



International Society  
for Traumatic Stress Studies  
30th Annual Meeting



## Healing Lives and Communities: Addressing the Effects of Childhood Trauma Across the Life Span

### Session Abstracts

**November 6 – 8, 2014** | Pre-Meeting Institutes and Keynote Panel, November 5  
InterContinental Miami, Miami, Florida, USA

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dedicated to trauma treatment, education,  
research and prevention

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# ISTSS 30<sup>th</sup> Annual Meeting

## Session Abstracts

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## Wednesday, November 5

### Pre-Meeting Institute (PMI) #1

Wednesday, November 5

08:30 AM to 05:00 PM

Windsor/Sandringham

### Orienting Emergency Responders in Psychological First Aid: Techniques and Resources

(Train/Ed/Dis, Cul Div-Global-Nat/Dis-Civil/War, Professionals and Para-Professionals, I, Global)

**Snider, Leslie, MD MPH<sup>1</sup>; Kim, Yoshiharu, MD, PhD<sup>2</sup>; Izutsu, Takashi, PhD<sup>3</sup>; Tsutsumi, Atsuro, PhD<sup>4</sup>; Ohtaki, Ryoko, MSc<sup>5</sup>**

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<sup>2</sup>*National Institute of Mental Health, National Center of Neurology and Psychiatry, Kodaira, Tokyo, Japan*

<sup>3</sup>*World Bank Tokyo, Tokyo, Chiyoda-ku, Japan*

<sup>4</sup>*United Nations University International Institute for Global Health, Kuala Lumpur, Cheras, Malaysia*

<sup>5</sup>*National Center of Neurology and Psychiatry, National Institute of Mental Health, Tokyo, Tokyo, Japan*

When terrible things happen in our communities, countries and the world, we want to reach out a helping hand to those who are affected. The Psychological First Aid: Guide for Field Workers (WHO, WTF, WVI, Geneva: World Health Organization 2011) covers an approach which involves humane, supportive and practical help to fellow human beings suffering serious crisis events. It is written for people in a position to help others who have experienced an extremely distressing event. It gives a framework for supporting people in ways that respect their dignity, culture and abilities. Despite its name, psychological first aid covers both social and psychological support. The guide has been translated and is freely available in several languages and applied in various regions of the world - from Latin American and the Caribbean, to Africa, the Middle East, Asia and the Pacific. For those interested in techniques and resources for orienting others in psychological first aid - be they medical personnel, other emergency responders, humanitarian aid staff, teachers, or community members - this pre-meeting institute offers techniques and resources for designing a participatory, skills-based orientation relevant to the socio-cultural context of participants, the crisis situation, available resources and stakeholders. It draws upon experience of PFA facilitators who have conducted orientations in many parts of the world, including national scale capacity building efforts in Japan and the East Asia region. Other resources include the PFA: Facilitator's Manual for Orienting Field Workers (WHO, WTF, WVI 2013) and all materials necessary for conducting an orientation. Participants will have the opportunity to learn how to adapt activities for comfort, safety and optimal learning of diverse participants and to design an orientation relevant to their context.

### Pre-Meeting Institute (PMI) #2

Wednesday, November 5

08:30 AM to 05:00 PM

Flagler

### Four Leading Model Developers Address Complex Case Material and Real World Implementation Issues.

(Practice, Complex, Child/Adol, M, Industrialized)

**Brown, Adam, PsyD<sup>1</sup>; Mannarino, Anthony, PhD<sup>2</sup>; Ford, Julian, PhD<sup>3</sup>; Saxe, Glenn, MD<sup>1</sup>; Blaustein, Margaret, PhD<sup>4</sup>**

<sup>1</sup>*New York University Langone Medical Center, New York, New York, USA*

<sup>2</sup>*Allegheny General Hospital/Drexel University College of Medicine, Pittsburgh, Pennsylvania, USA*

<sup>3</sup>*University of Connecticut Health Center, Farmington, Connecticut, USA*

<sup>4</sup>*Trauma Center at Justice Resource Institute, Brookline, Massachusetts, USA*



This full day pre-meeting institute, endorsed by the Complex Trauma SIG, will feature a unique opportunity to hear from developers of four leading evidence-based models for complex trauma intervention developed by members of the NCTSN over the past decade: Trauma Focused Cognitive Behavioral Therapy (TF-CBT), ARC (Attachment, Self-Regulation and Competency), TARGET (Trauma Affect Regulation: Guide for Education, and Trauma Systems Therapy (TST). The morning session will begin with each model developer presenting a brief overview of their model. The moderator will then present complex case material, and each model developer will discuss the case from the perspective of their intervention. Each discussion will take into account factors common to addressing child trauma, and will discuss the rationale for their approach, and why certain factors are or are not included in the model. Factors to be addressed include: child and family engagement; establishing safety; addressing emotional and behavioral regulation; integrating trauma history; facilitating future orientation; organizational factors; the role of the child's social environment; partnering with community agencies, among others. For the afternoon session, we will focus on how each model addresses real world implementation issues. We will invite participants to present brief case vignettes which highlight issues they have struggled with. Each model developer will respond regarding how they would approach such issues from the point of view of their model. These may include issues such as psychiatric emergencies, concerns about child abuse, hard-to-engage families, comorbid mental health and substance abuse problems, parental mental health issues, etc. We will then invite audience members to present questions or specific issues to the model developers. We will end with a moderated discussion of the relative applications of the different models to varying situations and clinical presentations.

### **Pre-Meeting Institute (PMI) #3**

**Wednesday, November 5**

**08:30 AM to 05:00 PM**

**Trade**

### **The Application of Trauma-Focused Cognitive-Behavioral Therapy (TF-CBT) for Youth with Complex Trauma**

(Practice, Chronic-Clinical Practice-Complex-Grief, Child/Adol, M, Global)

**Griffin, Jessica, PsyD<sup>1</sup>; Cohen, Judith, MD<sup>2</sup>; Kliethermes, Matthew, PhD<sup>3</sup>; Mannarino, Anthony, PhD<sup>4</sup>**

<sup>1</sup>*University of Massachusetts Medical School, Worcester, Massachusetts, USA*

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<sup>4</sup>*Allegheny General Hospital/Drexel University College of Medicine, Pittsburgh, Pennsylvania, USA*

Children who have experienced complex trauma benefit from a phase-based treatment approach (Cook et al, 2003). This workshop will provide in-depth information related to the application of Trauma-Focused Cognitive Behavioral Therapy for Youth with Complex Trauma, with an emphasis on phase-based treatment. The objective for this PMI is to provide practitioners with an increased knowledge base, including theoretical understanding, clinical tools and techniques, as well as research support related to the application of TF-CBT for youth with complex trauma. This session will begin with a brief overview of the TF-CBT model (Cohen, Mannarino, & Deblinger, 2006) as well as an overview of complex trauma and the impact of complex trauma on children and adolescents (Cook et al, 2003), including the impact of complex trauma on multiple domains of functioning (e.g., Attachment, Physical Health/Biology, Affect Regulation/Emotional Responses, Dissociation, Behavior, Cognition, Self-Concept and Future Orientation). As TF-CBT continues to be the most widely disseminated evidence-based treatment for children who experience trauma, with 13 Randomized Controlled Clinical Trials (including with youth with complex trauma), the application of TF-CBT has evolved over the last decade in order to best meet the needs of special populations (e.g., youth with complex trauma) and to improve sustainability in diverse settings (e.g., residential treatment, juvenile justice, in-home therapy), while still maintaining fidelity to the treatment model. This training seeks to improve sustainability of TF-CBT for agencies, clinicians, and stakeholders providing TF-CBT in diverse settings or in settings that largely include youth with complex trauma. This workshop will address prevalent misconceptions regarding the TF-CBT model, particularly as it relates to youth with complex trauma. Multiple considerations in the application of TF-CBT for youth with complex trauma will be discussed including the phase-based delivery of TF-CBT including three phases: 1) Safety and Stabilization; 2) Trauma Processing; and 3)

Integration and Consolidation. This workshop will address how the components of TF-CBT can effectively address the multiple domains of functioning impacted by complex trauma. Data regarding TF-CBT with youth with complex trauma will be presented. Throughout the institute presenters will encourage interactive discussion about how to implement TF-CBT for youth with complex trauma. Clinical vignettes, video, and demonstration of techniques will be utilized in an interactive discussion between the TF-CBT developers and national trainers.

## **Pre-Meeting Institute (PMI) #4**

**Wednesday, November 5**

**08:30 AM to 05:00 PM**

**Brickell**

### **Military Culture: Core Competencies for Healthcare Professionals**

(Practice, Assess Dx-Cul Div-Mil/Vets, Lifespan, I, Industrialized)

**Watson, Patricia, PhD<sup>1</sup>; Brim, William, PsyD<sup>2</sup>; Ermold, Jenna, PhD<sup>3</sup>; Nash, William, MD<sup>4</sup>; Westphal, Richard, RN PhD<sup>5</sup>; Kudler, Harold, MD<sup>6</sup>**

<sup>1</sup>*National Center for PTSD, Executive Division, White River Junction, Vermont, USA*

<sup>2</sup>*Center for Deployment Psychology, Uniformed Services University of the Health Sciences, Bethesda, Maryland, USA*

<sup>3</sup>*Center for Deployment Psychology, Rockville, Maryland, USA*

<sup>4</sup>*Boston VA Research Institute, Boston, Massachusetts, USA*

<sup>5</sup>*Richard Westphal Consulting, Gordonsville, Virginia, USA*

<sup>6</sup>*VISN 6 MIRECC and Duke University Medical Center, Chapel Hill, North Carolina, USA*

This PMI will teach the core competencies for military cultural competence for those who work with Service members, Veterans, and their families. It will be based on a recently released integrated VA/DOD online full day course. The focus will be on how to improve assessment and treatment planning for those patients with trauma-related conditions who are or have been in the military. Participants will be educated about the military culture and how that culture may affect the self and world views of their clients and therefore the patient/provider relationship. They will be invited to assess their own bias, beliefs and assumptions about the military which may inadvertently contribute to the stigma associated with seeking mental health care. Even VA and DoD providers who believe they have a good understanding of military culture from having been in the service themselves, or from having served as a healthcare professional in the system for many years, may not have a broad understanding of all branches of service, of different eras of Veterans, and of the many subcultures and subtleties inherent in military culture. The goal of this PMI is to educate providers interacting with traumatized Service members, Veterans and their families about aspects of the military culture such as military ethos and core values, stressors associated with military life, and resources and tools that are available to patients and their providers working together to address these issues. This PMI aims to additionally increase understanding of the various ways that the impact of military culture can differ across patients. Military ethos will be defined, as well as some of the more tangible or material elements and behaviors associated with military service such as customs, structure, organization and roles. Information will be given on common stressors experienced by Service members and their families as a result of demands distinctive to military life as well as resources that are available in an effort to promote adaption and adjustment to challenges. Finally, treatment resources and tools will be reviewed with a focus on how to apply cultural knowledge in patient care. The PMI will include videotape vignettes; assessment and treatment planning tools for health care professionals; lists of resources; and interviews with dozens of Service members, Veterans, family members and healthcare provide

## **Pre-Meeting Institute (PMI) #5**

**Wednesday, November 5**

**08:30 AM to 12:00 PM**

### **Bayfront A**

## **Changing the Pathway to Delinquency: Mindfulness, Meaning-Making, and Relational Strategies Drawn from 3 Complex Trauma Treatments and Applied at 3 Time Points from Childhood through Young Adulthood**

(Practice, CPA-Comm/Vio-Complex-Dev/Int, Child/Adol, M, Industrialized)

**Habib, Mandy, PsyD<sup>1</sup>; Lanktree, Cheryl, PhD<sup>2</sup>; Kagan, Richard, PhD<sup>3</sup>; Jaworski, Jennifer, PsyD<sup>4</sup>; Labruna, Victor, PhD<sup>1</sup>; Briere, John, PhD<sup>5</sup>**

<sup>1</sup>*Adelphi University, Garden City, New York, USA*

<sup>2</sup>*University of Southern California, Torrance, California, USA*

<sup>3</sup>*Parsons Child and Family Center, Albany, New York, USA*

<sup>4</sup>*Illinois Department of Juvenile Justice, St. Charles, Illinois, USA*

<sup>5</sup>*University of Southern California, Los Angeles, California, USA*

Analyses of the National Child Traumatic Stress Network (NCTSN) Core Data Set found that youth exposed to ongoing and/or multiple types of traumas often display a broad range of “challenging” or problematic behaviors, many of which place youth at-risk for juvenile justice involvement. As an official submission of the Complex Trauma Workgroup of the NCTSN, this pre-meeting institute will highlight how techniques and approaches from 3 empirically-based treatment models can prevent or reduce the development of emotional, behavioral, and cognitive dysregulation associated with complex trauma. Building on the core components of NCTSN-recommended complex trauma treatment, each of the three models, Real Life Heroes, ITCT (Integrative Treatment of Complex Trauma), and SPARCS (Structured Psychotherapy for Adolescents Responding to Chronic Stress), will present a range of approaches to reduce behavioral and relational difficulties and risk-taking, develop self-regulatory skills, support adaptive attachments, and facilitate trauma-processing and meaning-making. Model developers will illustrate activities and strategies, with an emphasis on the use of mindfulness, and meaning-making in the treatment of a child with a history of physical abuse, witnessing domestic violence, community violence, and intergenerational transmission of trauma. Each model will be matched to a specific developmental stage with the same child presented at 3 separate time points: RLH (childhood-6yrs), ITCT (early adolescence- 14yrs), and SPARCS (young adulthood- 20yrs). Each developer will begin with a brief overview of their respective model (including a review of the emerging evidence-base), followed by a brief description of the child’s evolving trauma history, present circumstances, and current functioning. The majority of each presentation will describe ways in which mindfulness and/or meaning-making can be used in treatment at the given time point, and will illustrate the application of specific techniques and strategies to engage children, caregivers and services to work together to address client symptoms, and ameliorate factors leading to high risk behaviors. Following the 3 model presentations, participants will hear from the Chief of Mental Health Services from the Illinois Department of Juvenile Justice and learn about the prevalence of trauma among youth in juvenile justice centers, the shifting culture of detention facilities, and policy implications and service gaps for at-risk/delinquent youth. This intermediate-level PMI, will conclude with a synthesis of the overlapping and unique features of model components, practical application by practitioners, and next steps for research with a moderated audience discussion led by an expert in the field of complex trauma.

## **Pre-Meeting Institute (PMI) #6**

**Wednesday, November 5**

**08:30 AM to 12:00 PM**

**Gusman/Tuttle**

### **Treating the Sleep Disturbances of Adults with PTSD: CBT for Insomnia and Imagery Rehearsal**

(Practice, Clinical Practice-Sleep-Mil/Vets, Adult, I, N/A)

**Harb, Gerlinde, PhD<sup>1</sup>; Gehrman, Philip, PhD<sup>2</sup>**

<sup>1</sup>Philadelphia VA Medical Center, Philadelphia, Pennsylvania, USA

<sup>2</sup>University of Pennsylvania, Philadelphia, Pennsylvania, USA

This pre-meeting institute will provide attendees with an overview over the treatment of the sleep disturbance associated with PTSD in Veterans. Veterans often present for treatment with complaints of disturbed sleep associated with their PTSD, and both insomnia and nightmares are contained within diagnostic criteria for PTSD. There is mounting evidence that cognitive behavioral therapy is efficacious in treating the insomnia associated with many mental health problems including PTSD. This seminar will focus on the application of CBT for insomnia (CBT-I) to the treatment of Veterans with PTSD. In addition, we will review a cognitive-behavioral treatment for post-traumatic nightmares, which has received increased research attention, namely Imagery Rehearsal therapy. A review of research evidence and an overview of important techniques as applicable to Veterans with PTSD will be provided. Specifically, the following topics will be included in this pre-meeting institute:

1. Review of nature of the sleep disturbance in the context of PTSD: What is insomnia in PTSD and phenomenology of nightmares.
2. Explanatory models of insomnia: 3 Ps model, circadian processes
3. Therapeutic strategies: Elements of CBT-I: Stimulus control, sleep restriction, cognitive strategies (worry time), relaxation training (PMR), sleep hygiene
4. Review of Imagery Rehearsal: research base, explanatory models
5. Elements of Imagery Rehearsal: Rationale, nightmare selection, nightmare write-out, changing nightmare story, creating a new dream script, rehearsal, fine-tuning
6. Integrating CBT-I and Imagery Rehearsal

## **Pre-Meeting Institute (PMI) #7**

**Wednesday, November 5**

**08:30 AM to 12:00 PM**

**Chopin**

*(Simultaneous translation to Spanish)*

### **Dimensions of Dissociation in Trauma-Related Disorders (Dimensiones de la Disociación en Trastornos Relacionados al Trauma)**

(Assess Dx, Assess Dx-Bio Med-Clinical Practice-Complex, Adult, M, N/A)

**Frewen, Paul, PhD; Lanius, Ruth, MD, PhD**

*University of Western Ontario, London, Ontario, Canada*

In this workshop we will review assessment and intervention methodology relevant to addressing dissociative symptomatology in individuals with PTSD. A dissociative subtype of PTSD has been defined by the presence of self-reported experiences of depersonalization and/or derealization. On the basis of neurophenomenological studies, Frewen and Lanius (in press a,b) recently proposed a four-dimensional framework ("4-D model") that theoretically differentiates states of post-traumatic distress that they argue intrinsically exemplify dissociative trauma-related altered states of consciousness (TRASC) from those that exemplify normal waking consciousness (NWC). In brief, the 4-D model classifies: 1) dissociative flashbacks as a TRASC of a person's sense of time-memory, considered

distinct from other NWC forms of intrusive recall of traumatic events that fail to provoke a marked sense of reliving; 2) thoughts that occur in second-person perspective, akin to voice-hearing (e.g., experiencing a voice inside one's head screaming "I hate you" as a TRASC of thought demarcated from the NWC experience of having distressing thoughts in first-person perspective (e.g., having the thought: "I hate myself"); 3) experiences of depersonalization as a TRASC of the body, theoretically differentiated from embodied experiences of distress (i.e., as occur in NWC; e.g., psychophysiological arousal, panic attacks without depersonalization/derealization experiences); and 4) marked cases of emotional numbing and affective shut-down as a TRASC of emotion (akin to a feeling of "being numb" or "emotionless"), considered unique as such relative to other pervasive negative emotional states that commonly occur within NWC (e.g., experiences of fear, anxiety, sadness, guilt, or shame, etc.). In this workshop, we will review research supporting the predictions of the 4-D model in people with PTSD, BPD with or without PTSD, and within the general population. We will review assessment scales for measuring the dimensions of the 4-D model, and treatment approaches, focusing particularly on mindfulness-based therapy. The workshop will be both didactic and experiential in nature.

## **Pre-Meeting Institute (PMI) #8**

**Wednesday, November 5**

**08:30 AM to 12:00 PM**

**Merrick**

### **Targeting Techniques to Address Complex Trauma Presentations within Cognitive Processing Therapy**

(Practice, CSA-Clinical Practice-Cog/Int-Complex, Adult, M, Global)

**Monroe, J., PhD<sup>1</sup>; Maieritsch, Kelly, PhD<sup>2</sup>**

<sup>1</sup>*Department of Veteran Affairs, Cincinnati, Ohio, USA*

<sup>2</sup>*Hines VA Hospital, Chicago, Illinois, USA*

The primary objective of this intermediate Pre-Meeting Institute is to provide attendees with specific techniques for successfully utilizing Cognitive Processing Therapy (CPT) with adult patients presenting with a history of childhood trauma (e.g., childhood physical/sexual abuse or assault, domestic violence, school-related violence, and gang activity). CPT is an evidence-based cognitive therapy for PTSD and trauma-related disorders. Two variations of the treatment (with or without written trauma narrative) have demonstrated robust effects in reducing the frequency and intensity of PTSD symptoms in multiple randomized clinical trials. The treatment may also be delivered in group, individual, or combined formats, allowing for flexible implementation in a variety of clinical settings. This institute will involve an overview of social cognitive theory and Socratic dialogue, followed by demonstrations of specific CPT techniques, examination of case vignettes, and role play exercises to provide opportunities for attendees to hone their skills. Throughout the institute, presenters will address techniques for working with patients with complex clinical presentations (e.g., multiple traumas, dissociation, comorbid personality disorder, substance use, current involvement in a violent relationship). Additional topics will include working with beliefs related to punishment, blame/guilt, reactions to authority, love of family, justice, religion, sexuality, and aggression. Presenters will address special considerations for working with patients of varied socioeconomic, cultural, and education backgrounds. Finally, the presentation will also review methods for enhancing collaboration between the patient and therapist and maintaining engagement in treatment. The target audience for this PMI is clinicians with a working knowledge of CPT and an interest in augmenting existing cognitive therapy skills. Although the presenters are CPT Trainers, this is not an introductory training to the CPT protocol. Attendees who have not previously received formal training in CPT may benefit from completing an online CPT course (<http://cpt.musc.edu>) prior to attending the workshop.



## **Pre-Meeting Institute (PMI) #9**

**Wednesday, November 5**

**08:30 AM to 12:00 PM**

### **Biscayne**

## **Introduction to Genetic and Epigenetic Research in Traumatic Stress Studies**

(Bio Med, Bio Med-Gen/Int-Res Meth, N/A, I, N/A)

**Nugent, Nicole, PhD<sup>1</sup>; Uddin, Monica, PhD<sup>2</sup>; Yehuda, Rachel, PhD<sup>3</sup>; Amstadter, Ananda, PhD<sup>4</sup>**

<sup>1</sup>*Brown Medical School, Providence, Rhode Island, USA*

<sup>2</sup>*Wayne State University, Detroit, Michigan, USA*

<sup>3</sup>*J. J. Peters Veterans Affairs Medical Center; Mount Sinai School of Medicine, Bronx, New York, USA*

<sup>4</sup>*Virginia Institute for Psychiatric and Behavioral Genetics, VCU, Richmond, Virginia, USA*

The field of genetic and epigenetic research has made impressive advances in the past few decades, catalyzing considerable excitement about the ways that genomics can inform our understanding of critical questions in the field such as why some trauma-exposed individuals are resilient while others develop post-traumatic stress disorder (PTSD), depression, and substance abuse. Given this growing literature, along with commercially available high-throughput genomic platforms, it is increasingly incumbent on researchers and clinicians to be familiar with the basics of genomically-informative designs. Further, researchers are increasingly interested in considering ways that genetic and epigenetic methods can be incorporated into their work. The purpose of this pre-meeting institute (PMI), targeted at researchers, clinicians, and students with little familiarity with genetic methods, is to provide an introduction to genetic and epigenetic methodology. State-of-the-science findings in genomics of trauma research will be reviewed, and the strengths and limitations as well as design considerations of these approaches will be discussed. This half-day PMI will address:

- (1) Family and Twin Studies in Trauma: Basic methods and findings related to understanding the contributions of genetic and environmental influences on behavior will be described, including traditional approaches such as twin and family modeling.
- (2) Molecular Genetic Approaches: We will review candidate gene research, genome wide association studies (GWAS), whole genome methods, and gene-environment interplay. Important research considerations with each of these methods will be discussed.
- (3) Epigenetics: We will provide a brief overview of epigenetic modifications, which involve chemical modifications that regulate chromatin structure and/or DNA accessibility, which in turn alter the transcriptional activity of the surrounding loci.
- (4) Novel Approaches: Researchers have begun to explore new and innovative approaches to the incorporation of genetic research into a range of scientific queries, such as examinations of genetic and epigenetic predictors of treatment response (both pharmacological and behavioral treatments) or epigenetic modifications that are altered through treatment involvement.

## **Pre-Meeting Institute (PMI) #10**

**Wednesday, November 5**

**01:30 PM to 05:00 PM**

**Gusman/Tuttle**

### **Fostering Media Partnerships: Working with the Media Before, During, and After a Community Crisis or Disaster**

(Journalism and Trauma, Commun-Nat/Dis-Pub Health-Terror, Prof, I, N/A)

**Houston, J. Brian, PhD<sup>1</sup>; Reyes, Gilbert, PhD<sup>2</sup>; Brymer, Melissa, PhD, PsyD<sup>3</sup>; Gurwitsch, Robin, PhD<sup>4</sup>; Reed, Katherine, MA<sup>5</sup>; Shapiro, Bruce<sup>6</sup>**

<sup>1</sup>*University of Missouri - Columbia, Columbia, Missouri, USA*

<sup>2</sup>*Fielding Graduate Institute, Santa Barbara, California, USA*

<sup>3</sup>*National Center for Child Traumatic Stress at UCLA, Los Angeles, California, USA*

<sup>4</sup>*Duke University Medical Center, Durham, North Carolina, USA*

<sup>5</sup>*University of Missouri, Columbia, Missouri, USA*

<sup>6</sup>*Dart Center for Journalism and Trauma, New York, New York, USA*

When a crisis or disaster occurs, the media will create and disseminate stories of what happened, why it happened, and what should be done in the future so it doesn't happen again. Those working with children, families, and communities have the ability to help media tell stories that can promote (instead of impede) recovery and resilience. This PMI session will help participants develop these skills and will include the following components:

1. Discussion of how local and national media work, including an examination of the roles, functions, and goals of the media, and a discussion of what to expect from the media if a community crisis or disaster were to occur.
2. Examination of strategies for working with the media at all phases of a community crisis or disaster (before, during, and after). Strategies covered will include: creating partnerships with local media before an event occurs, establishing a public information office or plan during an event, understanding "how" to talk with media, understanding "what" to say to media, and a review of one's own media image.
3. Viewing and discussion of recent examples of media coverage of community crises and disasters.
4. Role playing activity in which presenters and audience members practice the process of being interviewed by a member of the media following a community crisis or disaster.
5. Exploration of novel and emerging approaches to communicating with the public about trauma, disasters, and community crises. This will include the use of social media (e.g., Twitter, blogs) and digital storytelling.

## **Pre-Meeting Institute (PMI) #11**

**Wednesday, November 5**

**01:30 PM to 05:00 PM**

**Bayfront A**

### **Focusing the Military Cultural Lens: Evidence-Based Practices Addressing Child Trauma in Military and Veteran Families**

(Train/Ed/Dis, CPA-Clinical Practice-Commun-Mil/Vets, Child/Adol, M, Industrialized)

**Leskin, Gregory, PhD<sup>1</sup>; Cohen, Judith, MD<sup>2</sup>; Gurwitsch, Robin, PhD<sup>3</sup>; DeVoe, Ellen, PhD MSW<sup>4</sup>**

<sup>1</sup>*UCLA Semel Institute, Los Angeles, California, USA*

<sup>2</sup>*Allegheny General Hospital, Pittsburgh, Pennsylvania, USA*

<sup>3</sup>*Duke University Medical Center, Durham, North Carolina, USA*

<sup>4</sup>*Boston University School of Social Work, Boston, Massachusetts, USA*

Providing direct treatment services for military and veteran families is a major goal for the National Child Traumatic Stress Network (NCTSN). Many NCTSN programs have now implemented treatment services for military families through outreach and partnership with active duty bases, National Guard, and local VA hospitals. In order to prepare their staff to serve military families, many programs have engaged in programs to increase their knowledge of

military cultural characteristics to understand the types of stressors faced by military families and the potential impact on the children. Further, these programs are now extending their knowledge to include veteran families and children transitioning to civilian life. During this PMI, participants will be provided with information and resources to learn about the specific cultural and contextual issues that serve as the framework for delivery of evidence based practice delivery for military and veteran families and children. Participants will learn about current and updated prevalence levels of behavioral health issues negatively impacting military and veteran families, including PTSD, TBI, suicide, and other risk behaviors. Next, three program developers will present overviews of major interventions adapted or developed for military and veteran families and children including TF-CBT, PCIT & Strong Families Strong Forces. Speakers will identify the major military characteristics, risk factors, and organizational issues (military and community partnerships) that have informed development and adaptation of their evidence based practices (EBP) and interventions for military families. Each presenter will describe their EBP from the framework of addressing and overcoming issues and problems commonly faced by military and veteran families through education, prevention and delivery of interventions. Each program developer will illustrate how the intervention objectives of each EBP have been adapted to address particular issues related to deployment and combat stress, transition issues, parental psychological and physical injury, as well as child maltreatment. Strategies that highlight training at-risk military families to utilize resilient skills and approaches will be highlighted through the work of Strong Families Strong Forces. Programs that emphasize improvement in parenting skills (PCIT) will be presented. The program will include a presentation and discussion about the adapted TF-CBT program for military families where the child has experienced a traumatic stressor. Outcome data with military populations will be presented to support further implementation of these interventions for military and veteran families at risk for the negative impact of military experiences.

## **Pre-Meeting Institute (PMI) #12**

**Wednesday, November 5**

**01:30 PM to 05:00 PM**

**Chopin**

*(Simultaneous translation to Spanish)*

**STAIR Narrative Therapy: Flexible Applications (Terapia Narrativa STAIR\*: Aplicaciones Flexibles) \*Entrenamiento en Habilidades para Regulación Afectivo y Interpersonal – STAIR por sus siglas en inglés**

(Train/Ed/Dis, Affect/Int-Chronic-Train/Ed/Dis, Adult, M, N/A)

**Cloitre, Marylene, PhD<sup>1</sup>; Jackson, Christie, PhD<sup>2</sup>; Weiss, Brandon, PhD<sup>3</sup>**

<sup>1</sup>National Center for PTSD-Dissemination and Training Division, Menlo Park, California, USA

<sup>2</sup>VA, New York, NY, New York, USA

<sup>3</sup>NCPTSD-Dissemination & Education Div, Palo Alto Healthcare System, Menlo Park, California, USA

Individuals exposed to sustained or multiple forms of trauma often experience not only PTSD symptoms but also disturbances in self-regulation functions particularly in emotion management and relational capacities. These difficulties contribute significantly to overall impairment and yet very few therapies routinely address them as part of the recovery plan. Skills Training in Affective and Interpersonal Regulation (STAIR) Narrative Therapy is an evidence-based therapy that has successfully integrated skills training with narrative work to address both the specific disturbances related to trauma (e.g., re-experiencing symptoms) as well as a range of transdiagnostic affective and interpersonal problems. This workshop will review the flexible use of and evidence for the treatment as adapted for group modality and as formulated for the individual client to create a "patient centered" program. Case examples and strategies for effective implementation will be provided, with a special emphasis on male and female veterans and women who have experienced military sexual trauma (MST). Examples of implementation of the program using telemental health (videoconferencing) will also be included.

## **Pre-Meeting Institute (PMI) #13**

**Wednesday, November 5**

**01:30 PM to 05:00 PM**

**Merrick**

### **Cognitive Processing Therapy: Common Pitfalls and Case Consultation**

(Practice, Clin Res-Cog/Int-Train/Ed/Dis, Adult, M, Industrialized)

**Resick, Patricia, PhD<sup>1</sup>; Dondanville, Katherine, PsyD<sup>2</sup>**

<sup>1</sup>*Duke University Medical Center, Durham, North Carolina, USA*

<sup>2</sup>*University of Texas Health Science Center at San Antonio, San Antonio, Texas, USA*

This half day institute is designed for practitioners trained in Cognitive Processing Therapy (CPT/CPT-C) for post-traumatic stress disorder (PTSD). The institute aims to enhance practitioners' skills in adapting the protocol to various patient presentations and populations. The institute will focus on Common Pitfalls that practitioners come across when implementing CPT or CPT-C (without trauma account) either individually or in a group context. Institute participants will have an opportunity to guide the material based on their personal interests and clinical consultation needs. Institute participants are encouraged to present their own difficult PTSD cases for consultation. Though there will be some didactic materials presented, most of this session will be "hands-on." The Institute leaders will model techniques, integrate up-to-date research, and share personal case experiences. Brief video clips will be shown to demonstrate ways to address common pitfalls. Most importantly, institute participants will be asked to take part in partially scripted and unscripted role plays where they will practice and evaluate their use of the skills. The institute will address when to start the protocol with your patients and address concerns about implementing the protocol with common comorbidities. Once practitioners are using the protocol effectively, confronting avoidance and enhancing patient engagement is an important skill. How to flex the protocol and varying the length of treatment will be explored with regard to decision making when to stop early or add sessions. When to use emergency sessions or stop the protocol will also be discussed. The institute will also focus on sharpening Socratic Questioning skills and working with patients who stay stuck. How to identify and challenge Just World Stuck Points will be addressed. This is an Intermediate-Advanced level institute. Participants are expected to have previous training and experience implementing CPT.



## **Keynote Panel Discussion**

**Wednesday, November 5**

**06:15 PM to 07:30 PM**

**Chopin**

### **Changing Hearts and Minds: Can We Use Mass Media to Prevent or Heal Trauma?**

Moderator: Pearlman, Laurie Anne, PhD, Independent Trauma Consultant, USA  
deVries, Marten W., PhD, MD, Maastricht University, Netherlands  
Smith, Llew, Filmmaker, California Newsreel, USA

#### **WOUNDED PLACES: Confronting Childhood PTSD in America's Shell-Shocked Cities: Using Film to Build Public Awareness about Poverty, Social Exclusion and Trauma in Segregated Urban Neighborhoods**

(Journalism and Trauma, Complex-Health-Prevent-Social, Child/Adol, M, Industrialized)

Poulain, Rachel, MPH<sup>1</sup>; **Smith, Llew, Filmmaker<sup>1</sup>**; Bloom, Sandra, MD<sup>2</sup>

<sup>1</sup>*California Newsreel, San Francisco, California, USA*

<sup>2</sup>*Drexel University School of Public Health, Philadelphia, Pennsylvania, USA*

We will screen the documentary film “WOUNDED PLACES: Confronting Childhood PTSD in America's Shell-Shocked Cities” followed by a trio of presenters (a filmmaker, a practitioner of trauma-informed healing, and an injury prevention researcher) who will illustrate how film can be used as a tool that educators, providers, advocates, organizers, public officials and others can use to raise public awareness about the causes and consequences of childhood trauma across the life span; investigate trends and components of trauma-informed systems and programs that are successful; and analyze why healing trauma in low-income neighborhoods includes the creation of policies that address and mitigate poverty and racism. WOUNDED PLACES is produced by California Newsreel, creators of the award-winning films UNNATURAL CAUSES and RACE: THE POWER OF AN ILLUSION, and investigates how so many children in the United States, especially children of color in neighborhoods of concentrated poverty, are exposed to adversity, violence, concentrated poverty, neglect and other risks for trauma and show symptoms similar to PTSD. Applying a trauma-informed approach featuring the work of Sandra Bloom, John Rich, Ted Corbin and others, the film asks not “What’s wrong with you?” but rather, “What happened to you?” and explores how we can help individuals and traumatized neighborhoods heal.

#### **Healing Communities: Toward a Public Mental Health Media Response: Before, During and After Traumatic Events**

(Journalism and Trauma, Commun-Comm/Int-Prevent-Pub Health, N/A, M, Global)

**DeVries, Marten W, PhDm MD**

*Maastricht University, Maastricht, Netherlands*

Studies following Sept. 11, the tsunamis and ethnic violence have highlighted the role of predisposing factors and community experience in traumatic reactions. These findings unmask the impact of the high background levels of mental health vulnerability in populations. There is also evidence that improving community wellbeing significantly decreases the prevalence of mental disorders. This Media Presentation provides data and examples recommending that we should move beyond purely individual approaches to developing large-scale access to populations. Media is a powerful ally for prevention and provides a unique opportunity for limiting the consequences of trauma. When imbedded in communities, co-production opportunities occur contributing to empowerment, social participation, and self-efficacy and ultimately healing. Film viewings will focus on three processes: attending to ongoing background stresses, before threats arise including inoculating the public to adversity; galvanizing, informing and supporting the public during strife; and healing and providing structure for the afflicted after. Material depicting the use of media before, is drawn from the San Francisco Mood Survey, a Dutch docu-drama series and parenting documentaries in Africa, models for action during disaster from the Tube Bombings in London and from Sri Lanka, and healing after from the “The Team” in Kenya.

**Thursday, November 6**

**Keynote Address**

**Thursday, November 6**

**09:00 AM to 10:15 AM**

**Grand Ballroom**

**Windows of Vulnerability: Impact of Type and Timing of Childhood Traumatic Stress on Neurobiology and Psychopathology**

(Bio Med, CPA-CSA-Depr-Bio/Int, Lifespan, I, Industrialized)

**Teicher, Martin, MD, PhD**

*McLean Hospital, Harvard Medical School, Belmont, Massachusetts, USA*

Childhood abuse markedly increases risk for developing PTSD, mood, anxiety, personality, substance abuse and psychotic disorders. Recent studies suggest that clinical sequelae may stem, at least in part, from enduring adverse effects on brain development. What regions are affected, and what consequences ensue may depend on timing, as stress-susceptible brain regions appear to have their own unique sensitive periods when they are most vulnerable to the effects of early stress. Specific sensitive periods will be delineated for the hippocampus, amygdala and cortical regions as well as the types and time frame of abuse most predictive for development of major depression, anxiety and personality disorders. These findings will be placed into context illustrating how childhood abuse affects multiple components of the brain circuit responsible for threat detection and the overall network architecture of the brain. Finally, the case will be made that individuals with histories of substantial childhood maltreatment with DSM psychiatric diagnoses differ clinically and neurobiologically from non-maltreated individuals with the same diagnosis. Recognition of this ecophenotypic distinction may markedly enhance treatment guidelines, further our understanding of developmental trauma disorders and revise our understanding of the biological basis of psychopathology.

# CONCURRENT SESSION ONE

**Master Clinician**

**Thursday, November 6**

**10:30 AM to 11:45 AM**

**Grand Ballroom**

## **The Effects of Complex Developmental Trauma across the Lifespan: Professional Recognition, Training, and Intervention**

(Practice, Chronic-Clinical Practice-Complex-Dev/Int, Lifespan, M, Global)

**Courtois, Christine, PhD**

*Christine A. Courtois, PhD, PLLC, Washington, District of Columbia, USA*

The array of aftereffects of complex developmental trauma in childhood and its potential impact across the lifespan are now well-documented, with the effects of such trauma increasingly recognized as a public health issue of major proportions. Its impact is felt at individual, family, community, and societal levels. Despite this, the significance of such trauma and its relation to clients' development, presenting concerns, and symptoms are often missed or minimized by clinicians and therefore not targeted for treatment. Possible reasons for this include lack of attention to trauma and its impact in professional training across disciplines. Treatment and practice guidelines, a meta-model for the treatment of complex trauma, and trauma treatment competencies will be discussed in this Master Class.

## **Workshop Presentation**

**Thursday, November 6**

**10:30 AM to 11:45 AM**

**Chopin - SPANISH TRACK**

*Presented in Spanish with simultaneous translation to English*

## **Proyecto BRIGHT: Romper el Ciclo Intergeneracional de Trauma y Abuso de Sustancias (Project BRIGHT: Breaking the Intergenerational Cycle of Trauma and Substance Abuse)**

(Practice, Clin Res-Dev/Int-Prevent-Sub/Abuse, Lifespan, M, Industrialized)

**Garber, Karen, MSW<sup>1</sup>; Paris, Ruth, PhD<sup>2</sup>; Sommer, Amy, MSW<sup>1</sup>; Gould, Karen, MSW<sup>3</sup>**

<sup>1</sup>*Jewish Family and Children's Service of Greater Boston, Waltham, Massachusetts, USA*

<sup>2</sup>*Boston University, Boston, Massachusetts, USA*

<sup>3</sup>*Institute for Health and Recovery, Cambridge, Massachusetts, USA*

Mothers with Substance Use Disorders (SUDs) often have histories of multiple trauma exposures, elevated distress and decreased understanding and reflective functioning (RF) regarding their children's development and emotional experience. Their young children frequently experience high trauma exposure and impaired development. These factors can contribute to dysfunctional mother-child interactions and attachment insecurities. Project BRIGHT was designed to address traumatic stress in children 0 to 5 and their mothers residing in family residential SUD treatment. The intervention is based on Child-Parent Psychotherapy (Lieberman & Van Horn, 2005), although a CPP approach has never before been used with this population. In this presentation, first, we describe relevant research and second, we detail the weekly dyadic intervention which strives to promote developmental progress, resilience and emotional stability in both parent and child. Goals include increasing parents' understanding of trauma and loss, affect regulation, facilitating shared pleasure and building parental RF. Third, we present findings from an evaluation study which provides support for the multiple foci of BRIGHT and the feasibility of adapting evidence-based interventions in community SUD treatment settings. Finally, case vignettes will be presented as well as videotapes of parent-child interactions.

## Symposium

Thursday, November 6

10:30 AM to 11:45 AM

Biscayne - BIOLOGY TRACK

## Genetic and Epigenetic Pathways of Early Trauma, Post-Traumatic Stress Disorder and Trauma-Focused Therapy

(Clin Res, CPA-Clin Res-Gen/Int-Civil/War, Lifespan, M, Global)

Wilker, Sarah, Doctoral Student<sup>1</sup>; Elbert, Thomas, PhD<sup>2</sup>

<sup>1</sup>University of Ulm, Ulm, Baden-Württemberg, Germany

<sup>2</sup>University of Konstanz & vivo international, Konstanz, Germany, Germany

The interindividual variability in the risk to develop post-traumatic stress disorder (PTSD) in the aftermath of trauma exposure is large. Similarly, individuals who developed PTSD vary in their response to trauma-focused treatments. Genetic and epigenetic mechanisms moderate the risk of psychopathology after traumatic stress, yet we only begin to understand the molecular mechanisms underlying these gene  $\times$  environment interactions. A deeper understanding of the biological pathways of PTSD and trauma-focused therapy may help to develop individualized treatments and therapy-accompanying medication. This symposium includes four presentations presenting data on genetic and epigenetic factors involved in risk and resilience as well as in treatment effectiveness. Laramie Duncan will present progress of the work of the Psychiatric Genomics Consortium PTSD Group, including meta-analytic results and heritability estimates of PTSD. Thomas Elbert will present epigenetic consequences of prenatal and early childhood adversity, focusing on the methylation status of the glucocorticoid receptor gene. Torsten Klengel will highlight the influence of genetic and epigenetic mechanisms in response to childhood trauma at the FKBP5 locus. Finally, Sarah Wilker will present data indicating that FKBP5 genotype moderates interindividual variability in the response to exposure-based therapy for PTSD.

## Symposium

Thursday, November 6

10:30 AM to 11:45 AM

Biscayne - BIOLOGY TRACK

## Large-scale Genomic Analyses and PTSD Meet: Meta-Analytic Results from the PTSD Working Group of the Psychiatric Genomics Consortium (N=17,797 from 6 Studies)

(Bio Med, Gen/Int, Adult, M, Industrialized)

Duncan, Laramie, PhD<sup>1</sup>; Aiello, Allison, MS, PhD<sup>2</sup>; Bierut, Laura, MD<sup>3</sup>; Bradley, Bekh, PhD<sup>4</sup>; Gelernter, Joel, MD<sup>5</sup>; Liberzon, Israel, MD<sup>6</sup>; Miller, Mark, PhD<sup>7</sup>; Nievergelt, Caroline, PhD<sup>8</sup>; Ressler, Kerry, MD PhD<sup>9</sup>; Uddin, Monica, PhD<sup>10</sup>; Koenen, Karestan, PhD<sup>11</sup>

<sup>1</sup>Harvard Medical School, Boston, Massachusetts, USA

<sup>2</sup>University of North Carolina at Chapel Hill, Gillings School of Global Public Health, Chapel Hill, North Carolina, USA

<sup>3</sup>Washington University School of Medicine, St. Louis, Missouri, USA

<sup>4</sup>Atlanta VAMC/Emory University, Decatur, Georgia, USA

<sup>5</sup>Yale University School of Medicine; VA Connecticut Healthcare System, West Haven, Connecticut, USA

<sup>6</sup>University of Michigan, Ann Arbor, Michigan, USA

<sup>7</sup>National Center for PTSD, VA Boston Healthcare System, Boston University School of Medicine, Jamaica Plain, Massachusetts, USA



<sup>8</sup>University of California, San Diego, San Diego, California, USA

<sup>9</sup>Emory University School of Medicine, Atlanta, Georgia, USA

<sup>10</sup>Wayne State University, Detroit, Michigan, USA

<sup>11</sup>Columbia University School of Public Health, New York, New York, USA

Genomics research offers powerful tools to identify risk factors for post-traumatic stress disorder (PTSD). However, success in identifying robust genetic risk factors for PTSD has been limited by small sample sizes and candidate gene approaches. Genome-wide association studies (GWAS) - which examine approximately 1 million genetic variants for possible association to phenotypes - have revolutionized the understanding of many medical phenotypes. Schizophrenia has seen unequivocal success with these approaches, and now PTSD is poised for similar discoveries. The Psychiatric Genomics Consortium - PTSD Group (PGC-PTSD) united 23 research groups in collaboration, and has already analyzed genotyped DNA samples from 17,797 participants. Meta-analytic results for GWAS analyses of these 6 datasets will be presented, as well as heritability estimates for PTSD derived from these molecular genetic data (using GCTA, Genome-wide Complex Trait Analysis). Analyses are ongoing; preliminary findings suggest highly polygenic inheritance for PTSD. Power was adequate to detect common risk loci (MAF > 0.1) with effect sizes of OR > 1.5 and yet none were detected, a finding consistent with well-powered GWAS of other psychiatric disorders. Power to detect robust genetic risk factors for PTSD will continue to increase in coming years with over 60,000 samples committed for the next two years.

## Symposium

**Thursday, November 6**

**10:30 AM to 11:45 AM**

**Biscayne - BIOLOGY TRACK**

### Epigenetic Memories of Early Life Stress

(Bio Med, CPA-Chronic-Dev/Int, Child/Adol, M, E & S Africa)

**Elbert, Thomas, PhD<sup>1</sup>**; Radtke, Karl, MSc<sup>2</sup>; Hermenau, Katharin, PhD<sup>1</sup>; Hecker, Tobias, PhD<sup>1</sup>; Schauer, Maggie, PhD<sup>1</sup>

<sup>1</sup>University of Konstanz & Vivo International, Konstanz, Germany

<sup>2</sup>University of Konstanz, Konstanz, Germany

The nature and flexibility of traumatic stress responses have been shown to be related to epigenetic modifications. They modulate a gene's activity and hence the context in which the gene is expressed. For instance, the DNA-methylation of multiple genes results in changes in gene expression for glucocorticoid receptors. Animal studies show that these changes are associated with modifications in dendritic branching and neurogenesis, with related shrinking in hippocampal volume. The hypothalamic-pituitary-adrenal (HPA) axis is the "élite defence force". But only when functioning properly, it helps us to deal with crisis. HPA-axis function may be stably altered through epigenetic modifications that arise due to early life stress. Even prenatally experienced stress can have profound effects. Maternal anxiety, maternal depressive mood and witnessing of catastrophic events during pregnancy were found to alter HPA-axis activity of the children. In particular, we demonstrate a lasting impact of gestational exposure to either physical or emotional violence on the methylation status of the offspring's glucocorticoid receptor (GR) gene. Interestingly, in addition to the GR gene, other genes are epigenetically modified in relation to early life stress. Based on genome-wide analyses, we present further evidence for epigenetic consequences of pre- and postnatal childhood trauma.

## Symposium

Thursday, November 6

10:30 AM to 11:45 AM

Biscayne - BIOLOGY TRACK

### Genetic and Epigenetic Mechanisms of Gene-Trauma Interactions: Focus on FKBP5 Binding Protein 5 (FKBP5)

(Bio Med, Bio Med, Lifespan, M, N/A)

**Klengel, Torsten, MD<sup>1</sup>**; Binder, Elisabeth, MD PhD<sup>2</sup>

<sup>1</sup>*Max Planck Institute of Psychiatry, Munich, Bavaria, Germany*

<sup>2</sup>*Emory University, Atlanta, Georgia, USA*

The molecular mechanisms of gene-environment interaction are poorly understood. Here we show a potential common mechanism of how environmental factors, moderated by genetic predisposition, influence long-term epigenetic states that lead to psychiatric disorders. In addition, we show evidence for a structural variant conferring protection against the effects of childhood trauma. We have shown that a SNP in FKBP5 interacts with child abuse on the development of post-traumatic stress disorder (PTSD) in adulthood. The risk allele confers a stronger transcriptional activation of FKBP5 in response to stress compared to the protective allele. We further show that risk allele carriers exhibit a demethylation of CpGs around glucocorticoid response elements (GREs) in FKBP5 whereas carriers of the protective genotype retain a stable epigenetic profile. This allele-dependent epigenetic modification further de-represses FKBP5 transcription leading to a dysregulation of the stress-hormone axis. Moreover, we identified additional variants around GREs in FKBP5 by resequencing of the locus that alter the responsiveness of FKBP5 to stress by influencing the enhancer properties of the GREs tested. Finally, we show that a deletion/insertion in FKBP5 changes the 3D conformation of the locus thereby mediating protective effects against the impact of childhood trauma on the development of PTSD.

## Symposium

Thursday, November 6

10:30 AM to 11:45 AM

Biscayne - BIOLOGY TRACK

### Effectiveness of Exposure-Based Psychotherapy for Post-Traumatic Stress Disorder is Moderated by FKBP5 Genotype

(Clin Res, Gen/Int-Torture-Civil/War, Adult, M, E & S Africa)

**Wilker, Sarah, Doctoral Student<sup>1</sup>**; Pfeiffer, Anett, Doctoral Student<sup>2</sup>; Kolassa, Stephan, PhD<sup>3</sup>; Elbert, Thomas, PhD<sup>4</sup>; Lingensfelder, Birke, Dipl Psych<sup>4</sup>; Ovuga, Emilio, PhD, MD<sup>5</sup>; Papassotiropoulos, Andreas, MD<sup>6</sup>; de Quervain, Dominique, MD<sup>7</sup>; Kolassa, Iris, PhD<sup>1</sup>

<sup>1</sup>*University of Ulm, Ulm, Baden-Württemberg, Germany*

<sup>2</sup>*University of Konstanz & Vivo International, Reichenau, Baden-Württemberg, Germany*

<sup>3</sup>*SAP Switzerland AG, Tägerwil, Thurgau, Switzerland*

<sup>4</sup>*University of Konstanz & Vivo International, Konstanz, Germany*

<sup>5</sup>*Gulu University, Gulu, Uganda*

<sup>6</sup>*University Basel, Basel, Basel-Stadt, Switzerland*

Approximately one third of trauma survivors do not respond to treatment with exposure-based psychotherapy. While our knowledge on the contribution of gene × environment interactions to the interindividual variability in post-traumatic stress disorder (PTSD) susceptibility grows, the genetic factors which moderate treatment outcome remain to be illuminated. Because FKBP5 genotype influences PTSD risk and glucocorticoid receptor sensitivity, and

glucocorticoid signaling is known to affect extinction learning, we hypothesized that FKBP5 genotype moderates response to exposure-based psychotherapy. A sample of 43 survivors of the rebel war in northern Uganda participated in the study. All subjects received exposure-based psychotherapy and were genotyped for rs1360780, a putative functional single nucleotide polymorphism of the FKBP5 gene. Carriers of the FKBP5 rs1360780 risk allele showed significantly reduced long-term psychotherapeutic benefits. At the 10 months follow-up assessment, 43% of risk allele carriers still fulfilled diagnostic criteria for PTSD, while all non-carriers showed clinical remission. Genetic variation of FKBP5, known to be involved in the regulation of glucocorticoid signaling, seems to not only influence PTSD risk but also treatment responsiveness. These results render FKBP5 an interesting target for the pharmacological enhancement of exposure therapy.

## **Symposium**

**Thursday, November 6**

**10:30 AM to 11:45 AM**

**Bayfront A - CHILD TRACK ONE**

## **Polyvictimization and Complex Trauma across Childhood: Characterizing Patterns of Victimization and Impacts on Mental Health and Development among Clinic-Referred Youth**

(Clin Res, CPA-Chronic-Complex-DV, Child/Adol, M, Industrialized)

Adams, Zachary, PhD<sup>1</sup>; Layne, Christopher, PhD<sup>2</sup>

<sup>1</sup>*Medical University of South Carolina, Charleston, South Carolina, USA*

<sup>2</sup>*UCLA - National Center for Child Traumatic Stress, Los Angeles, California, USA*

The goal of this symposium is to characterize patterns of polyvictimization and complex trauma among children and adolescents and examine associated youth characteristics and mental health consequences among clinic-referred youth. Four clinical investigators will present findings from the National Child Traumatic Stress Network Core Data Set (CDS), which includes data for over 14,000 youth who presented for an evaluation at 56 centers across the U.S. Donisch et al. will describe results of a developmentally informed study of the impact of caregiver impairment on child functioning in the context of complex trauma. Stover et al. will address the relation between early domestic violence (DV) exposure and later polyvictimization, and the interplay between DV and other types of victimization in predicting youth mental health problems. Adams et al. will report findings from a latent class analysis (LCA) of patterns and mental health correlates of polyvictimization in adolescents. Grasso et al. will describe findings from a LCA of patterns of childhood adversity across three developmental periods and associations with mental health and juvenile justice outcomes. Dr. Christopher Layne, an expert in complex trauma, will discuss the implications of these findings emphasizing how results can guide clinical intervention and research on the impact of childhood trauma across the lifespan.

## **Symposium**

**Thursday, November 6**

**10:30 AM to 11:45 AM**

**Bayfront A - CHILD TRACK ONE**

## **Patterns of Adverse Childhood Experiences and Risk of Adolescent Psychopathology and Justice Involvement across Three Developmental Periods**

(Assess Dx, Chronic-Dev/Int, Child/Adol, M, Industrialized)

**Grasso, Damion, PhD<sup>1</sup>**; Dierkhising, Carly, PhD Candidate<sup>2</sup>; Branson, Christopher, PhD<sup>3</sup>; Ford, Julian, PhD<sup>1</sup>; Lee, Robert, MA<sup>4</sup>

<sup>1</sup>*University of Connecticut Health Center, Farmington, Connecticut, USA*

<sup>2</sup>*National Center for Child Traumatic Stress at UCLA, Los Angeles, California, USA*

<sup>3</sup>*Mount Sinai School of Medicine, Dept of Psychiatry, New York, New York, USA*

<sup>4</sup>*Duke University Medical Center, Durham, North Carolina, USA*

By adolescence, most children have experienced at least one type of adverse childhood experience (ACE) and many have been exposed to multiple types, with increased risk for physical and behavioral health problems.<sup>1-3</sup> Whether patterns of ACEs and associated risk are consistent or change across development in childhood is unknown but has clinical implications. Retrospective reports of ACEs in three distinct developmental epochs (early childhood, 0-5; middle childhood, 6-12; and adolescence, 13-18) were obtained from adolescents (N = 3,485) referred for trauma-specific services as part of the National Child Traumatic Stress Network (NCTSN). Results from latent class analysis (LCA) revealed increasingly complex patterns of ACEs in middle childhood and adolescence compared to early childhood. Within developmental epochs, gender, adolescent psychopathology, and juvenile justice involvement were associated with unique patterns of exposure. A poly-victimized subgroup (Means from 5.2 to 6.9 types) was evident across all three epochs, but the types of ACEs reported by poly-victims varied by epoch, with earlier epochs limited to ACEs in the home and later epochs including ACEs occurring outside of the home. Further, subgroup membership in earlier epochs was significantly associated with membership in subsequent epochs. Implications for research and clinical practice are identified.

## **Symposium**

**Thursday, November 6**

**10:30 AM to 11:45 AM**

**Bayfront A - CHILD TRACK ONE**

### **The Association of Timing and Exposure to Domestic Violence in Childhood to Polyvictimization and Mental Health Symptoms**

(Clin Res, Chronic-DV, Child/Adol, M, N/A)

**Stover, Carla, PhD<sup>1</sup>**; Berkowitz, Steven, MD<sup>2</sup>; Ghosh Ippen, Chandra, PhD<sup>3</sup>

<sup>1</sup>*University of South Florida, Tampa, Florida, USA*

<sup>2</sup>*University of Pennsylvania School of Medicine, Philadelphia, Pennsylvania, USA*

<sup>3</sup>*UCSF-San Francisco General Hospital, San Francisco, California, USA*

Domestic Violence (DV) is one of the most prevalent potentially traumatic events experienced by youth with substantial literature indicating the impact of exposure on a host of behavioral, social-emotional outcomes. Yet, few studies have examined the specific impact of DV on youth functioning in the context of other traumas. The present study used a large national sample (N=8,542) of youth initiating treatment at one of the National Child Traumatic Stress Network centers to examine: a) the association of early DV exposure to later polyvictimization and b) the unique contribution of DV to youth mental health symptoms in the context of polyvictimization. Results indicate youth exposed to DV were significantly more likely to experience polyvictimization (4+ trauma types) than youth who were not exposed (51% vs. 15%,  $p < .0001$ ). Additionally, youth exposed to DV before the age of 2 were significantly more likely to be polyvictimized than youth exposed at later ages. Those exposed to DV had significantly greater PTSD symptoms, externalizing symptoms, co-morbid psychiatric disorders, and utilization of services than youth without exposure; however these significant findings were not maintained when polyvictimization was entered into statistical models. Early screening and intervention for DV may interrupt the trajectory of polyvictimization.



## Symposium

Thursday, November 6

10:30 AM to 11:45 AM

Bayfront A - CHILD TRACK ONE

### Associations among Complex Trauma, Impaired Caregiving, and Child

#### Functioning: A Developmental Perspective

(Clin Res, Complex, Child/Adol, M, Industrialized)

**Donisch, Katelyn, MPH<sup>1</sup>**; Carmody, Karen, PhD<sup>2</sup>; Briggs, Ernestine, PhD<sup>3</sup>; Amaya-Jackson, Lisa, MD MPH<sup>4</sup>; Gewirtz, Abigail, PhD LP<sup>5</sup>; Spinazzola, Joseph, PhD<sup>6</sup>; Liang, Li-Jung, PhD<sup>7</sup>

<sup>1</sup>*Ambit Network, University of Minnesota, Minneapolis, Minnesota, USA*

<sup>2</sup>*Duke University Medical Center/National Center for Child Traumatic Stress, Durham, North Carolina, USA*

<sup>3</sup>*National Center for Child Traumatic Stress, Durham, North Carolina, USA*

<sup>4</sup>*Duke University School of Medicine, Durham, North Carolina, USA*

<sup>5</sup>*University of Minnesota-Twin Cities Campus, St Paul, Minnesota, USA*

<sup>6</sup>*The Trauma Center at JRI, Brookline, Massachusetts, USA*

<sup>7</sup>*National Center for Child Traumatic Stress, Los Angeles, California, USA*

Interpersonal traumatic events are often drastic departures from normative relational contexts and can be deleterious to children's abilities to negotiate current and future developmental tasks. In this study interpersonal traumas of interest include sexual abuse, physical abuse, emotional abuse, neglect, and domestic violence. Incorporating the disparate characterizations of complex trauma, we explored the demographic characteristics, developmental exposure, trauma history, and functioning of youth exposed to complex trauma with and without an impaired caregiver. Our sample of over 2,000 youth referred for trauma treatment was drawn from the National Child Traumatic Stress Network's Core Data Set. Children with complex trauma in the presence of an impaired caregiver on average experienced significantly more trauma types (5.6 vs. 4.7), were more likely to experience their first traumatic event by the age of three (77% vs. 45%), and were more likely to display clinically significant externalizing symptoms. During infancy and early toddlerhood, children must secure reliable, predictable caregiving to meet their socioemotional needs and therefore these findings may inform appropriate assessment and treatment.

## Symposium

Thursday, November 6

10:30 AM to 11:45 AM

Bayfront A - CHILD TRACK ONE

### Polyvictimization: Latent Profiles and Mental Health Outcomes in a Clinical

#### Sample of Adolescents

(Clin Res, CPA-CSA-Chronic-Complex, Child/Adol, M, Industrialized)

**Adams, Zachary, PhD<sup>1</sup>**; Moreland, Angela, PhD<sup>1</sup>; Cohen, Joseph, MS<sup>1</sup>; Lee, Robert, MS/MA<sup>2</sup>; Hanson, Rochelle, PhD<sup>1</sup>; Danielson, Carla, PhD<sup>1</sup>; Self-Brown, Shannon, PhD<sup>3</sup>; Briggs, Ernestine, PhD<sup>4</sup>

<sup>1</sup>*Medical University of South Carolina, Charleston, South Carolina, USA*

<sup>2</sup>*Duke University Medical Center/National Center for Child Traumatic Stress, Durham, North Carolina, USA*

<sup>3</sup>*Georgia State University, Atlanta, Georgia, USA*

<sup>4</sup>*National Center for Child Traumatic Stress, Durham, North Carolina, USA*

Exposure to multiple traumatic events (polyvictimization) in childhood reliably predicts mental health problems and risk behaviors in adolescence. This study involved empirical identification and characterization of trauma exposure profiles in a large, ethnically diverse, multi-site, clinical sample of adolescents. The study also evaluated relations

among identified victimization classes with demographic characteristics and patterns of clinical distress and impairment. Data from the NCTSN Core Data Set were used to identify victimization profiles via latent class analysis in a sample of 3,485 adolescents (ages 13-18, 63% female, 35.7% White, 23.2% Black, 35.0% Hispanic/Latino). Measures of psychological distress (internalizing/externalizing problems, post-traumatic stress) and risk behaviors (substance use, suicidality, self-injury) were evaluated as covariates of victimization classes. Six classes were identified. Four classes—approximately half the sample—were characterized by polyvictimization. Polyvictimization classes were differentiated on number and nature of victimization types and chronicity of emotional abuse. Unique relations with demographics and mental health outcomes were observed. Results suggest polyvictimization is not a unidimensional phenomenon but a diverse set of victimization experiences with unique correlates among youth warranting further attention.

## **Symposium**

**Thursday, November 6**

**10:30 AM to 11:45 AM**

**Windsor/Sandringham**

## **New Directions for Treating Traumatic Grief across the Lifespan**

(Clin Res, Death-Grief, Lifespan, M, Industrialized)

Williams, Joah, PhD<sup>1</sup>; Prigerson, Holly, PhD<sup>2</sup>

<sup>1</sup>*Medical University of South Carolina, Charleston, South Carolina, USA*

<sup>2</sup>*Dana-Farber Cancer Institute, Boston, Massachusetts, USA*

Recent epidemiological data suggests that over 50% of adults in the U.S. have experienced the death of a loved one due to violence, accidents, or disasters during their lifetime (Kilpatrick et al., 2013). These traumatic deaths place surviving family and friends at increased risk for PTSD, depression, and prolonged grief (e.g., Maercker et al., 2013; McDevitt-Murphy et al., 2012). Thus, making effective, evidence-based treatments available to these survivors is a public health priority. This symposium aims to highlight innovative approaches for working with survivors across the lifespan, including Stepped Care Trauma-Focused Cognitive Behavioral Therapy for children grieving the violent death of a loved one (Salloum). We will discuss clinical considerations for working with young Black men affected by peer homicide during adolescence (Smith) and present results of two open trials for a group-based intervention, Restorative Retelling, for violently-bereaved adults (Rheingold). Lastly, we will discuss adult survivors' attitudes towards existing mental health interventions and their recommendations for tailoring these interventions to survivors using data collected via focus groups conducted in the Charleston, SC, area (Williams). Presenters will discuss future directions for this research as well as implications for clinicians working with this underserved population.

## **Symposium**

**Thursday, November 6**

**10:30 AM to 11:45 AM**

**Windsor/Sandringham**

## **Parent-led Treatment for Children after Violent Loss: Case Examples**

(Clin Res, Death, Child/Adol, M, N/A)

Salloum, Alison, PhD<sup>1</sup>; Thompson, Melissa, MSW<sup>2</sup>; McDowell, Fabienne, MS<sup>2</sup>; Cohen, Judith, MD<sup>3</sup>; Storch, Eric, PhD<sup>1</sup>

<sup>1</sup>*University of South Florida, Tampa, Florida, USA*

<sup>2</sup>*Crisis Center of Tampa Bay, Tampa, Florida, USA*

<sup>3</sup>*Allegheny General Hospital, Pittsburgh, Pennsylvania, USA*

A pilot trial on Stepped Care Trauma-Focused Cognitive Behavioral Therapy (TF-CBT) with nine young children found that 55.6% (intent-to-treat) to 83% (completers) responded to Step One, which was a parent-led, therapist-assisted treatment. Based on these preliminary results, a randomized clinical trial (RCT) is underway comparing Stepped Care TF-CBT to standard TF-CBT. In Step One, the parent provides treatment to the child at-home using a parent-child workbook and meets with the therapist three times over six weeks. When the trauma is a result of a death, the workbook includes specific grief-related activities that are added to the trauma exposures. This presentation provides data on two case examples from the RCT where the trauma was the result of a violent death: a four-year old whose father was murdered and a seven-year old whose sister committed suicide. Data include pre- and post-assessments using a structured interview of PTSD and related childhood disorders and parent reports of child PTSD and emotional and behavioral problems. The parent-led grief activities and trauma exposures, as well as clinical challenges will be discussed. Results indicate that PTSD symptoms and related problems were decreased, and the parents could lead the grief-related and trauma exposure activities.

## **Symposium**

**Thursday, November 6**

**10:30 AM to 11:45 AM**

**Windsor/Sandringham**

### **“Certain People Can’t Take What I Just Now Told You”: Understanding Factors Shaping Disclosures of Trauma and Grief among Young, Black, Male Homicide Survivors**

(Practice, Comm/Vio-Death-Ethnic-Grief, Lifespan, M, Industrialized)

**Smith, Jocelyn, PhD**

*University of Michigan, Ann Arbor, Michigan, USA*

The objective of this study is to examine individual and contextual factors shaping young, Black men’s decisions to disclose experiences of trauma and grief to mental health professionals. Previous research has evidenced significant mental health implications for surviving loved ones of homicide victims (Hertz, Prothrow-Stith, & Chery, 2005). However, insufficient attention has been paid to surviving youth in urban contexts, and the experiences of young, Black, male homicide survivors have been almost entirely overlooked. Using a modified grounded theory approach to data collection and analyses (LaRossa, 2005), in-depth interviews were conducted with young, Black men in Baltimore (n = 40; ages 18-24). Across participants, young men reported 119 homicide deaths of loved ones. Eleven participants witnessed these violent deaths adding an additional layer of trauma to their experiences of grief. Young men’s narratives revealed that most had not shared these experiences with a mental health professional or any adult. Factors shaping young men’s decisions to disclose experiences of trauma and loss included safety (physical and psychological), distrust, and feeling unheard. Clinical implications of these factors for treating young, Black, male, homicide survivors are discussed.

## **Symposium**

**Thursday, November 6**

**10:30 AM to 11:45 AM**

**Windsor/Sandringham**

### **Open Trials of Restorative Retelling Intervention after Violent Loss**

(Clin Res, Commun-Death-Grief, Adult, M, Industrialized)

**Rheingold, Alyssa, PhD<sup>1</sup>**; Rynearson, Ted, MD<sup>2</sup>; Saindon, Connie, MA<sup>3</sup>; Williams, Joah, PhD<sup>1</sup>; Baddeley, Jenna, PhD<sup>4</sup>

<sup>1</sup>*Medical University of South Carolina, Charleston, South Carolina, USA*

<sup>2</sup>*University of Washington, Seattle, Washington, USA*

<sup>3</sup>*Survivors of Violent Loss, San Diego, California, USA*

<sup>4</sup>*Ralph H. Johnson VA Medical Center, Charleston, South Carolina, USA*

Many survivors of violent loss suffer from chronic problems such as post-traumatic stress, depression, and complicated bereavement. Limited information is available on the impact of bereavement interventions on symptoms reduction as moderated by various characteristics of the loss and survivor (e.g., types of loss, quality and type relationship with the deceased). Two records review studies using an open trial methodology examining the effectiveness of Restorative Retelling (RR) will be presented. This 10-session intervention includes distress-management skills; commemorative work; and exposure based drawings of the story of death imagery. Participants were 91 survivors who sought treatment in a Seattle based clinic and 118 survivors from a San Diego based clinic. Outcome measures included symptoms related to post-traumatic stress, depression, and complicated bereavement. Measures were assessed at pre- and post-treatment for all participants and at 1-year follow-up for a subset of participants. Findings suggest that RR is a promising intervention that may be associated with treatment gains. Further, time since loss, high distress, and relationship with the deceased may play an important role in treatment recovery. Results imply a large-scale randomized control trial on the RR is warranted to determine treatment efficacy.

## **Symposium**

**Thursday, November 6**

**10:30 AM to 11:45 AM**

**Windsor/Sandringham**

### **In Their Own Words: A Focus Group Study of Treatment Needs After Violent Loss**

(Clin Res, Clin Res-Death-Grief, Adult, M, Industrialized)

**Williams, Joah, PhD<sup>1</sup>**; Rheingold, Alyssa, PhD<sup>1</sup>; McNallan, Liana, BS<sup>2</sup>; Knowlton, Alice, BS<sup>1</sup>

<sup>1</sup>*Medical University of South Carolina, Charleston, South Carolina, USA*

<sup>2</sup>*People Against Rape, Charleston, South Carolina, USA*

While evidence-based treatments exist for PTSD, depression, and prolonged grief disorder (PGD), there is a clear lack of research supporting the effectiveness and acceptability of these treatments in the context of traumatic grief. We conducted a series of focus groups with 23 violent loss survivors to elicit community feedback on practice elements drawn from these existing treatment packages. Participants included 21 women and 2 men who were, on average, 50 years old (SD = 12.54). Approximately 43.5% (n = 10) of survivors were bereaved parents. Time since death ranged from 20 months to 35 years. Applying widely adopted cut-scores to self-report measures of mental health outcomes, approximately 30.4% of these survivors screened positive for PTSD, 52.2% for at least mild depression, and 39.1% for PGD. We conducted one group with homicide survivors, one with suicide survivors, and two smaller groups with motor vehicle fatality survivors. Although qualitative analyses are still underway, survivors generally felt that practice elements from existing interventions for PTSD (e.g., exposure), depression (e.g., behavioral activation), and PGD (e.g., continuing bonds) would be helpful and could be easily tailored to meet the needs of bereaved individuals experiencing chronic psychological distress. Reactions to and recommendations regarding specific practice elements will be discussed.

**Symposium**  
**Thursday, November 6**  
**10:30 AM to 11:45 AM**  
**Bayfront B - CHILD TRACK TWO**

## **Childhood Trauma and Delinquency: Predictors, Correlates, and Consequences for Youth in the Juvenile Justice System**

(Res Meth, Aggress-CPA-CSA-Chronic, Child/Adol, M, Industrialized)

Kerig, Patricia, PhD  
*University of Utah, Salt Lake City, Utah, USA*

Recent research reveals that adolescents in the juvenile justice system have been disproportionately exposed to childhood trauma and evidence rates of PTSD that are significantly higher than those seen among community youth. In response, new models of the developmental psychopathology of delinquency propose that childhood trauma might act as a catalyst for antisocial behavior in adolescence. However, there remain many unanswered questions regarding the purported mechanisms of effect underlying the association between trauma and delinquency, as well as how these effects play out over the lifespan. This symposium brings together four papers from four independent, geographically diverse laboratories in the US, who are examining this question utilizing cutting-edge research designs and analytic methods, including latent class analyses and mixture modeling, and data derived from large-scale prospective longitudinal samples of juvenile justice-involved youth. The symposium participants will engage attendees in discussion of the results and their implications for understanding the intersection between trauma in childhood and the emergence of delinquent behavior in the adolescent period.

**Symposium**  
**Thursday, November 6**  
**10:30 AM to 11:45 AM**  
**Bayfront B - CHILD TRACK TWO**

## **Poly-Victimization among Juvenile Justice-Involved Youth: A Latent Class Analysis Replication and Extension to Youths in Community-Based Programs**

(Clin Res, Chronic-Clin Res-Complex-Pub Health, Child/Adol, M, Industrialized)

**Ford, Julian, PhD<sup>1</sup>**; Grasso, Damion, PhD<sup>1</sup>; Cruise, Keith, PhD<sup>2</sup>  
<sup>1</sup>*University of Connecticut Health Center, Farmington, Connecticut, USA*  
<sup>2</sup>*Fordham University, New York, New York, USA*

Ford and colleagues (2013) reported the first study of polyvictimization in youth in juvenile detention facilities, showing that poly-victims had extreme PTSD and related psychosocial and behavioral symptoms compared to the high base rate among all detained youths. Many youth in the juvenile justice system (and, unlike in detention, a large sub-group of girls) are in community probation-ordered programs. This replication and extension study therefore assessed 271 youth ages 11-17 enrolled in court-based community rehabilitation programs with the Traumatic Events Screening Instrument. Latent class analysis yielded an optimal 4-class solution. One class with 10% of the sample represented poly-victims who had the highest likelihood of all forms of traumatic victimization and more severe UCLA PTSD RI and Abbreviated Dysregulation Inventory scores (MANOVA  $F[3,267] = 13.59, p < .001$ ) compared to 2 moderate victimization (primarily loss and non-interpersonal traumas) and low victimization classes. Poly-victims also showed the greatest reductions in PTSD symptoms and dysregulation (MANOVA  $F[2, 266] = 22.80, p < .001$ ) during and after receiving Trauma Affect Regulation: Guide for Education and Therapy (TARGET)



in groups, suggesting that poly-victimized youth in juvenile justice are prime candidates for trauma-specific affect regulation-focused therapeutic intervention.

## **Symposium**

**Thursday, November 6**

**10:30 AM to 11:45 AM**

**Bayfront B - CHILD TRACK TWO**

### **Toward Validation of the Dissociative Subtype among Traumatized Youth: Mixture Modeling Classifications Related to Over- vs. Undermodulation of Emotion**

(Clin Res, Aggress-Assess Dx-Dev/Int, Child/Adol, M, Industrialized)

**Bennett, Diana, MS PhD Student;** Modrowski, Crosby, BA; Kerig, Patricia, PhD; Chaplo, Shannon, BA  
*University of Utah, Salt Lake City, Utah, USA*

In keeping with the addition of a dissociative subtype in the revised DSM diagnosis of PTSD, new research suggests the existence of an “overmodulating” subtype with identifiable features. However, to date this typology has not been validated in youth. This study addressed this question in a sample of 225 adolescents meeting partial or full criteria for PTSD. Mixture modeling in Mplus identified two groups of youth that differed on the level of dissociative symptoms endorsed, as measured by the A-DES (30 high in dissociation, or “overmodulators,” and 195 low in dissociation, or “undermodulators”). Youth who indicated a tendency to undermodulate emotions reported lower general numbing of emotions, lower PTSD symptoms, less trauma exposure, and less emotion dysregulation as compared to youth more likely to overmodulate through dissociation. Further, peritraumatic dissociation mediated the association between trauma exposure and probability of membership in the overmodulation group. Further analyses include examination of the role of re-experiencing and avoidant symptoms in the over/undermodulation typology. These results have implications for understanding the development of delinquency among trauma-exposed adolescents and also suggest that two disparate types of emotional responses may have differential risk factors and outcomes for this population of youth.

## **Symposium**

**Thursday, November 6**

**10:30 AM to 11:45 AM**

**Bayfront B - CHILD TRACK TWO**

### **Factors Associated with Juvenile Justice Involvement in a Nationally Representative Sample of Trauma-Exposed Youth**

(Prevent, Chronic-Comm/Vio-Dev/Int-Prevent, Child/Adol, M, Industrialized)

**Branson, Christopher, PhD**

*Mount Sinai School of Medicine, Dept of Psychiatry, New York, New York, USA*

A growing body of literature demonstrates a link between childhood exposure to trauma and subsequent involvement in the juvenile justice system. However, few studies have examined potential mediators/moderators of this relationship and most such studies focus on a limited number of trauma types (e.g., sexual abuse). Such information is needed to inform the development of targeted interventions to prevent delinquency among maltreated youth. The current study examined factors associated with juvenile justice-involvement among a nationally-representative sample of youth with histories of trauma exposure. The sample consisted of adolescents ages 13-18 (N=10,123) that participated in the National Comorbidity Survey-Adolescent Supplement, a study of psychiatric disorders and risk factors. Analyses for the present study compared youth with and without justice-system involvement on several variables hypothesized to increase or reduce the risk of arrest (demographics, family-peer-

community factors, psychosocial functioning, onset/duration of trauma exposure). Several factors were associated with increased likelihood of justice-involvement, including polyvictimization, family functioning, and certain psychiatric disorders ( $p < .05$ ). The implications of these findings for assessment and prevention/early intervention will be discussed as well as directions for future research.

## **Symposium**

**Thursday, November 6**

**10:30 AM to 11:45 AM**

**Bayfront B - CHILD TRACK TWO**

### **Examining the Impact of PTSD and Violence Exposure on Juvenile Offending**

#### **Trajectories: A Growth Curve Modeling Approach**

(Social, Chronic-Dev/Int-Res Meth, Child/Adol, M, Industrialized)

**Dierkhising, Carly, PhD Candidate**

*University of California Riverside, Riverside, California, USA*

Growing evidence on the prevalence of violence exposure and PTSD among justice-involved youth has encouraged juvenile justice stakeholders to utilize trauma-specific services. A critical missing link in the current literature is whether violence exposure and PTSD relate to persistence in offending trajectories. The current study utilizes the largest longitudinal study of adolescent crime; the Pathways to Desistance Study (Schubert et al., 2004) to evaluate whether violence exposure and PTSD are related to changes in offending trajectories across two years. Participants ( $N = 1354$ ) are mostly male (86.4%) and 16 years old ( $SD = 1.14$ ). In the final model, violence exposure significantly predicts initial status in offending ( $\beta = .105$ ,  $p < .001$ ) and PTSD symptoms marginally predict slope ( $\beta = .016$ ,  $p = .052$ ). This indicates that violence exposure is related to a higher initial status in offending behavior; however, it does not predict change in offending trajectories. In contrast, PTSD is unrelated to initial status of offending behavior but is marginally associated with the rate of change in offending behavior at 18 months, suggesting that those with PTSD have slower rates of decline in offending behavior compared to those without. Implications for trauma services among justice-involved youth will be discussed.

## **Symposium**

**Thursday, November 6**

**10:30 AM to 11:45 AM**

**Brickell - MILITARY TRACK**

## **The Effects of Childhood Trauma on Post-Deployment Functioning and Recovery**

(Clin Res, Assess Dx-CPA-CSA-Mil/Vets, Adult, I, Industrialized)

Resick, Patricia, PhD, ABPP<sup>1</sup>; Chard, Kathleen, PhD<sup>2</sup>

<sup>1</sup>*National Center for PTSD, VA Boston Healthcare System and Boston University, Boston, Massachusetts, USA*

<sup>2</sup>*Cincinnati VA Medical Center, Cincinnati, Ohio, USA*

In keeping with the theme of the conference, this symposium will examine the effects of childhood abuse on active military members post-deployment, a very understudied topic. Recent studies of active duty military have shown that adverse childhood experiences predicted mental health symptoms even after adjusting for deployment-related traumatic exposures (Cabrera et al., 2007; Sareen et al., 2013). Carson et al. will expand on these findings by investigating the relationship between child abuse, coping, and pre-treatment PTSD and depressive symptoms in active duty military. Dondanville et al. will examine the impact of childhood abuse on mental health symptoms (PTSD, depression, alcohol use, suicidal behaviors) and health symptoms (PHQ-15, Promis, Fibromyalgia Questionnaire) among active duty military personnel enrolled in treatment for PTSD. The relationships among baseline symptoms, childhood abuse, and combat exposure will also be explored. No studies have examined the effect of childhood abuse on engagement and outcome for treatment for PTSD in a military sample. The proposed presentation by Wachen et al. will examine the impact of childhood abuse on engagement and outcomes following treatment for PTSD. The effect of childhood abuse over and above combat exposure will also be examined. Dr. Kathleen Chard will be the discussant of this symposium.

## **Symposium**

**Thursday, November 6**

**10:30 AM to 11:45 AM**

**Brickell - MILITARY TRACK**

## **Relationship between Child Abuse, Coping, and Pre-Treatment PTSD and Depressive Symptoms**

(Clin Res, CPA-CSA-Complex-Mil/Vets, Adult, I, N/A)

Carson, Cody, PhD<sup>1</sup>; Holder, Nicholas, BSc<sup>1</sup>; Resick, Patricia, PhD<sup>2</sup>; Wachen, Jennifer, PhD<sup>3</sup>; Mintz, Jim, PhD<sup>4</sup>; Dondanville, Katherine, PsyD<sup>4</sup>; Peterson, Alan, PhD<sup>4</sup>; Borah, Adam, MD<sup>5</sup>; Yarvis, Jeff, PhD MSW<sup>6</sup>

<sup>1</sup>*University of Texas Health Science Center at San Antonio, Fort Hood, Texas, USA*

<sup>2</sup>*Duke University Medical Center, Durham, North Carolina, USA*

<sup>3</sup>*National Center for PTSD / Boston University, Boston, Massachusetts, USA*

<sup>4</sup>*University of Texas Health Science Center at San Antonio, San Antonio, Texas, USA*

<sup>5</sup>*Darnell Army Medical Center, Ft. Hood, Texas, USA*

<sup>6</sup>*Ft. Belvoir Community Hospital, Fort Belvoir, Virginia, USA*

The relationship between child abuse (CA) and psychopathology in active duty military has received limited attention in the literature. The research that has been conducted suggests that adverse childhood experiences are related to an increase in mood and anxiety disorders in military samples (Sareen et al., 2013). However, little to no work has been conducted on differences in coping styles between active duty military who have experienced CA and

those who have not. The purpose of the current study was to examine differences in coping styles, as measured by the Response to Stressful Life Experiences Scale (RSES: Johnson et al., 2011), and pretreatment symptoms of PTSD and depression between those who experienced CA and those who did not. Pilot analyses were conducted on 99 active duty soldiers (45% experienced CA) who sought treatment for PTSD. Preliminary results indicated that the total RSES score was negatively correlated with pretreatment symptoms of depression across groups ( $r = -.24$ ,  $p < .05$ ), but was not related to pretreatment symptoms of PTSD ( $r = -.05$ , ns). No significant differences in the total RSES score were found between soldiers who had experienced CA and those who had not. Further analyses on the entire sample ( $N = 290$ ) will explore differences in coping styles, as measured by the RSES subscales, between those who experienced CA and those who did not.

## **Symposium**

**Thursday, November 6**

**10:30 AM to 11:45 AM**

**Brickell - MILITARY TRACK**

### **Impact of Child Abuse on Physical and Emotional Functioning**

(Assess Dx, CPA-Clin Res-Health-Mil/Vets, Adult, I, Industrialized)

**Dondanville, Katherine, PsyD<sup>1</sup>**; Blankenship, Abby, PhD<sup>1</sup>; Resick, Patricia, PhD<sup>2</sup>; Wachen, Jennifer, PhD<sup>3</sup>; Mintz, Jim, PhD<sup>1</sup>; Peterson, Alan, PhD<sup>1</sup>; Higgs, Jay, MD<sup>4</sup>; Borah, Adam, MD<sup>5</sup>

<sup>1</sup>*University of Texas Health Science Center at San Antonio, San Antonio, Texas, USA*

<sup>2</sup>*Duke University Medical Center, Durham, North Carolina, USA*

<sup>3</sup>*National Center for PTSD / Boston University, Boston, Massachusetts, USA*

<sup>4</sup>*San Antonio Military Medical Center, San Antonio, Texas, USA*

<sup>5</sup>*Carl R. Darnall Army Medical Center, Fort Hood, Texas, USA*

Childhood abuse (CA) experiences have been found to be a significant predictor of PTSD and depression, above and beyond the role of combat exposure in a sample of Army Troops deployed to Iraq (Cabrera, Hoge, Bliese, Castro, & Messer, 2007). The current study investigated the relationship between CA and physical and mental health symptoms among active duty Army personnel enrolled in an RCT evaluating the efficacy of CPT for Combat-related PTSD ( $N=89$ ). It was hypothesized that individuals with CA would endorse severer mental health and physical health symptoms at baseline in comparison to individuals without CA. Approximately 50% reported experiencing CA. Contrary to our hypotheses, there were no differences between individuals with and without CA experiences on PTSD as measured by the PCL ( $t = 0.55$ ,  $p = 0.58$ ) and depression as measured by the BDI-II ( $t = -0.05$ ,  $p = 0.96$ ). Number of deployments, a proxy measure of combat exposure, was not related to baseline PTSD or depression symptoms ( $p$ -range .12-.77). Further analyses will be conducted on alcohol use, suicidal behaviors, and health symptoms. Our results conclude CA did not contribute to more severe symptoms among service members and are consistent with previous literature that has found that childhood physical abuse did not predict adult PTSD symptoms (Nishish, Mechanic, & Resick, 2000; Seifert, Polusny, & Murdoch, 2011).

## **Symposium**

**Thursday, November 6**

**10:30 AM to 11:45 AM**

**Brickell - MILITARY TRACK**

### **Effects of Child Abuse on Engagement and Response to PTSD Treatment**

(Clin Res, CPA-CSA-Depr-Mil/Vets, Adult, I, Industrialized)

**Wachen, Jennifer, PhD<sup>1</sup>**; Dondanville, Katherine, PsyD<sup>2</sup>; Blankenship, Abby, PhD<sup>2</sup>; Carson, Cody, PhD<sup>3</sup>; Resick, Patricia, PhD<sup>4</sup>; Mintz, Jim, PhD<sup>2</sup>; Peterson, Alan, PhD<sup>2</sup>; Borah, Adam, MD<sup>5</sup>

<sup>1</sup>National Center for PTSD / Boston University, Boston, Massachusetts, USA

<sup>2</sup>University of Texas Health Science Center at San Antonio, San Antonio, Texas, USA

<sup>3</sup>University of Texas Health Science Center at San Antonio, Fort Hood, Texas, USA

<sup>4</sup>Duke University Medical Center, Durham, North Carolina, USA

<sup>5</sup>Darnell Army Medical Center, Ft. Hood, Texas, USA

Recent studies of active duty military found that childhood abuse (CA) predicted mental health symptoms even after adjusting for deployment related traumatic exposures (e.g., Sareen et al., 2013). However, no studies have examined the effect of CA on engagement and outcomes for treatment for PTSD in a military sample. One civilian study found that female rape victims with a history of childhood sexual abuse showed equal improvement following cognitive processing therapy (CPT) as those without (Resick, Nishith, & Griffin, 2003). However, the impact of multiple deployments in addition to a history of CA may lead to different results in an active duty sample. This study examined the impact of CA on engagement and outcomes following treatment for PTSD among active duty military through the STRONG STAR consortium (N=99). Participants received 12 sessions of group CPT or group Present Centered Therapy. ANCOVA and logistic regression were used to explore treatment outcomes and dropout. Results revealed no significant differences in treatment dropout between those with and without CA. Contrary to hypotheses, those with CA reported lower depression ( $p=.028$ ,  $d=0.48$ ) and total PCL scores ( $p=.077$ ,  $d=0.39$ ) following treatment than those without. Results support a growing literature suggesting that CA does not negatively impact treatment engagement and outcomes, even in a military sample.

## **Symposium**

**Thursday, November 6**

**10:30 AM to 11:45 AM**

**Sevilla - LONG-TERM EFFECTS OF CHILD TRAUMA TRACK**

## **Links from Childhood Trauma to Physiological Outcomes Across Development**

(Bio Med, CPA-Comm/Vio-Health-Prevent, Lifespan, M, Industrialized)

Wilson, Helen, PhD; Carrion, Victor, MD

*Stanford University School of Medicine, Stanford, California, USA*

This symposium presents findings from four unique, innovative studies examining relationships between childhood trauma and physiological outcomes at different stages of development. The four papers examine biological markers reflecting important developmental processes at relevant developmental stages (emotion regulation in children, sleep in pre- to early adolescence, menarche in adolescence, and health outcomes in middle adulthood). The first paper (Klabunde and Carrion) uncovers gender differences in the relationship between childhood trauma and altered development of the insula, a cortical region associated with emotion regulation and somatic processing. The second paper (Primeau, O'Hara, and Carrion) investigates objective markers of sleep dysregulation in youth exposed to interpersonal violence. The third paper (Staudenmeyer and Wilson) examines whether direct victimization and witnessed violence are associated with earlier age of menarche in a high-risk sample of low-income African American girls. The fourth paper (Nikulina and Widom) focuses on health outcomes related to diabetes and kidney and liver disease in adults, predicted by court substantiated child abuse and neglect. These four studies use innovative methodologies to demonstrate biological and health outcomes associated with childhood trauma and explicate differences associated with gender and race.



## **Symposium**

**Thursday, November 6**

**10:30 AM to 11:45 AM**

### **Sevilla - LONG-TERM EFFECTS OF CHILD TRAUMA TRACK**

#### **Evidence for Sexual Dimorphism within Insula Sub-Components in Youth with PTSD**

(Bio Med, Bio Med, Child/Adol, M, Industrialized)

**Klabunde, Megan, PhD<sup>1</sup>**; Carrion, Victor, MD<sup>2</sup>

<sup>1</sup>*Stanford University, Stanford, California, USA*

<sup>2</sup>*Stanford University School of Medicine, Stanford, California, USA*

Cortical differences are found when comparing youth with PTSD and typically developing controls. Cortical differences have been found within the insula, a brain region involved in emotion and somatic processing. However, recent studies suggest that insula sub-regions have different functions and developmental trajectories. Studies also suggest that sexual dimorphism occurs within the developing insula and also in youth with PTSD. Specifically, one recent study found that girls with PTSD demonstrate smaller insula volumes than controls. However, to date, no studies have yet examined sexual dimorphism across insula sub-components in youth with and without PTSD. Additionally, no studies have examined insula volume, surface area and thickness measures. In this study, we examined sex differences in youth (ages 9-17) with and without PTSD symptoms (30 youth with PTSD and 29 controls) across insula sub-regions on measures of cortical volume, surface area and thickness. Preliminary findings suggest that girls have smaller insula volumes and surfaces areas than controls, whereas boys have larger insula cortical volumes and surface areas than both controls and girls. Differences were found within the anterior segment of the circular sulcus. Therefore, sexual dimorphism occurs within insula subcomponents, and results support further evaluation of the insula in youth with PTSD.

## **Symposium**

**Thursday, November 6**

**10:30 AM to 11:45 AM**

### **Sevilla - LONG-TERM EFFECTS OF CHILD TRAUMA TRACK**

#### **The Association Between Childhood Trauma and Sleep Disruption: An Objective Investigation**

(Clin Res, Assess Dx-Bio Med-Sleep, Child/Adol, M, N/A)

**Primeau, Michelle, MD**

*Stanford University, Stanford, California, USA*

Sleep disruption is a frequent consequence of traumatic exposures (Germain, 2013). Retrospective studies have described an association between adverse childhood experiences and adult sleep disruption, including shorter total sleep time, increase sleep latency, reduced sleep quality, insomnia, and dependence on sedative-hypnotic medications (Bader et al. 2007; Chapman et al. 2011; Greenfield et al 2011). Prospective studies have found that sleep disruption preceding or following a traumatic exposure increases the risk for developing post-traumatic stress disorder, depression, and anxiety (Gehrman et al. 2013; Mellman et al. 2002, 2007). This presentation will summarize the extant literature and preliminary cross-sectional data utilizing an objective sleep measure, polysomnography, to describe sleep alterations in children exposed to interpersonal violence (age 10-14; N=9). Preliminary findings suggest that violence exposure is associated with alterations in rapid-eye movement (REM) sleep, which is believed to be important in emotional processing and memory, and that physical abuse is correlated with sleep disruption. Thus, childhood trauma may trigger a sleep disruption that puts an individual at greater

vulnerability for later psychiatric symptoms. Sleep therefore may represent a modifiable risk factor for the prevention of psychiatric conditions in children exposed to trauma.

## **Symposium**

**Thursday, November 6**

**10:30 AM to 11:45 AM**

### **Sevilla - LONG-TERM EFFECTS OF CHILD TRAUMA TRACK**

#### **Direct and Indirect Violence Exposure as Predictors of Early Menarche in African American Girls**

(Clin Res, CPA-CSA-Comm/Vio-Health, Child/Adol, M, Industrialized)

**Staudenmeyer, Anna, PhD<sup>1</sup>**; Wilson, Helen, PhD<sup>2</sup>

<sup>1</sup>*Palo Alto University, Palo Alto, California, USA*

<sup>2</sup>*Stanford University School of Medicine, Stanford, California, USA*

Age of menarche reflects a critical milestone in girls' physical and psychosocial development and is a vital predictor of emerging psychopathology and health risks. Research indicates an association between early age of menarche and childhood sexual and physical abuse, with inconsistent findings for physical abuse. Variability in study methodology limits the conclusions that can be drawn relative to childhood sexual and physical abuse as predictors of early menarche. No studies have examined witnessing violence in childhood and its relationship to age of menarche. In this study, 177 African-American adolescent girls (ages 14-22) drawn from a larger longitudinal study completed the Lifetime Victimization and Trauma History (LTVH). Age of menarche was collected from questionnaires completed by the girls' female caregivers. In childhood (before age 12), 9% of the sample experienced sexual abuse, 27.1% physical abuse, and 21.5% witnessed violence. The mean age of menarche for this sample was 11.69, less than the national average for African American girls. Regression models, controlling for confounding factors, will be used to determine the associations between experiencing versus witnessing violence in childhood and reported age of menarche. Results will help to clarify the implications of experiencing trauma in childhood, whether through witnessing or direct victimization.

## **Symposium**

**Thursday, November 6**

**10:30 AM to 11:45 AM**

### **Sevilla - LONG-TERM EFFECTS OF CHILD TRAUMA TRACK**

#### **Do Childhood Maltreatment, Childhood Poverty and Race Predict Physical Health Outcomes in Adulthood? A Multilevel Prospective Analysis**

(Bio Med, CPA-CSA-Cul Div-Neglect, Lifespan, M, Industrialized)

**Nikulina, Valentina, PhD**; Widom, Cathy, PhD

*John Jay College, CUNY, New York, New York, USA*

Child abuse and neglect tend to occur at higher rates in poor families and neighborhoods than in more advantaged environments and both child maltreatment and poverty are risk factors for poor physical health in adulthood. Race disparities in physical health are also documented and Blacks tend to have poorer health than Whites in the United States. Although risk factors for poor health frequently co-occur, the effects of childhood maltreatment on physical health are rarely assessed in the context of poverty and race. This paper will examine the unique and interacting contributions of childhood maltreatment, race, family and neighborhood poverty to adult physical health outcomes of diabetes, kidney and liver disease. This prospective cohort design study of substantiated cases of child abuse and neglect and matched controls (N= 1196) followed participants into middle adulthood (mean age = 42) and assessed

health outcomes through blood collection by a registered nurse. Data will be analyzed using hierarchical linear models that account for clustering of participants within neighborhoods. The findings will highlight the ways in which childhood maltreatment, race and poverty act together to influence physical health.

## **Symposium**

**Thursday, November 6**

**10:30 AM to 11:45 AM**

**Trade**

## **Interdisciplinary Collaboration to Support Evidence-Based Practices**

(Train/Ed/Dis, Commun-Train/Ed/Dis, Lifespan, M, Industrialized)

Franks, Robert, PhD<sup>1</sup>; Saunders, Benjamin, PhD<sup>2</sup>

<sup>1</sup>*Judge Baker Children's Center, Boston, Massachusetts, USA*

<sup>2</sup>*Medical University of South Carolina, Charleston, South Carolina, USA*

We describe efforts from four states that promote interdisciplinary collaboration to support evidence-based practices (EBP) dissemination. First, we present results from a statewide dissemination of TF-CBT in Connecticut using learning collaboratives with clinical providers and child welfare staff. Data from 13 agencies, over 150 staff, and 300 children served will be shared. Second, we describe the Community Based Learning Collaborative (CBLC) model from South Carolina, which pairs clinical staff trained in TF-CBT with non-clinical “brokers” trained in evidence-based case management. Data will be shared from seven CBLCs and over 800 professionals. Third, we describe the Veteran Culture and Clinical Competence Breakthrough Series, developed to improve access and quality of mental health services offered to Veteran, Guard and Reserve families in North Carolina. This initiative focuses on community mapping efforts to assist clinical providers in increasing access to needed services for military families. Finally, developing interdisciplinary collaborations in pre-service settings is the focus of many Child Advocacy Studies programs. This presentation will outline how the University of Missouri-St. Louis prepares young professionals to work with colleagues from different disciplines to understand, evaluate and be better prepared to implement EBPs across child service settings.

## **Symposium**

**Thursday, November 6**

**10:30 AM to 11:45 AM**

**Trade**

## **Avoiding Silos: Building Interdisciplinary Collaborations in Pre-Service Settings**

(Train/Ed/Dis, CPA-CSA-Train/Ed/Dis, Child/Adol, M, Industrialized)

**Dunn, Jerry, PhD;** Denny, Dorothy, LCSW

*University of Missouri St. Louis, St Louis, Missouri, USA*

Efforts to build and enhance interdisciplinary collaborations to facilitate dissemination of evidence based practices often face challenges and barriers. One promising approach to reducing these challenges is to support the “up-stream” strategy of integrating trauma informed skills and knowledge into undergraduate and graduate training programs. Developing interdisciplinary collaborations in pre-service settings is the focus of Child Advocacy Studies (CAST) programs in universities and community colleges across the nation. This presentation will outline how the CAST certificate at the University of Missouri-St. Louis and other educational institutions prepares young

professionals to work with colleagues from different disciplines to understand, evaluate and be better prepared to implement evidence based practices across various child service settings. Ideas for experiential learning opportunities will be discussed as well as information gleaned from students and service sector employers.

## **Symposium**

**Thursday, November 6**

**10:30 AM to 11:45 AM**

**Trade**

### **Using the Community Based Learning Collaborative Model to Promote Interprofessional Collaboration and Increased Access to Trauma-Focused Services for Children**

(Train/Ed/Dis, CPA-CSA-Commun, Child/Adol, M, Industrialized)

**Hanson, Rochelle, PhD; Saunders, Benjamin, PhD; Moreland, Angela, PhD**  
*Medical University of South Carolina, Charleston, South Carolina, USA*

Objective: This presentation will share data from 2 projects that utilize the Community Based Learning Collaborative (CBLC) model to implement trauma-informed services to abused children and their families: Project BEST (Bringing Evidence-Supported Treatments to South Carolina children and families; Duke Endowment) and PATS (Program on Adolescent Traumatic Stress; SAMHSA). The CBLC trains clinicians to implement TF-CBT with fidelity and brokers (non-clinical, child abuse professionals) on skills related to treatment planning and case management; it is designed to promote interprofessional collaboration (IC) across child-serving agencies to increase access/availability of trauma-focused EBTs. Method: We will focus on 7 CBLCs (n=808 clinical and broker professionals) with pre/post and monthly data measuring IC (related to assessment, referral, information sharing) and organizational level factors associated with TF-CBT treatment completion. Results: Analyses will examine individual and organizational level variables related to IC; HLM analyses will examine longitudinal change in levels of IC and how these factors relate to rates of TF-CBT treatment completion. Conclusion: Data supporting the role of IC to improve availability and successful completion of trauma-focused EBTs for children has important implications for future EBT implementation efforts.

## **Symposium**

**Thursday, November 6**

**10:30 AM to 11:45 AM**

**Trade**

### **Interdisciplinary Collaboration to Assist Community Mental Health Providers Working with Veteran, Guard, and Reserve Families**

(Train/Ed/Dis, Mil/Vets, Prof, M, Industrialized)

**Ake, George, PhD**  
*Duke University School of Medicine, Durham, North Carolina, USA*

Objective: In 2011, the Veteran Culture and Clinical Competence Breakthrough Series (BSC) was funded to help improve access and quality of community mental health services offered to Veteran, Guard and Reserve families in NC. Methods: In order to increase the presence and quality of military-informed care, the Duke Evidence-based Practice Implementation Center, in partnership with the Center for Child and Family Health and the National Center for Child Traumatic Stress, hosted a 14-month BSC with six community-based agencies, 37 clinicians, seven in-person training days, site visits and in-person team consultations, inter-agency taskforces and over 80 hours of

training. Conclusions: Similar to other studies showing that less than 50% of community providers ask their patients about their military service and fewer have received training to become military informed, the BSC demonstrated that improvements were needed within agencies and systems to better identify military service members and their families. In addition, community mapping activities were useful when embedded in the face-to-face training sessions of the BSC to connect providers to local military family friendly resources.

## **Symposium**

**Thursday, November 6**

**10:30 AM to 11:45 AM**

**Trade**

### **Behavioral Health and Child Welfare Collaboration for Implementation of Trauma-Focused Evidence-Based Treatment**

(Train/Ed/Dis, Pub Health-Social-Train/Ed/Dis, Child/Adol, M, Industrialized)

**Lang, Jason, PhD<sup>1</sup>; Connell, Christian, PhD<sup>2</sup>; Shanley, Paul, LCSW<sup>3</sup>**

<sup>1</sup>*Child Health and Development Institute, Farmington, Connecticut, USA*

<sup>2</sup>*Yale School of Medicine, New Haven, Connecticut, USA*

<sup>3</sup>*Connecticut Department of Children and Families, Hartford, Connecticut, USA*

We present results from learning collaboratives that involved co-training teams of clinical providers and child welfare workers to improve access to EBPs for children in the child welfare system. Clinical providers were trained in TF-CBT, and child welfare staff were trained to screen children, refer to EBP providers, and coordinate treatment and case planning. The evaluation examines changes in trauma knowledge and practice and cross-system collaboration among 150 staff across 13 agencies. A mixed method design was used including baseline and post-training surveys and focus groups. Agencies completed monthly implementation metrics, and therapists collected child outcome assessments of PTSD symptoms, internalizing, and externalizing behaviors through standardized measures. Repeated measures MANOVAs of staff surveys reveal: 1) improvements in ratings of trauma knowledge and practice over time with variation across participant types, and 2) improvements in ratings of collaboration over time, with greater change for mental health setting participants. Qualitative analyses help contextualize survey results and highlight participant views on the benefits and challenges to this cross-system training model. Child-level outcome analyses reveal significant reductions in PTSD symptoms, depressive symptoms, and problem behaviors.



**Symposium**  
**Thursday, November 6**  
**10:30 AM to 11:45 AM**  
**Gusman/Tuttle**

## **New Directions in Campus Sexual Assault Research**

(Social, Rape, Adult, M, Industrialized)

Flack, William, PhD<sup>1</sup>; Newman, Elana, PhD<sup>2</sup>  
<sup>1</sup>*Bucknell University, Mifflinburg, Pennsylvania, USA*  
<sup>2</sup>*University of Tulsa, Tulsa, Oklahoma, USA*

Recent developments in research on campus sexual assault in the U.S. align with an increased focus from the federal government on this issue. Contributors to this symposium will address the continued high prevalence of campus sexual assault, and new topics of research on this problem including hooking up as a risk factor, institutional betrayal as a response, and study abroad as an understudied context.

**Symposium**  
**Thursday, November 6**  
**10:30 AM to 11:45 AM**  
**Gusman/Tuttle**

## **Sexual Assault and Study Abroad**

(Prevent, Prevent-Pub Health-Rape, Adult, M, Global)

Kimble, Matt, PhD<sup>1</sup>; Flack, William, PhD<sup>2</sup>; Burbridge, Emily, BA<sup>1</sup>  
<sup>1</sup>*Middlebury College, Middlebury, Vermont, USA*  
<sup>2</sup>*Bucknell University, Mifflinburg, Pennsylvania, USA*

Sexual assault of women on college campuses has been widely studied over the past two decades. More recent data suggest that risk may not be evenly distributed across the college experience with certain periods, like the first two years, possibly conferring more risk than other periods (Kimble et al., 2008; Flack et al., 2008). Student health offices often refer to such periods as “red zones.” This talk will present data from a number of samples that suggest a relatively high risk for sexual assault during study abroad. Four separate samples using Koss’s Revised Sexual Experiences Survey (Koss et al., 2007) suggest single semester risk ranging from 3 to 6% for completed rape and 7 to 11% for attempted rape. Both direct within subject comparisons as well as comparisons to the existing literature suggest that risks are higher than would be expected during the third year at college. In this sense, study abroad may “renew” risk for undergraduate women. Further data on factors that may play a role in increased risk such as location, language fluency, and alcohol use will be presented. The implications for colleges sending students abroad, both with respect to prevention and response, will be discussed.

**Symposium**  
**Thursday, November 6**  
**10:30 AM to 11:45 AM**  
**Gusman/Tuttle**

## **Hooking Up is a Risk Factor for Campus Sexual Assault: Findings from Four Studies**

(Social, Aggress-Comm/Int-Comm/Vio-Rape, Adult, M, Industrialized)

**Flack, William, PhD**

*Bucknell University, Mifflinburg, Pennsylvania, USA*

Hooking up is usually defined as an intimate, sexual, dyadic encounter that may or may not entail future relational commitment. Garcia et al. (2012) indicate that between 60% and 80% of U.S. college students have engaged in hookups. My research team at Bucknell University has been examining the relationship between hooking up and campus sexual assault annually since 2010. Findings from four datasets provide robust evidence that hooking up is reported as a significant contextual risk factor by approximately 75% of female sexual assault victims. Furthermore, some types of hook ups are riskier than others, especially those in which partners are either strangers or acquaintances, as compared with hookups involving friends or former romantic partners. I will provide an overview of these results in the context of feminist routine activities theory, as well as suggestions for further investigation and educational intervention.

## **Symposium**

**Thursday, November 6**

**10:30 AM to 11:45 AM**

**Gusman/Tuttle**

## **Research on Institutional Betrayal: The Case of Campus Sexual Violence**

(Social, Aggress-Rape-Orient, Adult, M, Industrialized)

**Freyd, Jennifer, PhD; Smith, Carly, MA; Rosenthal, Marina, MA**

*University of Oregon, Eugene, Oregon, USA*

Recent research indicates that institutional betrayal exacerbates the harm of sexual trauma – sexually-assaulted students who were treated poorly by their institutions show significantly greater levels of anxiety and trauma-specific symptoms (Smith & Freyd, 2013). We have found heightened effects for LGBT-identified students compared to heterosexual students (Cunningham, Smith, & Freyd, under review). We have also uncovered some of the specific mechanisms by which universities currently fail to prevent sexual assault and cause additional harm to victims. We have recently discovered through controlled experimentation that the typical “email alerts” many universities send out in supposed compliance with the Clery Act currently are written in a way that contributes to beliefs in rape myths (Smith, Bhuptani & Freyd, under review). Additionally, we are currently collecting systematic data from faculty, administrators, and students to assess knowledge of and adherence to Title IX. Preliminary findings (N=254) indicate that while up to 23% of faculty and staff have received a disclosure of sexual violence from a student, 48% report not having adequate knowledge about what will happen next if a report is made to school officials. Our research reveals areas of institutional policy and practice that could and should be targeted for improvement.

## **Workshop Presentation**

**Thursday, November 6**

**10:30 AM to 11:45 AM**

**Merrick**

### **Working With Auditory Hallucinations in PTSD**

(Practice, Clinical Practice-Cog/Int-Complex, Adult, A, Industrialized)

**Brewin, Chris, PhD**

*University College London, London, United Kingdom*

Recent research has identified that auditory pseudo-hallucinations are common in PTSD, affecting over half of complex cases. The symptom consists of patients hearing their thoughts in the form of a particular voice or voices that may be supportive or, more often, critical. The symptom is similar to voice-hearing in psychosis and is probably dissociative in nature, with patients fully aware these are their own thoughts. Voices are likely to have a major impact on other symptoms and on wellbeing, and be actively involved in the therapeutic process by commenting on the therapist and what is happening in the session. Pilot work suggests it is important to have patients describe and interact with their voices, and test out predictions based on what they say. Essentially this involves adapting standard cognitive therapy procedures such as Socratic questioning and having patients interrogate their own voices. The workshop will outline the nature of voice-hearing in PTSD and how to assess it efficiently. I will present case studies of therapeutic work with voices and discuss the use of different techniques to normalise voice-hearing and bring it under the patient's control.

(Brewin, C.R. & Patel, T. (2010). Auditory pseudohallucinations in United Kingdom war veterans and civilians with post-traumatic stress disorder. *Journal of Clinical Psychiatry*, 71, 419-425)

## **Workshop Presentation**

**Thursday, November 6**

**10:30 AM to 11:45 AM**

**Flagler**

### **Addressing the Complex Needs of Commercially Sexually Exploited Children:**

#### **Provider Response and System Challenges**

(Practice, CSA, Child/Adol, I, Industrialized)

**Kinnish, Kelly, PhD<sup>1</sup>; Cohen, Judith, MD<sup>2</sup>; Greenbaum, Virginia, MD<sup>3</sup>**

<sup>1</sup>*Georgia Center for Child Advocacy, Atlanta, Georgia, USA*

<sup>2</sup>*Allegheny General Hospital, Pittsburgh, Pennsylvania, USA*

<sup>3</sup>*Emory University School of Medicine, Atlanta, Georgia, USA*

The Commercial Sexual Exploitation of Children (CSEC) represents a particular challenge to professionals across multiple service systems. Victims often have long histories of multiple traumatic experiences, high rates of PTSD, and are at high risk for a broad range of adverse consequences and negative mental health outcomes. Numerous barriers to identification and service engagement further compromise outcomes. This presentation will provide an overview of CSEC, including risk factors, contextual features, developmental considerations, and system challenges. Considerations for medical personnel will be reviewed, as they are often the first of the helping professionals to come into contact with CSEC victims, set the stage for addressing their most immediate physical and safety needs, and can be drivers of early engagement in a collaborative system response to their broader needs. Then Trauma-Focused Cognitive-Behavioral Therapy with this population will be discussed, with specific guidance on applications of the treatment components with this population and a review of recent research utilizing TF-CBT with CSEC in the Congo. A video of a 14-year-old girl describing her CSE experiences will begin the workshop and reinforce key elements (with consent for use for training and educational purposes).

# CONCURRENT SESSION TWO

## Invited Panel

**Thursday, November 6**

**01:30 PM to 02:45 PM**

## Grand Ballroom

### **Psychotherapies for Trauma-Related Disorders: What Do They Have in Common?**

(Practice, Affect/Int-Clin Res-Cog/Int-Complex, Adult, M, Global)

Schnyder, Ulrich, MD<sup>1</sup>; Cloitre, Marylene, PhD<sup>2</sup>; Elbert, Thomas, PhD<sup>3</sup>; Gersons, Berthold, MD, PhD<sup>4</sup>; Resick, Patricia, PhD<sup>5</sup>; Shapiro, Francine, PhD<sup>6</sup>

<sup>1</sup>Zurich University, Zurich, Switzerland, Switzerland

<sup>2</sup>National Center for PTSD-Dissemination and Training Division, Menlo Park, California, USA

<sup>3</sup>University of Konstanz & Vivo International, Konstanz, Germany

<sup>4</sup>University of Amsterdam, Diemen, Netherlands

<sup>5</sup>Duke University Medical Center, Durham, North Carolina, USA

<sup>6</sup>EMDR Institute, Watsonville, California, USA

In this panel, five pioneers who have developed empirically supported psychotherapies for trauma-related disorders will engage in a conversation about the nature of trauma recovery. Marylene Cloitre (STAIR Narrative Therapy), Thomas Elbert (Narrative Exposure Therapy), Berthold Gersons (Brief Eclectic Psychotherapy for PTSD), Patricia Resick (Cognitive Processing Therapy), and Francine Shapiro (EMDR Therapy) will explain how they combine psychoeducation, exposure, and cognitive treatment elements. The discussion will focus specifically on adults who had been exposed to childhood trauma, and are suffering from comorbid conditions such as depression, substance abuse, or personality disorders, in addition to PTSD. The panelists will be asked in which way the improvement of emotion regulation skills and the promotion of resilience are addressed in their respective approaches. It is expected that many commonalities will emerge. However, differences will also be identified, e.g., emphasis on fear versus other negative emotions and cognitions, homework assignments, the creation of a consistent narrative. Based on the strengths and weaknesses of trauma treatment to date, the panelists will explore the mechanisms of action that they share. Finally, they will suggest solutions for unresolved problems such as residual symptoms, ongoing impairments in psychosocial functioning, or relapse.

## Panel Presentation

**Thursday, November 6**

**01:30 PM to 02:45 PM**

## Chopin - SPANISH TRACK

*Presented in Spanish with simultaneous translation to English*

### **La Intersección entre la Violencia Doméstica, Salud Mental y Trauma en Niños y Familias Latinas (The Intersection among Domestic Violence, Mental Health and Trauma in Latino Families and Children)**

(Commun, Cul Div-DV-Train/Ed/Dis, Lifespan, I, Industrialized)

**Chang-Angulo, Rocio, PsyD<sup>1</sup>**; **Kasongo, Wendy, BA<sup>2</sup>**; **Bayona, Paloma, BA<sup>3</sup>**

<sup>1</sup>University of Connecticut Health Center, Farmington, Connecticut, USA

<sup>2</sup>CT Coalition of Domestic Violence, Wethersfield, Connecticut, USA

<sup>3</sup>NAMI, Hartford, Connecticut, USA

As of 2010, the Latino population represented 16.3% of the U.S. population, an increase of 43% (15.2 million people) since 2000 (U.S. Census Bureau, 2012). Among all Latinos in the U.S., nearly 40% are foreign-born (PEW Hispanic Center, 2010). For some Latino groups in the United States, factors such as the length of residence, age at arrival, living in dangerous neighborhoods, and experiences of discrimination, play a part in U.S. Latinos' risk of psychiatric disorders. The risk of psychopathology in adults might contribute to the risk of psychopathology in Latino children. In a national sample of traumatized children, the National Child Traumatic Stress Network (NCTSN, 2005) found that 156,426 Latino children reported experiences of developmental trauma, which included exposure to domestic violence, emotional abuse, traumatic loss, physical abuse, sexual abuse, neglect, and community violence (Bernal & Santiago, 2006). This panel will discuss the importance of partnering with community organizations to address the needs of Latino communities. NAMI, the CT Coalition against Domestic Violence and the Center for Trauma Recovery and Juvenile Justice have united efforts to address the needs of the Latino community by focusing on the effects of domestic violence, mental health and trauma in the lives of Latino children and their families.

## **Symposium**

**Thursday, November 6**

**01:30 PM to 02:45 PM**

**Windsor/Sandringham**

## **Complications in Diagnosing PTSD: The Issue of Comorbidity**

(Assess Dx, Anx-Assess Dx-Depr-Grief, Lifespan, M, Industrialized)

Elhai, Jon, PhD

*University of Toledo, Toledo, Ohio, USA*

The diagnosis of PTSD is often complicated by the co-occurrence of several other, similar disorders and constructs that overlap with some of the symptoms of PTSD. In this symposium, we present results examining the relation of dimensional aspects of PTSD to external measures of frequently comorbid constructs: anxiety, depression and dissociative symptoms. Specifically, we use advanced empirical methods such as confirmatory factor analysis and latent profile analysis to evaluate how PTSD's underlying symptom dimensions relate to concomitant measures of anxiety, depression, and dissociative symptoms; and how these symptoms may aggregate to form unique typologies or subgroups of PTSD patients. Implications of these results for etiologic models, diagnosis and treatment for PTSD will be discussed, with a clinical focus on differential diagnosis given the overlap between these disorders.

## **Symposium**

**Thursday, November 6**

**01:30 PM to 02:45 PM**

**Windsor/Sandringham**

## **Dimensional Structure and Comorbidity of DSM-5 Post-Traumatic Stress**

### **Symptoms: Results from the National Health and Resilience in Veterans Study**

(Assess Dx, Assess Dx-Depr-QoL-Mil/Vets, Adult, M, Industrialized)

Pietrzak, Robert, PhD MPH

*National Center for PTSD, West Haven, Connecticut, USA*

This study evaluated the factor structure, and psychiatric and functional correlates of DSM-5 PTSD symptomatology in a nationally representative sample of U.S. veterans. Data were analyzed from the National Health and Resilience in Veterans Study (NHRVS), a nationally representative survey of 1,484 U.S. veterans conducted in 2013.



Confirmatory factor analyses were conducted to evaluate the factor structure of DSM-5 PTSD symptoms and structural equation models were constructed to examine the association between PTSD symptom clusters from the best-fitting model and external psychiatric and functional correlates. Results revealed that a five-factor dysphoric arousal model and a newly proposed six-factor model both fit the data significantly better than the DSM-5 four-factor model. The emotional numbing symptom cluster was more strongly related to depressive symptoms and mental health-related functioning than other symptom clusters, while the externalizing behavior symptom cluster was more strongly related to hostility symptoms. These results suggest that a novel six-factor model of PTSD symptoms, which builds on extant structural models of PTSD and includes a sixth externalizing behavior factor, provides the best dimensional representation of DSM-5 PTSD symptom clusters, and demonstrates utility in assessing psychiatric and functional outcomes in this population.

## **Symposium**

**Thursday, November 6**

**01:30 PM to 02:45 PM**

**Windsor/Sandringham**

### **Heterogeneity of Post-Traumatic Stress, Depression and Generalized Anxiety Disorder Symptoms in Veterans**

(Assess Dx, Anx-Assess Dx-Depr-Mil/Vets, Adult, M, Industrialized)

**Contractor, Ateka, MA<sup>1</sup>**; Tamburrino, Marijo, MD<sup>1</sup>; Galea, Sandro, MD, DrPH<sup>2</sup>; Liberzon, Israel, MD<sup>3</sup>; Calabrese, Joseph, MD<sup>4</sup>; Elhai, Jon, PhD<sup>1</sup>

<sup>1</sup>*University of Toledo, Toledo, Ohio, USA*

<sup>2</sup>*Mailman School of Public Health, New York City, New York, USA*

<sup>3</sup>*University of Michigan, Ann Arbor, Michigan, USA*

<sup>4</sup>*Case Western Reserve University, Cleveland, Ohio, USA*

Post-traumatic stress disorder (PTSD) is comorbid with depression (Kessler, Sonnega, Bromet, Hughes, & Nelson, 1995) and Generalized Anxiety Disorder (GAD; Brown, Campbell, Lehman, Grisham, & Mancill, 2001). The quadripartite model conceptualizes all three disorders as belonging to the “distress disorders” category; shared distress is their non-specific component (Watson, 2009). We aimed to (1) assess discrete patterns of PTSD-depression-GAD comorbidity using Latent profile analyses, and (2) assess covariates (gender, income, education, age) in defining the best fitting class solution. The PTSD Checklist, GAD-7 scale, and the Patient Health Questionnaire -9 (assessing depression) were administered to 1266 Ohio National Guard veterans. Results indicated three discrete patterns with mild, moderate and severe levels of symptomatology [BIC = 107106.481; Adjusted Lo-Mendell –Rubin ( $p$ ) = 3925.999 (.0007)]. The covariates of income,  $B = .25$ ,  $z = 2.94$ ,  $p = .003$ ,  $OR = 1.29$ ; and education,  $B = .36$ ,  $z = 2.46$ ,  $p = .014$ ,  $OR = 1.4$  significantly predicted class one versus class three membership. The covariate of income,  $B = .24$ ,  $z = 2.46$ ,  $p = .014$ ,  $OR = 1.27$  significantly predicted class two versus class three membership. Conclusively, there is a comparable PTSD-depression-GAD severity pattern among trauma-exposed veterans, with income and education predictive of class membership.

## **Symposium**

**Thursday, November 6**

**01:30 PM to 02:45 PM**

**Windsor/Sandringham**

### **An Investigation of PTSD's Comorbidity with Anxiety and Depression Using Latent Factors**

(Res Meth, Anx-Depr, Adult, M, N/A)

**Durham, Tory, PhD<sup>1</sup>**; Byllesby, Brianna, BA<sup>2</sup>; Elhai, Jon, PhD<sup>1</sup>

<sup>1</sup>*University of Toledo, Toledo, Ohio, USA*

<sup>2</sup>*University of Toledo, Department of Psychology, Toledo, Ohio, USA*

**Method:** The present study analyzed data obtained from 190 undergraduate students who endorsed a worst trauma on the Stressful Life Events Screening Questionnaire. The Post-traumatic Stress Disorder Checklist and the Hospital Anxiety and Depression Scale were used to determine PTSD symptomatology and affective states of depression and anxiety, respectively. Confirmatory factor analysis was used to determine model fit for the constructs. Six Wald's chi-square tests of parameter constraints were conducted to determine which PTSD factors were more or less related to depression and anxiety discretely. **Results:** Results indicate a well-fitting five-factor model of PTSD, two-factor model of depression and anxiety and an excellent-fitting seven-factor combined model  $S-B \quad 2(413, N = 190) = 662.105, p < .001, CFI = .969, TLI = .965, RMSEA = .056$ . The Wald's chi-square tests indicated that the depression factor was significantly more highly correlated with numbing ( $r = .515$ ) and dysphoria ( $r = .501$ ) than anxious arousal ( $r = .354$ ). The anxiety factor was not significantly more highly correlated with any of PTSD's latent factors. **Conclusions:** The results indicate PTSD may be more related to mood disorders than anxiety disorders. The specificity of depression to PTSD demonstrates a strong mood component that is sometimes overlooked in the literature.

## **Symposium**

**Thursday, November 6**

**01:30 PM to 02:45 PM**

**Windsor/Sandringham**

### **Assessing Latent Level Associations between PTSD and Dissociative Factors: Is Depersonalization Related to PTSD Factors more so than Alternative Dissociative Factors?**

(Assess Dx, Assess Dx, Adult, M, Industrialized)

**Armour, Cherie, PhD<sup>1</sup>**; Contractor, Ateka, MA<sup>2</sup>; Palmieri, Patrick, PhD<sup>3</sup>; Elhai, Jon, PhD<sup>2</sup>

<sup>1</sup>*University of Ulster, Coleraine, Northern Ireland, United Kingdom*

<sup>2</sup>*University of Toledo, Toledo, Ohio, USA*

<sup>3</sup>*Center for the Treatment and Study of Traumatic Stress, Summa Health System, Akron, Ohio, USA*

PTSD criteria in DSM-5 included a dissociative diagnostic subtype characterized by two depersonalization and derealization items. Researchers have queried whether this was too restrictive as alternative dissociative symptomatology may also be characteristic of the subtype. The current study utilized data from trauma exposed Northern Irish students ( $N=165$ ) assessed on DSM-5 PTSD symptoms via the PTSD Symptom Scale-Self-Report (PSS-5) and dissociative symptoms via the Dissociative Experiences Scale (DES). Confirmatory factor analysis of PTSD and DES models revealed an optimal 4-factor PTSD model based on DSM-5 groupings and an optimal 3-factor DES model (including a depersonalization/derealization factor [DEP]). Wald chi-square tests of parameter constraints assessed the latent-level relations between the factors of optimal models and revealed that the DEP factor was no more or less related to any PTSD factor compared to alternative DES factors. However, differential relations between DEP and factors of PTSD were evident (i.e., DEP was more related to alterations in arousal and reactivity ( $r=.432$ ) compared to avoidance ( $r=.289$ ), Wald  $2(1, N=165)8.352, p=.004$ ). Suggesting that alternative dissociative symptom groupings are not more or less related to PTSD groupings compared to DEP but that differential relations exist in relation to how DEP associates with PTSD factors.

## **Symposium**

**Thursday, November 6**

**01:30 PM to 02:45 PM**

**Bayfront A - CHILD TRACK ONE**

## **Developmental and Relational Perspectives on the Effects of Domestic Violence and Related PTSD on Infants, Young Children, Adolescents and their Families**

(Clin Res, Bio Med-Complex-DV-Fam/Int, Child/Adol, M, Industrialized)

Schechter, Daniel, PD, MD

*University of Geneva, Geneva, GE, Switzerland*

A growing body of literature is emerging on intergenerational transmission of interpersonal violence and its effects on offspring of traumatized parents who may or may not have been exposed directly to violence. It is becoming increasingly clear that both developmental and relational perspectives must be integrated into the empirical design of such research in order to arrive at effective and viable treatment models that can address violent acting out, revictimization, and suffering and impairment due to post-traumatic psychopathology. This symposium brings together four specialists in infant, child, and adolescent trauma-- that provide models for this integration. Michael Scheeringa will present research that investigates maternal influences on child development of PTSD. Daniel Schechter will present psychobiological findings in response to questions of how maternal interpersonal violence-related PTSD affects the very early parent-child relationship and child symptom measures. Alissa Huth-Bocks will present research on the effects of perinatal exposure to domestic violence. And finally, Martin Teicher will present the effects of interparental violence on children and subsequent brain development during adolescence. Discussion will focus on understanding the links between presentations.

## **Symposium**

**Thursday, November 6**

**01:30 PM to 02:45 PM**

**Bayfront A - CHILD TRACK ONE**

## **Maternal and Relational Factors as Mediators of PTSD Symptoms in Very Young Children: A Two-Year Prospective Study**

(Assess Dx, Assess Dx-DV-Fam/Int, Child/Adol, M, Industrialized)

**Scheeringa, Michael, MD MPH**

*Tulane University Health Sciences Center, New Orleans, Louisiana, USA*

There has been much speculation in the literature that parenting behaviors might be contributing influences for the long-term outcome of children's post-traumatic stress disorder (PTSD) symptoms. Much of the previous literature has been cross-sectional or missing measures of actual parenting behaviors. In a sample of 62 children, 1-6 years old, who experienced life-threatening traumas, PTSD was measured prospectively two years apart. Seven maternal and relational factors were measured, including a new self-report of parenting related to PTSD symptoms. Moderation models were not significant. Mediation models were significant when the mediator variable was maternal symptoms of PTSD or depression (measured at Time 1), self-report of maternal escape/avoidance coping (measured at Time 2), or self-report emotional sensitivity (measured at Time 2). However, greater self-reported maternal emotional sensitivity was associated with greater Time 2 PTSD symptoms among children, contrary to previous speculations in the literature. Observational measures of emotional sensitivity as the mediator were not supported, and different measures of emotional sensitivity had weak correlations with each other. Correlation of

parents' and children's symptoms is a robust finding, but caution is warranted in attributing children's PTSD symptoms to insensitive parenting.

## **Symposium**

**Thursday, November 6**

**01:30 PM to 02:45 PM**

**Bayfront A - CHILD TRACK ONE**

### **Childhood Trauma and Intimate Partner Violence: Associations with Maternal Parenting and Infant Social-Emotional Functioning across the Perinatal Period**

(Prevent, CPA-DV-Fam/Int, Lifespan, M, Industrialized)

**Huth-Bocks, Alissa, PhD**; Harris, Katherine, MS; Ahlfs-Dunn, Sarah, MS PhD Student; Puro, Erin, PhD  
*Eastern Michigan University, Ypsilanti, Michigan, USA*

The objective of the present study was to examine associations between childhood maltreatment, recent intimate partner violence, and parenting outcomes among 120 diverse, economically disadvantaged mothers, as well as associations with infant functioning. Participants were interviewed prospectively from pregnancy through 3 years after birth; data analyses for the current study were based on prenatal and age 1 multi-method assessments. Direct and indirect effects of trauma on outcomes were examined using the PROCESS procedure (Hayes, 2013). Severity of mothers' childhood maltreatment indirectly influenced prenatal thoughts and feelings about parenting through its effects on intimate partner violence (unstandardized effect =  $-.345$ ), as evidenced by a bias-corrected bootstrap 95% confidence interval below zero ( $-.943$  to  $-.015$ ). Results from a multiple mediator model further indicated that intimate partner violence indirectly influenced infant social-emotional functioning, such that partner violence influenced prenatal parenting representations, which in turn influenced observed parenting behaviors after birth, which influenced infant functioning (unstandardized effect =  $-.010$ ; 95% confidence interval =  $-.033$  to  $-.001$ ). Trauma-informed interventions with pregnant and post-partum mothers are needed to offset deleterious effects of trauma on the early parent-infant relationship.

## **Symposium**

**Thursday, November 6**

**01:30 PM to 02:45 PM**

**Bayfront A - CHILD TRACK ONE**

### **How Do Maternal Interpersonal Violence-Related Post-Traumatic Stress, Brain Activity and Epigenetics Converge to Confer Risk to the Mother-Toddler Relationship?**

(Bio Med, Affect/Int-Aggress-DV-Gen/Int, Child/Adol, M, Industrialized)

**Schechter, Daniel, PD, MD**

*University of Geneva, Geneva, GE, Switzerland*

Maternal interpersonal violence-related post-traumatic stress disorder (IPV-PTSD) has been associated with behavioral and physiologic disturbances within the mother-infant relationship that impact social-emotional development of the child (Lyons-Ruth & Block, 1996; Schechter et al; 2007; Schechter et al., 2013). This presentation focuses on a sub-sample of 100 mothers and toddlers recruited from community health centers and other agencies in Geneva, Switzerland. Mothers with IPV-PTSD versus no PTSD with or without IPV exposure, along with their children, will be compared with regards to psychological characteristics, brain activation in response to stressful vs non-stressful child and adult relational stimuli using fMRI. These variables will then be

examined in relation to the degree of methylation of the glucocorticoid receptor NR3c1, and finally to maternal and child behavior. Results: IPV-PTSD mothers versus non-PTSD controls exhibited higher parenting stress, with specific neural activation patterns of medial prefrontal cortico-limbic dysregulation in response to mother-child and adult male-female interactions. The latter patterns overlap with lower methylation of NR3c1, with less sensitive maternal behavior, and greater child difficulty in the mother-child interaction on the CARE-Index. Clinical implications will be discussed.

## **Symposium**

**Thursday, November 6**

**01:30 PM to 02:45 PM**

**Bayfront A - CHILD TRACK ONE**

### **Impact of Witnessing Violence toward Siblings on Brain Network Architecture and Psychopathology**

(Bio Med, Anx-CPA-DV, Lifespan, M, N/A)

**Teicher, Martin, MD, PhD;** Ohashi, Kyoko, PhD; Anderson, Carl, PhD  
*McLean Hospital, Harvard Medical School, Belmont, Massachusetts, USA*

We recently reported that witnessing violence toward siblings (WVS) was associated with greater psychiatric symptom scores than witnessing interparental violence ( $n = 1412$ ). In the present study we sought to assess whether WVS was associated with differences in brain structural network architecture. The sample consisted of 93 subjects (33M/60F; 18 - 25 years of age) including 41 (14M/27F) who witnessed significant violence toward siblings and 52 (19M/33F) with no exposure to childhood maltreatment. Diffusion tensor MRIs (3T Siemens TIM Trio) and tractography (TrackVis and FSL) were used to calculate number of fiber streams interconnecting 90 brain regions, and analyzed with graph theory. There were significant differences between groups in global network architecture, particularly in local efficiency and clustering coefficient. Brain regions with the greatest reduction in central importance in WVS subjects were located in the basal ganglia (bilateral putamen, right caudate and pallidum), and each correlated inversely with current anxiety ratings ( $r = -0.252 - -0.309$ ). Children witnessing violence between parents more often than not also witness violence toward siblings, and this later event may be of equal or greater importance, though it is almost invariably overlooked. Key themes that often arise with WVS are 'survivor guilt' and 'collusion with the aggressor'.

**Symposium**  
**Thursday, November 6**  
**01:30 PM to 02:45 PM**  
**Brickell - MILITARY TRACK**

## **PTSD, Depression and Functional Outcomes among Military Personnel, Veterans and Their Family Members**

(Clin Res, Assess Dx-Comm/Int-QoL-Mil/Vets, Adult, M, N/A)

Morissette, Sandra, PhD<sup>1</sup>; Sayer, Nina, PhD<sup>2</sup>

<sup>1</sup>VA VISN 17 Center of Excellence for Research on Returning War Veterans, Waco, Texas, USA

<sup>2</sup>Minneapolis VA Health Care System, Minneapolis, Minnesota, USA

Since the September 11, 2001 terrorist attacks, over 2.5M U.S. military personnel have deployed as part of the military conflicts in Iraq and Afghanistan, and over 1.6M are currently returning home to their families, communities, employment, and educational settings. While most are resilient in spite of the heavy load of traumatic and non-traumatic stress associated with warzone deployments, a substantial minority experience significant mental health problems, functional impairment, and difficulties reintegrating. This symposium presents data from several studies aimed at understanding the relations among PTSD, commonly co-occurring mental health problems, and functional outcomes among service members and their families. The first presentation evaluates a predictive model of functional impairment in returning veterans. The second presents functional outcomes data from a clinical trial of Cognitive Processing Therapy for military sexual trauma-related PTSD. The third evaluates predictors of social functioning trajectories across the deployment cycle among partners/spouses of deployed soldiers. Finally, functional outcomes data are presented in relation to new PTSD criteria using the Clinician Administered PTSD Scale for DSM-5. Our discussant will integrate these findings as they relate to community reintegration and recovery initiatives for service members and their families.

**Symposium**  
**Thursday, November 6**  
**01:30 PM to 02:45 PM**  
**Brickell - MILITARY TRACK**

## **Predictors of Functional Impairment among Returning Iraq/Afghanistan Veterans**

(Clin Res, Depr-QoL-Mil/Vets, Adult, M, Industrialized)

Kimbrel, Nathan, PhD<sup>1</sup>; Morissette, Sandra, PhD<sup>2</sup>; Meyer, Eric, PhD<sup>3</sup>; DeBeer, Bryann, PhD<sup>4</sup>; Gulliver, Suzy, PhD<sup>5</sup>; Marx, Brian, PhD<sup>6</sup>; Schumm, Jeremiah, PhD<sup>7</sup>; Penk, Walter, PhD<sup>8</sup>

<sup>1</sup>Department of Veterans Affairs Medical Center, Veterans Integrated Service Network (VISN) 6 Mental Illness Research, Education and Clinical Center (MIRECC), Durham, North Carolina, USA

<sup>2</sup>VA VISN 17 Center of Excellence for Research on Returning War Veterans, Waco, Texas, USA

<sup>3</sup>VISN 17 Center of Excellence for Research on Returning War Veterans, Waco, Texas, USA

<sup>4</sup>Central Texas Veterans Health Care System, Waco, Texas, USA

<sup>5</sup>Texas A&M Health Science Center, Waco, Texas, USA

<sup>6</sup>National Center for PTSD, VA Boston Healthcare System and Boston University, Boston, Massachusetts, USA

<sup>7</sup>Cincinnati VA Medical Center & University of Cincinnati, Cincinnati, Ohio, USA

<sup>8</sup>Texas A&M Health Science Center, Temple, Texas, USA

This study examined predictors of functional impairment among returning Iraq/Afghanistan war veterans. Approximately 300 Iraq/Afghanistan war veterans were enrolled in an ongoing study of functional outcomes. Veterans completed diagnostic interviews, neuropsychological testing, and a battery of self-report questionnaires,



including state-of-the-art measures of functional impairment. Path analysis was used to compare and contrast different predictive models of functional impairment using data from the baseline assessment. Preliminary findings suggest that the best-fitting path model (RMSEA = .04, CFI = .93) is one in which the effects of the deployment-related predictors of functional impairment, including combat exposure, traumatic brain injury (TBI), and military sexual trauma (MST), were fully mediated by more proximal predictors, including post-traumatic stress disorder (PTSD) symptoms, alcohol problems, chronic pain, neuropsychological functioning, and physical health problems. Among the more proximal predictors of functional impairment, PTSD symptomatology was clearly the strongest predictor ( $r = .53, p < .001$ ). Although a variety of factors contribute either directly or indirectly to post-deployment functional impairment among returning veterans, PTSD symptomatology appears to be the most robust predictor.

## **Symposium**

**Thursday, November 6**

**01:30 PM to 02:45 PM**

**Brickell - MILITARY TRACK**

### **The Role of CPT in Psychosocial Functioning in Veterans with MST-related PTSD**

(Clin Res, Clin Res-Rape, Adult, M, Industrialized)

Suris, Alina, PhD, ABPP<sup>1</sup>; Mullen, Kacy, PhD<sup>2</sup>; **Holliday, Ryan, MS PhD Student<sup>2</sup>**

<sup>1</sup>*Veterans Affairs North Texas Health Care System, Dallas, Texas, USA*

<sup>2</sup>*VA, Dallas, Texas, USA*

Although the extant research has begun to identify efficacious treatments for military sexual trauma (MST)-related post-traumatic stress disorder (PTSD), few studies have examined the effect of therapeutic modalities on psychosocial functioning within survivors of MST-related PTSD. As such, we examined the quality of life as well as psychosocial functioning of 45 men and women with MST-related PTSD. Each participant took part in a randomized clinical trial that included 12 weeks of psychotherapeutic treatment (either Cognitive Processing Therapy [CPT] or Present Centered Therapy [PCT]) and six months of follow-up. In order to assess quality of life and psychosocial functioning, each participant was administered the Quality of Life Inventory and the Short Form (36) Health Survey. Using a hierarchical linear modeling approach, results demonstrated that participants treated with CPT reported higher physical functioning over time than participants treated with PCT. Furthermore, participants in the CPT condition demonstrated a trend toward fewer role limitations due to physical health and higher general health over time than participants treated with PCT. Implications of these findings indicate further research is necessary to determine the role psychotherapy plays in improving a patient's quality of life and psychosocial functioning.

## **Symposium**

**Thursday, November 6**

**01:30 PM to 02:45 PM**

**Brickell - MILITARY TRACK**

### **Predictors and Impact of Trajectories of Family Functioning Across Deployment on Post-Deployment PTSD Symptoms among National Guard Soldiers**

(Assess Dx, Fam/Int-Mil/Vets, Adult, M, N/A)

**Polusny, Melissa, PhD<sup>1</sup>**; Erbes, Christopher, PhD LP<sup>1</sup>; Arbisi, Paul, PhD, ABPP<sup>2</sup>; DeGarmo, David, PhD<sup>3</sup>; Kramer, Mark, PhD<sup>4</sup>

<sup>1</sup>*Minneapolis VAHCS, Center for Chronic Disease Outcome Research, University of Minnesota Medical School, Minneapolis, Minnesota, USA*

<sup>2</sup>*Minneapolis VA Health Care System and University of Minnesota Medical School, Minneapolis, Minnesota, USA*

<sup>3</sup>University of Oregon, Eugene, Oregon, USA

<sup>4</sup>Minneapolis VA Health Care System, Minneapolis, Minnesota, USA

Families are a key source of support for Veterans' reintegration post-deployment. Yet, deployment stressors may erode family functioning which may impact Veterans' post-deployment mental health. We will present findings from a prospective, longitudinal study of 1,025 National Guard Soldiers and their spouse/partners. Spouse/partners completed a battery of valid/ reliable instruments, including measures of risk and resilience, depression (Patient Health Questionnaire-8) and social functioning (Social Functioning Questionnaire), 3 months prior to Soldiers' deployment to Iraq or Afghanistan (Time 1), at Month 3 and 9 of deployment (Times 2 and 3), and 3 months following Soldiers' return (Time 4). Soldiers completed measures at Times 1 and 4. Preliminary growth mixture modeling analyses revealed four distinct trajectories of spouse/partner functioning across the deployment: stable, good functioning over time (resilience); impaired functioning over time (chronic impairment); initially good functioning that worsened during deployment and improved post-deployment (recovery); and initially good functioning that continued to worsen over time (vulnerable-risk). We will examine predictors of social functioning trajectories and explore their impact on Veterans' risk of developing PTSD symptoms. Implications for future research and development of family-based interventions will be discussed

## Symposium

**Thursday, November 6**

**01:30 PM to 02:45 PM**

**Brickell - MILITARY TRACK**

## The Association between PTSD in DSM-5 with Functional Impairment among War Veterans

(Assess Dx, Clinical Practice-QoL-Mil/Vets, Adult, M, N/A)

**Marx, Brian, PhD<sup>1</sup>**; Rodriguez, Paola, PhD<sup>2</sup>; Bovin, Michelle, PhD<sup>3</sup>; Weathers, Frank, PhD<sup>4</sup>; Schnurr, Paula, PhD<sup>5</sup>; Keane, Terence, PhD<sup>6</sup>

<sup>1</sup>National Center for PTSD, VA Boston Healthcare System and Boston University, Boston, Massachusetts, USA

<sup>2</sup>National Center for PTSD, Boston, Massachusetts, USA

<sup>3</sup>VA - National Center for PTSD, Boston, Massachusetts, USA

<sup>4</sup>Auburn University, Auburn, Alabama, USA

<sup>5</sup>VA National Center for PTSD, Executive Division, White River Junction, Vermont, USA

<sup>6</sup>National Center for PTSD, VA Boston Healthcare System, Boston University School of Medicine, Boston, Massachusetts, USA

Prior research has shown a strong link between post-traumatic stress disorder (PTSD) and functional impairment across a variety of psychosocial domains (Rodriguez et al., 2012; Schnurr et al., 2009). However, all of the research has been conducted with prior versions of the PTSD diagnostic criteria. Research is now needed to explore these associations using the new PTSD criteria. We analyzed data from 119 veterans taking part in an ongoing psychometric investigation of the recently revised Clinician Administered PTSD Scale for DSM-5 (CAPS-5). In addition to the CAPS-5, participants completed other self-report questionnaires, including the World Health Organization Disability Assessment Schedule 2.0 (WHODAS 2.0) and the Inventory of Psychosocial Functioning (IPF). Consistent with prior research, greater PTSD symptom severity was significantly correlated with greater functional impairment and veterans diagnosed with PTSD reported significantly greater impairment across a variety of domains than veterans without PTSD. Whereas those with and without PTSD significantly differed on all domains assessed by the WHODAS 2.0, those with and without PTSD significantly differed on four of the seven domains assessed by the IPF. Finally, our results show that DSM-5 PTSD symptom cluster D (negative alterations in cognitions and mood) is most significantly related to functional impairment.

## **Symposium**

**Thursday, November 6**

**01:30 PM to 02:45 PM**

**Sevilla - LONG-TERM EFFECTS OF CHILD TRAUMA TRACK**

### **The Impact of Sexual Identity, Lifetime Trauma Exposure, Intergenerational Trauma and Family Factors on Mental Health and Substance Abuse among Diverse Samples of Women**

(CulDiv, Fam/Int-Health-Orient-Surv/Hist, Adult, M, Industrialized)

Zimmerman, Lindsey, PhD

*University of Washington School of Medicine, Seattle, Washington, USA*

Researchers focused on social determinants of mental health and substance abuse will describe analyses conducted in four nationally recruited samples of women in the United States. Researchers examined the prevalence of trauma exposure (including childhood maltreatment, physical and sexual victimization, combat trauma, cumulative trauma and intergenerational/historical trauma) and their associations with depression, PTSD, and alcohol abuse among diverse groups of women. Among heterosexual and sexual minority women participants from US veteran (Lehavot) and US civilian populations (Everett), researchers found higher overall lifetime trauma exposures among sexual minority women. Within sexual minority women, family support was associated with fewer traumas, whereas family rejection due to sexual orientation was associated with higher PTSD symptoms (Zimmerman). Intergenerational traumas were risk factors for PTSD and depression among American Indian women even when controlling for lifetime trauma (Walters). Sexual minority women reported high rates of trauma, which were associated with health. These papers illustrate the import of considering within-group differences among sexual minority women when developing prevention and treatment programs to address the high prevalence of trauma exposure, mental illness and substance abuse among diverse groups of sexual minority women.

## **Symposium**

**Thursday, November 6**

**01:30 PM to 02:45 PM**

**Sevilla - LONG-TERM EFFECTS OF CHILD TRAUMA TRACK**

### **Investigating the Impact of Cumulative Trauma on Sexual Minority Women's Hazardous Drinking and Depressive Symptoms**

(Social, Orient, Adult, M, Industrialized)

Everett, Bethany, PhD; Hughes, Tonda, RN, PhD; Steele, Sarah, PhD Student

*University of Illinois Chicago, Chicago, Illinois, USA*

Underlying causes for higher rates of hazardous drinking and psychological distress among sexual minority women (SMW), as compared to heterosexual women, are unclear. Using the Chicago Health and Life Experiences of Women (CHLEW) and the National Study of Health and Life Experiences of Women (NSHLEW) samples (N=1,573; mean age=46), we examined associations between number and types of victimization and hazardous drinking or depression among heterosexual and sexual minority women (SMW). We also examined the impact of number and types of victimization on drinking trajectories of adult SMW. Results show that compared to heterosexuals, bisexual and mostly heterosexual women showed particularly high risk for hazardous drinking and depression. Women who reported victimization in both childhood and adulthood were 2.2 and 4.6 times as likely to report hazardous drinking and depression, respectively. Victimization explained some, but not all of the observed sexual orientation disparities in drinking and depression. Higher rates of re-victimization among SMW, and

associated increases in drinking and depression, indicate that interventions designed to reduce re-victimization may be one promising component of efforts to reduce to sexual orientation disparities.

## **Symposium**

**Thursday, November 6**

**01:30 PM to 02:45 PM**

**Sevilla - LONG-TERM EFFECTS OF CHILD TRAUMA TRACK**

### **Embodiment of Historical Trauma among Sexual Minority American Indian and Alaska Native Women**

(CulDiv, Cul Div-Health-Orient-Surv/Hist, Adult, M, Industrialized)

**Walters, Karina, PhD<sup>1</sup>**; Evans-Campbell, Tessa, PhD<sup>1</sup>; Huh, David, PhD<sup>2</sup>; LePak, Jessica, PhD Candidate<sup>1</sup>

<sup>1</sup>*University of Washington, Seattle, Washington, USA*

<sup>2</sup>*University of Washington School of Medicine, Seattle, Washington, USA*

Understanding how historically traumatic event exposure affects present-day mental health has become a dominant narrative among American Indian communities, particularly among multiply oppressed populations such as sexual minority Native women. In the present study, two spirit women were recruited as part of a multi-site cross-sectional national health survey of Native two spirit persons from seven metropolitan areas (N = 452; 41% lesbian/bisexual). We conducted a longitudinal analysis using generalized estimating equations to examine the association between the longitudinal profile of historical trauma in the four preceding generations and current PTSD and depression symptoms. The aim of the profile analysis was to determine whether elevated depression and PTSD symptoms would be associated with varying intergenerational “trauma profiles.” Lifetime abuse and trauma exposures were included as covariates to control for the effect of lifetime trauma on retrospective reporting of trauma from past generations. Overall, findings indicated that PTSD was associated with greater trauma in more recent generations and depression was associated with a chronic profile of event exposure over generations. Finally, the type of event that their ancestors had experienced (direct vs. disruptive) had distinct associations with contemporary PTSD and depression symptom expression.

## **Symposium**

**Thursday, November 6**

**01:30 PM to 02:45 PM**

**Sevilla - LONG-TERM EFFECTS OF CHILD TRAUMA TRACK**

### **Family Influences on Trauma Exposure and Recovery among Young Adult Sexual Minority Women**

(CulDiv, Dev/Int-Fam/Int-Health-Orient, Adult, M, Industrialized)

**Zimmerman, Lindsey, PhD<sup>1</sup>**; Kaysen, Debra, PhD<sup>2</sup>

<sup>1</sup>*University of Washington School of Medicine, Seattle, Washington, USA*

<sup>2</sup>*University of Washington, Seattle, Washington, USA*

The prevalence of lifespan victimization, potentially traumatic exposure, and PTSD diagnoses among young adult sexual minority women (YA SMW) exceeds that of heterosexual peers. Few studies have examined the role of family risk and protective factors, even though SMW report unique family risks as compared to heterosexual women, including family rejection due to sexual orientation. We prospectively examined family support and family rejection due to sexual orientation as predictors of lifespan trauma exposure and PTSD symptom severity among a nationally recruited sample of YA SMW (N = 821; mean age = 21 years). Longitudinal regression analyses were conducted over 1 year. Family support was associated with significantly fewer potentially traumatic experiences in

childhood or adulthood. Family rejection explained a significant proportion of unique variance in PTSD symptom severity (5%) among trauma exposed SMW over time. Findings highlight the role family support may play in preventing trauma and victimization experiences among SMW, whereas family rejection was found to exacerbate PTSD symptoms and diminish recovery over time. Family educational resources regarding trauma risks among SMW, and family systems intervention to increase support for YA SMW, may help to reduce the disparity in trauma exposure and PTSD between heterosexual and SMW.

## **Symposium**

**Thursday, November 6**

**01:30 PM to 02:45 PM**

### **Sevilla - LONG-TERM EFFECTS OF CHILD TRAUMA TRACK**

#### **Trauma across the Lifespan and Mental Health Outcomes among Heterosexual and Sexual Minority Women Veterans**

(CulDiv, CPA-Rape-Orient-Mil/Vets, Adult, M, Industrialized)

**Lehavot, Keren, PhD;** Simpson, Tracy, PhD, Cpsych

*VA Puget Sound Health Care System / Seattle Division, Seattle, Washington, USA*

Sexual minority women are highly overrepresented among women veterans, yet little is known about how they compare to heterosexual women veterans on trauma and mental health outcomes. In this study, women veterans were recruited over the Internet (N = 706, 37% lesbian or bisexual) to participate in an anonymous, online survey. We examined the differential impact of traumatic experiences across the lifespan—including childhood trauma, civilian traumas, and military traumas—on screening positive for current PTSD and depression for both heterosexual and sexual minority women veterans. Sexual minority women reported higher rates of trauma across the lifespan, although in some instances (e.g., adult sexual assault during and after military service, combat exposure) they did not differ from their heterosexual counterparts. Childhood trauma and military traumas added the most variance to both PTSD and depression models. Sexual assault during military service appeared to be especially harmful with respect to screening positive for PTSD for both sexual orientation groups. Findings indicate a significant burden of interpersonal trauma for both heterosexual and sexual minority women veterans and provide information on the distinct association of various traumas with current PTSD and depression by sexual orientation.

**Symposium**  
**Thursday, November 6**  
**01:30 PM to 02:45 PM**  
**Merrick**

## **Invisible Wounds of Intimate Partner Violence: Implications for Assessment and Treatment**

(Assess Dx, DV, Adult, M, Industrialized)

Iverson, Katherine, PhD  
*National Center for PTSD, Women's Health Sciences Division, VA Boston Healthcare System and Boston University School of Medicine, Jamaica Plain, Massachusetts, USA*

The Institute of Medicine (2011) and US Preventive Services Task Force (2012) recommend routine screening of women for experiences of intimate partner violence (IPV). The Affordable Care Act (2010) reinforces these recommendations by requiring that insurance cover screening and counseling for women who have experienced IPV as part of standard preventative health services. Many adverse physical (e.g., chronic pain) and mental (e.g., PTSD) health outcomes are well-documented. However, there are other important aspects of abused women's health that currently go undetected that may be assessed and treated in the context of new IPV health care policies. Four speakers will present data pertaining to understudied, and often invisible, wounds of IPV. The first paper examined the impact of a mindfulness intervention on IPV survivors' self-compassion and self-efficacy. The second and third studies present unique data on the occurrence and correlates of IPV-related traumatic brain injury in domestic violence and healthcare-seeking samples. The final paper focuses on the intersection between IPV and HIV, including support for a brief counseling model for PTSD in terms of improving HIV risk behaviors among recently abused women. Patricia Resick, Ph.D., will serve as a discussant to the symposium and highlight clinical and research implications.

**Symposium**  
**Thursday, November 6**  
**01:30 PM to 02:45 PM**  
**Merrick**

## **The Impact of MBSR on Self-Compassion, Mindfulness Skills and Self-Efficacy among Survivors of Chronic Trauma**

(Clin Res, Chronic-Clin Res-DV, Adult, M, Industrialized)

Dutton, Mary Ann, PhD  
*Georgetown University School of Medicine, Washington, District of Columbia, USA*

This study was intended to examine the impact of Mindfulness Based Stress Reduction (MBSR) for outcomes of self-compassion, mindfulness skills and general self-efficacy. The study was part of a larger study designed to examine probably Post-Traumatic Stress Disorder (PTSD) and depression symptoms. Participants (n=106) were low income, minority women recruited from the general community and long-term housed programs, including for domestic violence, substance abuse and homelessness. Women were non-helpseeking with respect to mental health services. Results showed improvements in self-compassion, mindfulness skills and self-efficacy, in addition to PTSD and depression. Implications for examining these often unrecognized adverse effects of chronic trauma exposure in favor of a focus solely on PTSD and depression are discussed.



**Symposium**  
**Thursday, November 6**  
**01:30 PM to 02:45 PM**  
**Merrick**

**Traumatic Brain Injuries & Intimate Partner Violence: Silent Strategies and Promising Screenings**

(Assess Dx, Acc/Inj-Complex-DV-Health, Adult, M, N/A)

**McFadgion, Akosoa, PhD MSW**  
*Howard University, Washington, District of Columbia, USA*

Traumatic brain injuries (TBI) resulting from blunt force to the head and/or anoxic injuries (strangulation) can cause subsequent mental health deficits. Abused women who incur trauma to the head or strangulation also incur life-altering disabilities; yet most of these women are not aware of the extent of their injury or symptoms of TBI and thus are unaware of needed treatment. This presentation will explore the challenge of identifying TBI among women who experience intimate partner violence (IPV) amidst the overwhelming presence of additional health consequences of IPV that are similar to traumatic brain injury symptomatology. Studies to be presented found that abused women who incurred TBI (n=267) experienced significantly more CNS symptoms than abused women who did not experience TBI (n= 270) ( $p<.001$ ). CNS symptoms included difficulty concentrating (64% vs 46%) and memory loss (48% vs 32%). Abused women in domestic violence shelters experienced similar cognitive impairments ( $r=.393, p<.05$ ); however risky coping strategies (alcohol use, over medicating) were used to cope with the CNS symptoms ( $R=.54, p<.001$ ). Attendees will leave with an understanding of the silent strategies implemented by abused women that impact how screenings are adopted in trauma-treatment settings.

**Symposium**  
**Thursday, November 6**  
**01:30 PM to 02:45 PM**  
**Merrick**

**PTSD and HIV Risk in Victims of Intimate Partner Violence: Implications for Intervention**

(Clin Res, DV-Prevent, Adult, M, N/A)

**Johnson, Dawn, PhD<sup>1</sup>**; Zlotnick, Caron, PhD<sup>2</sup>; Palmieri, Patrick, PhD<sup>3</sup>; Johnson, Nicole, Doctoral Student<sup>1</sup>; Baker, Brittany, Doctoral Student<sup>1</sup>

<sup>1</sup>*University of Akron, Akron, Ohio, USA*

<sup>2</sup>*Brown University Warren Alpert Medical School, Providence, Rhode Island, USA*

<sup>3</sup>*Center for the Treatment and Study of Traumatic Stress, Summa Health System, Akron, Ohio, USA*

A growing body of literature highlights the association between intimate partner violence (IPV) and HIV risk. IPV victims are more likely to engage in HIV risk behaviors, including unprotected sex, sex with risky partners, sex with more than one sex partner, trading sex, and are more likely to have a sexually transmitted disease (STI). Additionally, post-traumatic stress disorder (PTSD) and substance use disorder (SUD), highly prevalent in IPV victims, are associated with high risk sexual behaviors. This presentation will describe research findings from a series of studies. Consistent with prior research, we find that IPV victims report high rates of sexual risk taking, as well as higher rates of STI's relative to the general population. Additionally, given the relationship between PTSD and HIV risk behavior, it seems reasonable that interventions targeting PTSD could lead to a reduction in HIV risk behavior. Consistently, in a randomized controlled clinical trial (N = 60) of a PTSD intervention for battered women in shelters (i.e., HOPE), we find that women who received HOPE display significantly fewer HIV risk behaviors

after leaving shelter relative to women who did not receive HOPE. Clinical implications and directions for future research will be discussed.

## **Symposium**

**Thursday, November 6**

**01:30 PM to 02:45 PM**

**Merrick**

### **Traumatic Brain Injury among Women Veterans: An Invisible Wound of Intimate Partner Violence**

(Clin Res, DV-Mil/Vets, Adult, M, Industrialized)

**Iverson, Katherine, PhD<sup>1</sup>; Terri, Pogoda, PhD<sup>2</sup>**

<sup>1</sup>*National Center for PTSD, Women's Health Sciences Division, VA Boston Healthcare System and Boston University School of Medicine, Jamaica Plain, Massachusetts, USA*

<sup>2</sup>*Boston University/Boston Veterans Health Care System, Jamaica Plain, Massachusetts, USA*

Traumatic brain injury (TBI), defined as a blow or jolt to the head that disrupts brain function, is a “signature injury” of returning Veterans. Although intimate partner violence (IPV) is prevalent among female veterans and is known to increase women’s risk for TBI, the occurrence of probable IPV-related TBI has not been examined in the female veteran population. We identify the occurrence of IPV-related TBI in a sample of female veterans, and examine the associations of IPV-related TBI with PTSD and depressive symptoms. Participants were 176 female veteran New England Department of Veterans Affairs (VA) patients who participated in a 2013 survey (80% response rate). 18.8% (n = 33) screened positive for probable IPV-related TBI history. Women who experienced probable IPV-related TBI reported significantly more severe PTSD (mean PCL scores: 53.2 versus 34.1,  $p < .0001$ ) and depressive (mean CES-D scores: 26.6 versus 20.7,  $p < .0001$ ) symptoms than those who experienced IPV without probable TBI. Findings inform VA’s efforts to implement national guidelines with respect to IPV detection and care for female veterans. VA has established TBI evaluation and treatment services, and with additional IPV training for providers, this healthcare system could be well-positioned to identify IPV-related TBI and provide comprehensive health care and preventative services.

**Symposium**  
**Thursday, November 6**  
**01:30 PM to 02:45 PM**  
**Trade**

## **Traumatic Stress Responses in the Wake of Collective Trauma: Methodological, Conceptual, Lifespan, and Cultural Considerations**

(Global, Global-Pub Health-Res Meth, Adult, M, Global)

Garfin, Dana, PhD<sup>1</sup>; Hobfoll, Stevan, PhD<sup>2</sup>

<sup>1</sup>*University of California, Irvine, Irvine, California, USA*

<sup>2</sup>*Rush Medical College, Chicago, Illinois, USA*

Collective traumas such as earthquakes, tsunamis, terrorist attacks, and technological disasters impact the community broadly and can have significant deleterious psychological consequences for many individuals who are both directly and indirectly exposed. Findings from three epidemiological studies of collective traumas in three countries will be presented: 1) the 2010 Chilean earthquake and tsunami, 2) the 2011 Japanese earthquake, tsunami, and nuclear meltdown, and 3) the 2013 Boston Marathon bombings. The symposium will conclude with a presentation on qualitative differences in type of collective trauma, drawing from research on violence in Colombia and the 2010 Deepwater Horizon oil spill. The symposium will focus on the strengths and weaknesses of different methods of community assessment as well as cultural factors that should be considered when conducting global research. A lifespan approach that incorporates the role of prior trauma will be implemented. Factors that are infrequently included when researching post-traumatic stress responses after collective traumas, in particular community stigma and indirect exposure via the media, will be analyzed. Our discussant, Stevan Hobfoll, will draw from his expertise in and extensive research on collective trauma in Israel/Palestine to comment on this research.

**Symposium**  
**Thursday, November 6**  
**01:30 PM to 02:45 PM**  
**Trade**

## **Indirect Media Exposure to Collective Trauma: Does Content Matter?**

(Journalism and Trauma, Comm/Vio-Pub Health-Social-Terror, Adult, M, Industrialized)

Holman, E. Alison, PhD; Garfin, Dana, PhD; Lubens, Pauline, Doctoral Student; Silver, Roxane, PhD  
*University of California, Irvine, Irvine, California, USA*

After a collective trauma, negative psychological responses have been documented in individuals both directly (i.e., physically present at the time of the event) and indirectly (i.e., watched media coverage) exposed (Holman et al., 2014; Silver et al., 2013). While mounting evidence demonstrates negative effects of media exposure to collective events, little is known about the types of media-based exposures that are most strongly correlated with distress. We conducted two Internet-based surveys following the Boston Marathon bombings between April 29 and May 2013 (T1) with representative samples from Boston (n=846), New York City (n=941), and the remainder of the United States (n=2,888), and a follow-up survey 6 months later (T2) with an 81% retention rate. Individuals both directly and indirectly exposed reported symptoms of acute stress at T1 and Post-Traumatic Stress (PTS) at T2. Images of bloody or injured people were more strongly correlated with acute stress and PTS compared to other types of images; traditional media consumption (e.g., television) was more strongly correlated with negative outcomes than was internet or social-media based exposures. Childhood exposure to negative life events (e.g., child abuse, natural disaster, illness, injury) was associated with BMB-related acute stress (at T1) and PTS (T2).

**Symposium**  
**Thursday, November 6**  
**01:30 PM to 02:45 PM**  
**Trade**

## **Mental Health Challenges of Fukushima Nuclear Plant Workers Following the 2011 Great East Japan Earthquake and Fukushima Daiichi Nuclear Accident**

(Social, Nat/Dis-Pub Health-Social-Tech/Dis, Adult, M, Industrialized)

**Shigemura, Jun, MD PhD<sup>1</sup>**; Tanigawa, Takeshi, MD PhD<sup>2</sup>; Tachibana, Shoichi, MD PhD<sup>1</sup>; Sano, Shin-ya, MD, PhD<sup>1</sup>; Fujii, Chiyo, MD PhD<sup>3</sup>; Sato, Yutaka, MA<sup>1</sup>; Kuwahara, Tatsuro, MD PhD<sup>1</sup>; Tatsuzawa, Yasutaka, MD PhD<sup>1</sup>; Takahashi, Sho, MD, PhD<sup>4</sup>; Toda, Hiroyuki, MD<sup>1</sup>; Nishi, Daisuke, MD PhD<sup>5</sup>; Matsuoka, Yutaka, MD PhD<sup>3</sup>; Nagamine, Masanori, MD PhD<sup>1</sup>; Harada, Nahoko, RN, MSN<sup>1</sup>; Tanichi, Masaaki, MD<sup>2</sup>; Nomura, Soichiro, MD, PhD<sup>1</sup>; Yoshino, Aihide, MD, PhD<sup>1</sup>

<sup>1</sup>National Defense Medical College, Tokorozawa, Saitama, Japan

<sup>2</sup>Juntendo University, Tokyo, Tokyo, Japan

<sup>3</sup>National Center of Neurology and Psychiatry, Kodaira, Tokyo, Japan

<sup>4</sup>University of Tsukuba, Tsukuba, Ibaraki, Japan

<sup>5</sup>National Institute of Mental Health, National Center of Neurology and Psychiatry, Kodaira, Tokyo, Japan

On March 11, 2011, earthquakes and tsunamis triggered the Fukushima Daiichi nuclear accident. Recovery is still evolving, and plant clean-up is expected to take decades. These plant workers have been facing serious mental health challenges. Many of them are also disaster victims; they not only had experienced tremendous workplace trauma (e.g., radiation exposure, plant explosion), but also loss of loved ones and property as well as home evacuation. Moreover, they have been targets of discrimination, given the public criticism to their company. To better understand the relationship between multiple disaster exposures and psychological outcomes among this population, we conducted a cross-sectional study among 1,495 Fukushima Daiichi and nearby intact Daini plant workers 2-3 months post-disaster. Their psychological responses were relatively high (K6 13, Daiichi vs. Daini, 47% vs. 37%; IES-R 25, 30% vs. 19%). Among multiple stressors, individuals with discrimination experience were 2-3 times more likely to have adverse mental health outcomes than those without such experience ( $p < .05$ ). In the aftermath of this multiple disaster, discrimination was a significant factor in the workers' post-disaster mental health. Specialists should address this issue among workers, and public health measures to alleviate discrimination, such as working with the media, may be helpful.

**Symposium**  
**Thursday, November 6**  
**01:30 PM to 02:45 PM**  
**Trade**

## **Trauma Signature Analysis in Relation to Collective Trauma**

(Global, Global-Nat/Dis-Refugee-Civil/War, Lifespan, M, Global)

**Shultz, James, PhD<sup>1</sup>**; Espinel, Zelde, MD, MA, MPH<sup>1</sup>; Garfin, Dana, PhD<sup>2</sup>

<sup>1</sup>University of Miami Miller School of Medicine, Miami, Florida, USA

<sup>2</sup>University of California, Irvine, Irvine, California, USA

Introduction: Trauma signature (TSIG) analysis is an evidence-based method that examines the interrelationship between population exposure to a disaster, extreme event, or complex emergency, and the inter-related physical and psychological consequences for the purpose of providing timely, actionable guidance for effective mental health and psychosocial support that is organically tailored and targeted to the defining features of the event. Methods: TSIG

analysis methodology will be described and TSIG summaries will be displayed graphically for a range of natural and human-generated (“anthropogenic”) disasters and extreme events worldwide. Results: “TSIG summaries” are compared for disaster case studies categorized as natural (Haiti Earthquake, Superstorm Sandy), technological (Deepwater Horizon Oil Spill, Santiago de Compostela Train Derailment), “hybrid” (Great East Japan Disaster), and intentional (Boston Marathon Bombing, 5-Day South Ossetia War, conflict-associated internal displacement in Colombia). TSIG summaries portray “exposure severity” for population encounters with an array of hazards, losses, and changes. Conclusions: TSIG analysis has utility for exploring and differentiating the distinguishing features of a disaster event in relation to salient, evidence-based psychological risks factors for collective and individual trauma.

## **Symposium**

**Thursday, November 6**

**01:30 PM to 02:45 PM**

**Trade**

### **Traumatic Stress Responses following the 2010 8.8 Magnitude Chilean Earthquake**

(Global, Cul Div-Health-Nat/Dis-Pub Health, Adult, M, Latin Amer & Carib)

**Garfin, Dana, PhD<sup>1</sup>**; Silver, Roxane, PhD<sup>1</sup>; Francisco, Uglade, PhD<sup>2</sup>; Linn, Heiko, Dipl Psych<sup>2</sup>

<sup>1</sup>*University of California, Irvine, Irvine, California, USA*

<sup>2</sup>*Universidad Andrés Bello, Santiago, Santiago, Chile*

Post-disaster epidemiological studies help document PTS responses and inform humanitarian relief efforts yet are infrequently implemented, particularly in Latin America (Norris, 2005). We assessed a representative sample of 2,108 Chilean adults three months after the 2010 8.8 magnitude Bio-Bio earthquake via face-to-face interviews. Childhood exposure to prior earthquakes, demographics, and psychological resources (self-efficacy) were examined as predictors of PTSD, global distress, functional impairment, substance use, and service utilization. 18% of Chileans met DSM-IV criteria for PTSD; psychopathology correlated with female gender, lower SES, prior mental health problems, and childhood exposure to the 1960 Chilean earthquake (the strongest recorded earthquake). Low self-efficacy was positively associated with global distress, service utilization, and substance use. Importantly, findings were relevant across Chile, even in less heavily impacted areas, bolstering research indicating the lack of a clear “dose-response” relationship between exposure to collective trauma and distress (Seery et al., 2010; Silver et al., 2002). The benefits of post-disaster epidemiological studies for informing public policy and relief efforts will be discussed, as will methods to target psychological resources, such as self-efficacy, to increase adaptive responses following collective trauma.

**Symposium**  
**Thursday, November 6**  
**01:30 PM to 02:45 PM**  
**Flagler**

## **From Predictors to Passageways to Practice: Mapping the Ecology of Bereavement in Grieving Youth**

(Assess Dx, Comm/Int-Death-Fam/Int-Civil/War, Child/Adol, M, Industrialized)

Kaplow, Julie, PhD, ABPP<sup>1</sup>; Layne, Christopher, PhD<sup>2</sup>

<sup>1</sup>*University of Michigan Medical School, Ann Arbor, Michigan, USA*

<sup>2</sup>*UCLA - National Center for Child Traumatic Stress, Los Angeles, California, USA*

Although the death of a loved one is not an uncommon occurrence for children and adolescents, the field of childhood grief remains in a largely nascent state. This lack of progress is especially evident in relation to its current inability to clarify age-specific manifestations of grief across different populations, distinguish between adaptive and maladaptive grief reactions, and identify risk and protective factors located in the post-death ecology. This symposium will explore these issues in three populations of bereaved youth: (1) war-exposed Bosnian adolescents, (2) youth from military families, and (3) youth from the general community. Analyses across samples involve the examination of candidate risk and protective factors including pre-death variables (e.g., types of war exposure, pre-death adversities, relationship to the deceased), circumstances of the death, and post-death environmental factors (e.g., parent-child communication, exposure to loss reminders) in relation to adaptive and maladaptive grief reactions. Using Multidimensional Grief Theory as a guide for understanding links between candidate risk/protective factors, post-death passageways, and grief, we discuss implications for theory building, assessment, and intervention, including the utility and limitations of DSM-5's proposed Persistent Complex Bereavement Disorder and its Traumatic Bereavement Specifier.

**Symposium**  
**Thursday, November 6**  
**01:30 PM to 02:45 PM**  
**Flagler**

## **How Can We Differentiate between Adaptive versus Maladaptive Grief? A Study of War-Exposed Adolescents**

(Clin Res, Death-Civil/War, Child/Adol, M, C & E Europe & Indep)

Howell, Kathryn, PhD<sup>1</sup>; Kaplow, Julie, PhD, ABPP<sup>2</sup>; Layne, Christopher, PhD<sup>3</sup>

<sup>1</sup>*University of Memphis, Memphis, Tennessee, USA*

<sup>2</sup>*University of Michigan Medical School, Ann Arbor, Michigan, USA*

<sup>3</sup>*UCLA - National Center for Child Traumatic Stress, Los Angeles, California, USA*

The majority of youth who lived through the Bosnian war were exposed to multiple traumatic events, including deaths of loved ones. In a sample of 118 war-exposed and bereaved Bosnian adolescents (age 15-19, M=16.9, 47.5% female), we identified factors that distinguish youth exhibiting adaptive grief reactions from those exhibiting maladaptive grief reactions. We examined relations between predictors including demographic variables, post-war contextual factors (dimensions of war exposure, secondary adversities), loss reminders (cues that direct attention to the deceased person's ongoing absence) and outcomes, including adaptive versus maladaptive grief reactions. Adolescents were drawn from a study of long-term post-war adjustment. Regression analyses and independent samples t-tests revealed differential relations between specific predictors (types of war exposure, loss reminders) and



adaptive versus maladaptive grief, as well as some gender-linked differences. These results shed light on ways in which post-war contextual factors differentially predict, and may contribute to, adaptive versus maladaptive grief. Findings carry implications for improving screening for bereaved youth at risk for long-term maladjustment and for identifying candidate foci of interventions designed to reduce maladaptive grief and promote adaptive grief in war-exposed and traumatically bereaved youth.

## **Symposium**

**Thursday, November 6**

**01:30 PM to 02:45 PM**

**Flagler**

### **Using the Bereavement Risk and Resilience Index to Predict Maladaptive Grief Domains and Adverse Outcomes in Bereaved Youth**

(Assess Dx, Clinical Practice-Death, Child/Adol, M, Industrialized)

**Wamser-Nanney, Rachel, PhD<sup>1</sup>**; **Kaplow, Julie, PhD, ABPP<sup>2</sup>**; Layne, Christopher, PhD<sup>3</sup>; Pynoos, Robert, MD MPH<sup>3</sup>

<sup>1</sup>*University of Michigan, Dept of Psychiatry, Ann Arbor, Michigan, USA*

<sup>2</sup>*University of Michigan Medical School, Ann Arbor, Michigan, USA*

<sup>3</sup>*UCLA - National Center for Child Traumatic Stress, Los Angeles, California, USA*

The death of a loved one can place youth at risk for adverse outcomes including maladaptive grief, post-traumatic stress symptoms (PTSS), and depression. However, the specific roles that factors embedded in the death and its aftermath play in influencing youths' psychological functioning remain unclear. We examined associations between candidate risk and protective factors (measured by the Bereavement Risk and Resilience Index; Layne & Kaplow, 2012) and psychological outcomes in 132 bereaved youth (ages 6-18). Outcomes included three theorized dimensions of maladaptive grief as proposed by Multidimensional Grief Theory (Kaplow et al., 2013), as well as PTSS and depression. Candidate predictors included pre-death adversities, circumstances of the death, and post-death contextual variables (e.g., caregiver attention, secondary adversities). Regression models revealed some differential relations between theorized risk and protective factors and outcomes. Pre-death adversities predicted PTSS, Separation Distress, and Circumstance-Related Distress, but were unrelated to Existential Distress. Youths' more immediate reactions to the death predicted PTSS and all three domains of maladaptive grief. Youth-reported caregiver attentiveness and adherence to a regular schedule were inversely associated with depression. Theoretical and clinical implications of these findings will be discussed.

## **Symposium**

**Thursday, November 6**

**01:30 PM to 02:45 PM**

**Flagler**

### **Parents Facilitating Children's Grief: A Linguistic and Behavioral Analysis**

(Assess Dx, Comm/Int-Death-Dev/Int-Fam/Int, Lifespan, M, Industrialized)

**Kaplow, Julie, PhD, ABPP<sup>1</sup>**; Wamser-Nanney, Rachel, PhD<sup>2</sup>; Wardecker, Britney, BA/BS<sup>3</sup>; Layne, Christopher, PhD<sup>4</sup>; Pynoos, Robert, MD MPH<sup>4</sup>

<sup>1</sup>*University of Michigan Medical School, Ann Arbor, Michigan, USA*

<sup>2</sup>*University of Michigan, Dept of Psychiatry, Ann Arbor, Michigan, USA*

<sup>3</sup>*University of Michigan, Ann Arbor, Michigan, USA*

<sup>4</sup>*UCLA - National Center for Child Traumatic Stress, Los Angeles, California, USA*

Surviving parents' own reactions and behaviors following a death can powerfully influence their bereaved children's adjustment. Indeed, the text accompanying the DSM-5 Persistent Complex Bereavement Disorder recommends that children's psychological distress be evaluated in the context of their caregiving environment. Nevertheless, little is known regarding specific parental behaviors that facilitate versus inhibit "adaptive" grief in children. We used the Linguistic Inquiry and Word Count Program (Pennebaker et al., 2001) with transcripts of parent-child interviews and the Grief Facilitation Inventory (Kaplow & Layne, 2012) to examine relations between (a) parent-child discussions about the deceased, (b) child-reported parental grief facilitation, and (c) children's psychological functioning. The sample consisted of 30 recently bereaved parent-child dyads. Children ranged in age from 6 to 17 ( $M = 11.18$ ,  $SD = 3.23$ ). Analyses revealed that the more parents talk to their children about the deceased, the fewer PTSD symptoms their children exhibit. However, specific word use (e.g., "angry") is associated with greater child psychological difficulties. Results also point to differential relations between specific parent-led facilitation behaviors (e.g., memorializing, reminiscing, etc.) and children's adaptive versus maladaptive grief. Implications for intervention will be discussed.

## **Symposium**

**Thursday, November 6**

**01:30 PM to 02:45 PM**

**Flagler**

### **Effect of Relationship-to-Deceased and Military Pride on Adaptive Grief Reactions in Parentally Bereaved Children of U.S. Service Members**

(Assess Dx, Death-Mil/Vets, Child/Adol, M, Industrialized)

**Cozza, Stephen, MD<sup>1</sup>**; Fisher, Joscelyn, PhD<sup>1</sup>; Ortiz, Claudio, PhD<sup>1</sup>; Kaplow, Julie, PhD, ABPP<sup>2</sup>; Layne, Christopher, PhD<sup>3</sup>; Harrington-Lamorie, Jill, DSW<sup>4</sup>; Zhou, Jing, MS<sup>1</sup>; Liu, Alex, BA<sup>5</sup>; Grein, Katherine, BA<sup>5</sup>; Fullerton, Carol, PhD<sup>1</sup>; Ursano, Robert, MD<sup>1</sup>

<sup>1</sup>*Center for the Study of Traumatic Stress, Uniformed Services University of the Health Sciences, Bethesda, Maryland, USA*

<sup>2</sup>*University of Michigan Medical School, Ann Arbor, Michigan, USA*

<sup>3</sup>*UCLA - National Center for Child Traumatic Stress, Los Angeles, California, USA*

<sup>4</sup>*Uniformed Services, University of the Health Sciences, Bethesda, Maryland, USA*

<sup>5</sup>*Uniformed Services University, Bethesda, Maryland, USA*

During the ten years following the start of military operations in Iraq and Afghanistan, approximately 14,000 children have lost parents. However, there have been no investigations of grief outcomes or potential predictors of these outcomes in parentally-bereaved U.S. military children. This study examines the relations between six theorized risk/resilience factors (i.e., relationship to the deceased, current stress, current parental attention, family schedule, ongoing connection to military community, and pride in deceased's military service) and adaptive and maladaptive child grief outcomes in 53 military children, ages 5 to 17 years. Six domains of child grief were measured using the Multidimensional Grief Reactions Scale (MGRS; Layne, Kaplow and Pynoos, 2011). Neither time since death nor circumstances of death were associated with grief reactions in any domain. However, significant associations were found between high importance of relationship to deceased and adaptive separation-related grief reactions, as well as pride in the deceased's military service and adaptive existential grief reactions. Preliminary findings suggest that certain contextual factors, (e.g., military pride) may promote adaptive grief reactions in bereaved military children.

**Symposium**  
**Thursday, November 6**  
**01:30 PM to 02:45 PM**  
**Gusman/Tuttle**

## **Using Multi-Family Groups to Strengthen Resilience in Vulnerable Populations: An integration of Models**

(Clin Res, Comm/Int-Fam/Int-Health-Prevent, Lifespan, M, Industrialized)

Vermetten, Eric, MD, PhD  
*Military Mental Health Research/UMC Utrecht, Utrecht, Ut, Netherlands*

Many children and parents are confronted with traumatic incidents and live in harsh conditions worldwide. Multi-family groups (MFG) have been found useful interventions in both clinical as well as research evaluations for the prevention and intervention of adverse psychosocial consequences in adults and children of different ages. MFG have been applied to a wide array of populations, for instance ex-military, war-civilians, refugees and asylum seekers, families living in poverty, or being struck by home violence. MFG is a multi-level intervention at the crossroads of family- and group oriented interventions. Since its early use by Laqueur in 1970's, the methodology has been developed further along slightly distinct theoretical lines. In this symposium, four presenters from different countries, will illuminate their experiences with MFG. Bringing together this expertise in one symposium, offers the opportunity to learn about commonalities and differences, strengths and challenges of MFG for vulnerable parents and children and youngsters. Despite possible differences in approach, in all contributions the relevance of and opportunities to strengthen parents and children together in adapting and recovering from stressful difficulties will be underlined.

**Symposium**  
**Thursday, November 6**  
**01:30 PM to 02:45 PM**  
**Gusman/Tuttle**

## **Strengthening Family Coping Resources (SFCR): Multi-Family Group (MFG) for Families in Urban Poverty**

(Practice, Chronic-Clin Res-Complex-Fam/Int, Lifespan, M, Industrialized)

Kiser, Laurel, PhD MBA  
*University of Maryland School of Medicine, Baltimore, Maryland, USA*

Chronic stressors and multiple traumas are frequent in the lives of urban poor families and are often associated with severe, persistent reactions in multiple family members as well as systemic adaptations. Appreciating consistencies in the presentations of these families facilitated development of an empirically-derived treatment targeting their most pervasive symptoms. Using a MFG format, SFCR enhances a family's protective function vulnerable to chronic exposure to stress and trauma. SFCR is a family-focused, skill-building intervention providing accepted, scientifically sound trauma treatment with the goal of reducing symptoms of trauma-related disorders in multiple family members. The model includes a focus on storytelling building to co-construction of a family trauma narrative. Since most urban poor families contend with on-going danger, SFCR is also designed to increase coping resources (e.g., sense of safety, stability, co-regulation, support) to prevent relapse and re-exposure. Results from field trials suggest SFCR is a feasible intervention with significant positive effects on children's PTSD symptoms and behavior problems, parenting stress, and family functioning. SFCR's unique practice elements, including

developmentally appropriate break-out activities reinforced with family practice, will be described and discussed in context with other MFG models.

## **Symposium**

**Thursday, November 6**

**01:30 PM to 02:45 PM**

**Gusman/Tuttle**

### **What are the Components of Resilience in Multiple Family Group Interventions with Refugees and Migrants?**

(Prevent, Commun-Prevent-Refugee-Civil/War, Lifespan, M, C & E Europe & Indep)

**Weine, Stevan, MD**

*University of Illinois Chicago, Chicago, Illinois, USA*

To advance the science and practice of multiple family groups with refugees and migrants, it is necessary to better characterize the components of resilience in multiple family groups interventions . Based upon resilience theory and family systems theory, and mixed methods findings from several resilience focused interventions with refugees and migrants conducted by the author, this presentation will present a model that can guide intervention design, engagement strategy, and assessment for multiple-family groups with refugees and migrants. The model addresses the potential complications associated with families in transition, including socio-structural adversities, socio-cultural differences, temporal changes, and ongoing mobility.

## **Symposium**

**Thursday, November 6**

**01:30 PM to 02:45 PM**

**Gusman/Tuttle**

### **Alleviating Family Consequences of War Trauma: Contribution of Multi-Family Groups**

(Practice, Affect/Int-Chronic-Dev/Int-Fam/Int, Lifespan, M, Industrialized)

**Mooren, Trudy, PhD**

*Centrum 45, Arq Research, Oegstgeest, Netherlands*

Recent studies show evidence for the relation between parental trauma, parent-child interaction and child development. Intra-familial relationships after traumatic events are receiving growing clinical and scientific attention. In this contribution we present our experiences with Multifamily (MF) groups in families of refugees, asylum-seekers or victims of human trafficking and ex-military. At least one family member is suffering from post-traumatic stress disorder, other anxiety disorders and/or depression. Children in these families have been confronted with incidents of violence and/or neglect. The aim of this presentation is to demonstrate the potential power of MFG intervention for improving intrafamilial interactions. MF groups are at the crossroads of family- and group therapy. Theoretically, change in the parent-child interaction is established through the increase of 'mentalization'. Further, interventions are focused at specific goals, different age-groups and various sub-systems (e.g., children, parents, parent-child dyads, families). From the qualitative analyses of the evaluation among participants and team-members, it's concluded that MF-groups are effective in improving communication, facilitating try-outs of new behavior and increasing parenting competencies. Key principles of these groups will be outlined, illustrated and evaluated.

## **Workshop Presentation**

**Thursday, November 6**

**01:30 PM to 02:45 PM**

### **Bayfront B - CHILD TRACK TWO**

#### **Risk and Resiliency Factors for Traumatized LGBTQ Youth**

(CulDiv, CSA-Commun-Orient, Child/Adol, I, Industrialized)

**Cohen, Judith, MD<sup>1</sup>; Killen-Harvey, Al, MSW, LCSW<sup>2</sup>; Barba, Antonia, LCSW<sup>3</sup>**

<sup>1</sup>*Allegheny General Hospital, Pittsburgh, Pennsylvania, USA*

<sup>2</sup>*Chadwick Center for Children and Families, Rady Children's Hospital – San Diego, San Diego, California, USA*

<sup>3</sup>*JBFCs, New York, New York, USA*

The primary goal of this workshop is to explore the high degree of risk of abuse faced by Lesbian, Gay, Bisexual, Transgender and Questioning (LGBTQ) adolescents. Due to a lack of information and visibility, this group of adolescents faces risk of physical, sexual and emotional abuse at home, school, and in society at large. This interactive workshop will include an overview of basic language and terminology, as well as the stages of sexual identity development, and identification of the physical and emotional stressors faced by this population. There will also be an exploration of the cultural and institutional dynamics that can serve to reinforce this abuse. Areas of strength and resiliency for this population will also be explored and participants will be given the opportunity to assess their own values and feelings related to this topic. The information and discussion will be guided through the use of vignettes and video storytelling. Strengths and needs within a bio-psychosocial context, as well as engagement, collaboration, and resources will be explored.

## **Oral Paper Presentation**

**Thursday, November 6**

**01:30 PM to 02:45 PM**

### **Biscayne - BIOLOGY TRACK**

## **Physiological Aspects of Trauma**

### **The Role of Neuronal Emotional Reactivity in the Intergenerational Transmission of Abuse: a Family Study Design**

(Clin Res, CPA-Fam/Int-Neglect-Bio/Int, Lifespan, I, Industrialized)

**van den Berg, Lisa, PhD Candidate<sup>1</sup>; Elzinga, Bernet, PhD<sup>2</sup>; Tollenaar, Marieke, PhD<sup>2</sup>; Bakermans-Kranenburg, Marian, PhD<sup>3</sup>; Van IJzendoorn, Marinus, PhD<sup>3</sup>; Alink, Lenneke, PhD<sup>3</sup>**

<sup>1</sup>*University of Leiden, Faculty of Social and Behavioural Sciences; Psychology, Leiden, Zuid-Holland, Netherlands*

<sup>2</sup>*Leiden University, Leiden, Netherlands*

<sup>3</sup>*University of Leiden, Leiden, Zuid-Holland, Netherlands*

Childhood emotional maltreatment (CEM) has profound and enduring effects on emotional functioning, and recent studies found that CEM is associated with enhanced bilateral amygdala reactivity to emotional faces. To investigate whether enhanced amygdala activation is directly associated with abuse exposure, or whether it reflects inherited characteristics from the parents, we are currently conducting a large family study on the intergenerational transmission of abuse. In this study, neural reactivity to faces is investigated in adult brothers and sisters and their children. So far, we have included 59 participants (30 adults and 29 children) and we are currently still including new participants in our study. Our preliminary whole brain analyses show strong bilateral amygdala activation for all emotional faces versus scrambled faces (control condition) for all participants. In my presentation, I will present the outcomes on brain activation during the presentation of emotional faces between individuals who did or did not

experience abuse and between people who transmitted abuse or not. This study will extend our knowledge about factors that play a role in the intergenerational transmission of abuse.

### **Oral Paper Presentation**

**Thursday, November 6**

**01:30 PM to 02:45 PM**

**Biscayne - BIOLOGY TRACK**

### **Childhood Trauma and Adolescent Neuroendocrine Functioning: Examining Age of Trauma Onset and Adolescent Depression as Moderators**

(Res Meth, CPA, Child/Adol, I, Industrialized)

**Kuhlman, Kate, PhD;** Price, Elisa, MS; Vargas, Ivan, MS; Lopez-Duran, Nestor, PhD  
*University of Michigan, Ann Arbor, Michigan, USA*

The purpose of this study was to examine age of trauma and depression as moderators between child trauma exposure and adolescent HPA-axis functioning. In this study, 138 youth (aged 9-16) completed a diagnostic interview, a lab stressor (7 salivary cortisol samples), and 8 diurnal cortisol samples. We found that more non-intentional trauma was associated with exaggerated CAR, over regulation of diurnal cortisol, and elevated bedtime cortisol. Physical abuse exposure was associated with steeper cortisol increase to acute stress, while emotional abuse was associated with impaired regulation of cortisol following peak response. These findings were moderated by age of trauma and depression. Specifically, the HPA-axis appears to be sensitive to physical abuse during early childhood in ways that may be neurobiologically adaptive, while more physical abuse exposure during later childhood is necessary to make the same adaptation. Depressed youth with a trauma history may be neurobiologically sensitive to novel environments and specific daily experiences, e.g. bedtime. Our findings suggest that the associations between child trauma and later HPA-axis functioning vary by age of trauma and current psychopathology. These findings inform our understanding of HPA-axis development, as well as offer insight into areas of investigation among intervention studies of trauma-exposed youth.

### **Oral Paper Presentation**

**Thursday, November 6**

**01:30 PM to 02:45 PM**

**Biscayne - BIOLOGY TRACK**

### **The Role of High-Density Lipoprotein Cholesterol in Risk for PTSD**

(Bio Med, Acc/Inj-Bio Med-Prevent-Pub Health, Adult, M, Industrialized)

**Matsuoka, Yutaka, MD PhD<sup>1</sup>;** Hamazaki, Kei, MD, PhD<sup>2</sup>; Nishi, Daisuke, MD PhD<sup>3</sup>; Yonemoto, Naohiro, MPH<sup>1</sup>; Noguchi, Hiroko, PhD, RN<sup>1</sup>; Kim, Yoshiharu, MD, PhD<sup>3</sup>

<sup>1</sup>*National Center of Neurology and Psychiatry, Kodaira, Tokyo, Japan*

<sup>2</sup>*University of Toyama, Toyama, Toyama, Japan*

<sup>3</sup>*National Institute of Mental Health, National Center of Neurology and Psychiatry, Kodaira, Tokyo, Japan*

Several cross-sectional studies, but no prospective studies, have reported an association between an abnormal lipid profile and PTSD. In this prospective study we analyzed data from 300 severely injured patients. To estimate the risk for PTSD according to the serum lipid level, we categorized each participant according to tertiles of lipid level distributions in patients without PTSD. We then performed logistic regression analysis to calculate the odds ratio (OR) and 95% confidence interval. High-density lipoprotein cholesterol (HDL-C) levels at baseline were significantly lower in patients with PTSD than those without PTSD at 6 months after MVA and were inversely associated with risk for PTSD. After adjusting for the five confounding factors, OR for the post-MVA patients in the



highest HDL-C tertile was 0.04 compared with those in the lowest tertile. In contrast, triglycerides (TG) at baseline were significantly higher in patients with PTSD than in those without PTSD at 6 months post-MVA and were positively associated with risk for PTSD. There was no clear association between low density lipoprotein cholesterol or total cholesterol and risk for PTSD. Low HDL-C and high TG may be risk factors for PTSD. Determining lipid profiles might help identify those at risk for PTSD after experiencing trauma.

## **Oral Paper Presentation**

**Thursday, November 6**

**01:30 PM to 02:45 PM**

**Biscayne - BIOLOGY TRACK**

### **Neuroendocrine Correlates of mTBI and PTSD in OEF/OIF/OND Veterans**

(Bio Med, Acc/Inj-Mil/Vets, Adult, M, Industrialized)

**Flory, Janine, PhD<sup>1</sup>**; Yehuda, Rachel, PhD<sup>1</sup>; Henn-Haase, Clare, PsyD<sup>2</sup>; Marmar, Charles, MD<sup>3</sup>

<sup>1</sup>*James J Peters VAMC/Mount Sinai School of Medicine, Bronx, New York, USA*

<sup>2</sup>*New York University Langone Medical Center, Department of Psychiatry, New York, New York, USA*

<sup>3</sup>*New York University School of Medicine, New York, New York, USA*

The high number of OEF/OIF/OND veterans with PTSD and mild Traumatic Brain Injury (mTBI) has brought to light a gap in the evidence base of diagnostic and treatment strategies for treatment-seeking veterans. Often the symptoms overlap (e.g., insomnia, irritability, trouble concentrating) and little is known about the underlying pathophysiologies for each disorder separately and for their co-occurrence. Dysfunction in neuroendocrine measures has been independently identified in both conditions but no investigations have examined these conditions together. Previously we reported that male OEF/OIF/OND veterans with PTSD had lower 24-hour urinary cortisol and lower values on a measure of GR sensitivity (lysozyme suppression test: IC<sub>50</sub>-DEX) relative to combat-exposed veterans without PTSD. The sample was further divided into those who reported prior head injury (HI) with loss of consciousness <10 mins (n=31) or no HI (n=90). Results showed that prior HI was associated with *higher* values on the lysozyme suppression test ( $F_{(1,117)}=5.9$ ,  $p=.017$ ) and *higher* urinary cortisol ( $F_{(1,108)}=4.8$ ,  $p=.030$ ). An interaction effect showed that veterans with prior HI but no PTSD had the highest levels of urinary cortisol ( $F_{(1,108)}=5.3$ ,  $p=.023$ ). Results suggest that there may be a unique biological signal associated with mTBI and PTSD in combat veterans.

# CONCURRENT SESSION THREE

## Invited Symposium

**Thursday, November 6**

**03:00 PM to 04:15 PM**

**Windsor/Sandringham**

## Screening for Trauma in Mental Health Clinics – Is It Ethical?

(Ethics, Clinical Practice, Lifespan, M, Industrialized)

Saunders, Benjamin, PhD

*Medical University of South Carolina, Charleston, South Carolina, USA*

A core feature of ethical clinical practice is that the services delivered are efficient in improving health and that they do not harm the patient. In addition, if potentially distressing procedures are used the benefits must outweigh the costs. It is a common and understandable concern among mental health clinicians and administrators that screening for a history of potentially traumatic events and symptoms of traumatic stress as part of a standard assessment may be overly distressing or even traumatic for clients. In this symposium these concerns will be addressed and four researchers will look at the costs and benefits of screening for trauma and assessing trauma symptoms in different populations. The first study looked at what clinicians in a Swedish child clinic thought of screening for interpersonal violence at intake, and the second study investigated what children and parents thought about being assessed for trauma symptoms in regular clinics in Norway. The third study took a look at how youth reacted after participating in a national victimization study in the US, and finally we will learn what adult VA patients that were part of a clinical study thought of the assessment process. Clinical implications will be discussed.

## Invited Symposium

**Thursday, November 6**

**03:00 PM to 04:15 PM**

**Windsor/Sandringham**

## Trauma Screening: Ethical Issues Concerning Potential Distress

(Ethics, Assess Dx-Res Meth-Train/Ed/Dis, Child/Adol, M, Global)

Saunders, Benjamin, PhD

*Medical University of South Carolina, Charleston, South Carolina, USA*

Objective: Concern that trauma screening is itself traumatic for children is a common ethical issue in mental health. To help answer this concern, the literature examining distress due to screening will be reviewed. Debriefing results from a large, nationally representative sample of U.S. adolescents in a longitudinal victimization study will be described. Method: 3614 adolescents were asked detailed questions about their victimization experiences and assessed for PTSD, depression, other problems, and their levels of emotional distress during the interview. Results: 5.7% reported that some questions were upsetting. Only 8 respondents (0.2%) reported feeling upset at the end of the interview and 2 requested a referral. Girls, adolescents with a trauma history and/or had a history of PTSD, depression, or alcohol abuse were more likely to find some questions distressing. However, rates of study dropout were the same as for comparisons, indicating the distress did not persist. Conclusion: These data suggest that about 20% of adolescents seen in community clinics may experience some level of transient distress during trauma screening. However, distress is likely to be manageable and not persist beyond the assessment. The ethics of trauma screening will be discussed in light of these data and compared to screening for other types of sensitive, but clinically meaningful experiences.

**Invited Symposium**  
**Thursday, November 6**  
**03:00 PM to 04:15 PM**  
**Windsor/Sandringham**

**Is it Ethical to Ask Routinely about Intimate Partner Violence in a Child and Adolescent Mental Health Clinic? The Clinicians' Views**

(Practice, CPA-DV-Ethics, Child/Adol, M, Industrialized)

**Hultmann, Ole, Doctoral Student**  
*University of Gothenburg, Gothenburg, Sweden*

**Purpose:** The prevalence of exposure to intimate partner violence (IPV) is reported to be high among children visiting child and adolescent psychiatric clinics (CAM) and several researchers recommend routinely asking about IPV at intake. This is both to raise disclosure rates and to ensure adequate treatment. However, The Swedish Board of Health and Welfare suggest that it is not ethical to screen for violence as it is argued that the benefits will not outweigh the costs. The aim of this study was to learn more about how clinicians perceive the costs and benefits of routinely screening for IPV. **Method:** Routine screening was implemented in a CAM in Sweden. Fourteen clinicians were interviewed about their experiences using a standard questionnaire about IPV at intake. **Results:** Three themes emerged: (a) constraint (the questions hinder the development of good relationships with patients), (b) uncertainty (upon reflection, screening is acknowledged as important, but somewhat deficient), and (c) utility (the questionnaire provides a useful framework). **Conclusions:** Our findings indicate that clinicians' have mixed feelings towards routinely asking about IPV. This shows that there is need for training and supervision over time if routine screening is to be successfully implemented at the clinic.

**Invited Symposium**  
**Thursday, November 6**  
**03:00 PM to 04:15 PM**  
**Windsor/Sandringham**

**Won't They Be Very Upset? Ethical Considerations When Assessing for Trauma and Trauma Symptoms in Child and Adolescent Mental Health Clinics**

(Ethics, Assess Dx, Child/Adol, M, Industrialized)

**Ormhaug, Silje, Doctoral Student<sup>1</sup>**; Jensen, Tine, PsyD<sup>2</sup>; Holt, Tonje, PhD<sup>1</sup>  
<sup>1</sup>*Norwegian Center for Violence and Traumatic Stress Studies (NKVTS), Oslo, Norway*  
<sup>2</sup>*University of Oslo, Oslo, Norway*

**Purpose:** Many clinicians are concerned that assessing for trauma at the start of treatment will make the youth upset and disturb the establishment of a good therapeutic relationship. The aim of this study was to learn what the youth and their parents actually think about being assessed for trauma exposure and symptoms. **Method:** A group of highly symptomatic youth (n = 99) and their parents (n = 89) referred to regular child and adolescent clinics were assessed for trauma exposure and symptoms before, in the midst of, and after treatment. They were then asked about their reactions to being assessed. **Findings:** Results showed that the youth and parents were in general not upset by the assessments, and although those with a PTSD diagnosis reported higher levels of distress they were just as willing as the non-diagnosis group to be assessed again. **Conclusions:** Thorough assessments of trauma exposure and symptoms are important in order to provide adequate treatment, and this is well tolerated by both parents and youth. It can thus be argued that it is unethical not to ask about and assess for trauma, as it may hinder us from delivering good enough services to a group of vulnerable youth.

**Invited Symposium**  
**Thursday, November 6**  
**03:00 PM to 04:15 PM**  
**Windsor/Sandringham**

**Participation in Trauma Research: Is there Evidence of Harm?**

(Ethics, Assess Dx-Clin Res-Rape, Adult, M, Industrialized)

**Griffin, Michael, PhD<sup>1</sup>**; Resick, Patricia, PhD<sup>2</sup>; Smith, Brian, PhD<sup>3</sup>

<sup>1</sup>*University of Missouri St. Louis, St. Louis, Missouri, USA*

<sup>2</sup>*Duke University Medical Center, Durham, North Carolina, USA*

<sup>3</sup>*National Center for PTSD, VA Boston Healthcare System and Boston University, Boston, Massachusetts, USA*

Relatively few studies have examined the impact of participating in trauma-related research on trauma survivors. If undue distress is induced by participation this would raise an important ethical concern for trauma researchers. Previous data from our lab based on assessment studies of survivors of sexual assault and domestic violence indicated that trauma assessments were not harmful and were perceived as interesting and even helpful (Griffin, et. al., 2003). Data are reported from a cognitive treatment study of female sexual and physical assault survivors (N= 107) with severe PTSD at pretreatment (Clinician Administered PTSD Scale = 71.4). Extensive assessments conducted at pre- and post-treatment included diagnostic interviews, self-report scales, and physiological assessments (loud tone and script-driven imagery paradigms). Reactions to the assessment process were assessed at post-treatment and indicated that overall the participants found the process to be interesting and not overly distressing. In addition, comparisons of treatment responders (no PTSD at post-treatment) vs non responders (still PTSD at post-treatment) revealed that participants with PTSD did not experience more distress than those without PTSD at post-treatment across assessment domains (all  $t < 2.0$ ,  $p = n.s.$ ). Comparisons to our earlier work and ethical implications of the findings will be discussed.

**Invited Panel**

**Thursday, November 6**

**03:00 PM to 04:15 PM**

**Bayfront A - CHILD TRACK ONE**

**Trauma and Public Health: Science, Practice, Policy, and the Role of ISTSS**

(Social, Commun-Prevent-Pub Health-Social, Other: Public Health Officials, M, Global)

**Magruder, Kathryn, MPH, PhD<sup>1</sup>**; Elmore, Diane, PhD MPH<sup>2</sup>; McLaughlin, Katie, PhD<sup>3</sup>

<sup>1</sup>*Department of Veterans Affairs Medical Center, Charleston, South Carolina, USA*

<sup>2</sup>*UCLA-Duke University National Center for Child Traumatic Stress, Washington, DC, USA*

<sup>3</sup>*University of Washington, Seattle, Washington, USA*

Exposure to trauma is pervasive in societies worldwide and refers to a range of events including interpersonal violence, rape, natural disasters, terrorist attacks, and both civilian and military war-related experiences. The burden of trauma exposure includes increased likelihood of PTSD and comorbid psychiatric problems, as well as physical problems resulting directly from the trauma and chronic health conditions secondary to psychiatric problems. Impaired role function, reduced life course opportunities, and premature mortality all contribute to the public health burden of trauma. Because PTSD is conditional on trauma exposure, it may be one of the most preventable of mental disorders. The public health model of trauma emphasizes the individual, the environmental and societal context, and the traumatic event itself. These three aspects offer opportunities for prevention at multiple levels. Furthermore, the public health approach highlights the importance of effective public policies based in evidence for protecting people and communities. This panel will summarize a report of the ISTSS Trauma and Public Health Task Force emphasizing the public health burden of trauma exposure, the public health model and prevention

opportunities, the role of public health policies, and opportunities for ISTSS to maximize its societal impact in addressing trauma as a public health issue.

## **Oral Paper Presentation**

**Thursday, November 6**

**03:00 PM to 04:15 PM**

**Chopin - SPANISH TRACK**

*Presented in Spanish with simultaneous translation to English*

## **Prevalencia, Evaluación, y Tratamiento de Trauma y el Estrés Traumático (Prevalence, Assessment and Treatment of Trauma and Traumatic Stress)**

### **Descripción de la Prevalencia de Eventos Traumáticos en Adultos Chilenos de la Región del Maule (Prevalence description of traumatic events in Chilean adults at the Region of Maule)**

(Assess Dx, Assess Dx, Adult, M, Latin Amer & Carib)

**Fresno, Andres, PsyD;** Ramos Alvarado, Nadia, Magister en Psicología; Spencer Contreras, Rosario, PsyD; Nuñez, Daniel, PsyD; Leiva, Marcelo, PhD; Rey, Ricardo, PsyD

*Universidad de Talca, Talca, Región del Maule, Chile*

El objetivo del presente estudio es describir el reporte de la exposición a eventos traumáticos a lo largo de la vida. Se evaluó a 1194 personas a quienes se les aplicó la Lista de Chequeo de eventos de vida (Life Event Check-List, LEC; Blake et al., 1995); un cuestionario de 17 ítems que indaga acerca de la ocurrencia de eventos potencialmente traumáticos donde los participantes deben reportar si el o los eventos le(s) sucedieron de manera personal directa o indirecta (testigos del evento o si se enteraron de ello). Los resultados indican que 97% de la personas reporta haber experimentado al menos un evento traumático en su vida. El evento, vivenciado de manera directa, más prevalente en esta muestra es el desastre natural 93%, seguido por muerte repentina e inesperada de alguien cercano 36% y accidente en medio de transporte 22%. Por otra parte las vivencia indirectas más comunes son: enfermedad a lesión con riesgo vital 57%, incendio o explosión 55% y accidente en medio de transporte 53%. Estos resultados son interesantes ya que nos muestra que la mayoría de las personas han experimentado 1 o más eventos traumáticos, siendo uno de ellos el desastre natural, lo que es esperable dado que es una muestra de una las zonas afectadas por el terremoto del 27F de 2010 en Chile. Los resultados son discutidos en relación a la literatura sobre exposición a eventos traumáticos.

(The present study's objective is to describe the reporting of exposure to traumatic events across the life span. 1194 people were evaluated by administering the Life Event Checklist, (LEC; Blake et al., 1995). This 17-item questionnaire examines the occurrence of potentially traumatic events and asks respondents to report whether or not certain events have happened to them personally (directly), or if they have witnessed or otherwise found out about the event/s (indirectly). The results indicate that 97% of people report having experienced at least one traumatic event in their lives. The most common event participants had experienced directly was natural disaster (93%), followed by the sudden and unexpected death of someone close to them (36%), and a transportation accident (22%). Meanwhile, the most common indirect experiences were: life-threatening sickness or injury (57%), fire or explosion (55%), and transportation accident (53%). These results are interesting in showing that most people have experienced 1 or more traumatic events. One of those was natural disaster, which was expected given that the sample came from areas affected by the earthquake in Chile that took place on February 27, 2010. The results are discussed in relation to the literature on exposure to traumatic events.)

## **Oral Paper Presentation**

**Thursday, November 6**  
**03:00 PM to 04:15 PM**  
**Chopin - SPANISH TRACK**

**Heridas de una Guerra Invisible: Angustia y la Curación de Adolescentes con Múltiples Formas de Exposición Crónica y Permanente a la Violencia en las Zonas Urbanas de los Estados Unidos (Wounds of an Invisible War: Distress and Healing in Youth Exposed to Multiple Forms of Chronic Urban Violence)**

(Assess Dx, Chronic-Commun-Comm/Int-Comm/Vio, Child/Adol, I, Industrialized)

**Watson, Aran, MA PhD Student;** Dhaliwal, Kanwarpal, MPH  
*Ryse Center, Richmond, California, USA*

Un cuerpo de investigación valida que la exposición a la violencia crónica y multi-formadas en la infancia puede conducir a sintomatología compleja y variada en su expresión (Cloitre et al., 2009). Sin embargo, las características específicas de la angustia de los jóvenes expuestos a la exposición permanente y/o aguda a la trauma dentro de las comunidades sometidas a múltiples niveles de la violencia es menos comprendidos. Aún menos conocido es cómo los jóvenes se indifican , hacen sentido de, y hacen frente a su propia angustia en relación con la violencia. Utilizando los datos obtenidos de un 'community-based research project' entre los jóvenes expuestos a múltiples tipos de trauma y de la violencia basada en la comunidad (n=465), este estudio examinado las características de auto-descrito de la exposición al trauma y las expresiones de angustia de jovenes latinos y las estrategias de afrontamiento y el apoyo identifican y utilizan para aumentar su capacidad de recuperación. Usando la teoria fundamentada modificada para análisis, ámbitos clave de la angustia, de afrontamiento y estrategias de curación entre los jóvenes participantes serán identificados. Los resultados informarán el desarrollo de un proceso de evaluación mejorada de la angustia juvenil y a mejorar los servicios juveniles en las comunidades con niveles similares de violencia y las historias de opresión.

(A significant body of research validates that exposure to chronic and multi-formed violence exposure in childhood can lead to complex and varied symptomology expression (Cloitre et al., 2009). Yet the specific characteristics of distress of youth exposed to ongoing and/or acute exposure to violence within communities subject to multiple levels of violence is considerably less well understood. Even less known is how youth identify, make meaning of, and address their own distress in relation to violence. Utilizing data collected from a community-based participatory research project (N=465), this study aims to examine two related research questions: (1) what are the self-described characteristics of trauma exposure and expressions of distress among Latino youth exposed to multiple types of trauma and community-based violence?, and (2) What strategies of coping and support do young people identify and utilize to increase their resilience or post-traumatic growth in the face of chronic violence-exposure? Utilizing a modified grounded theory approach to qualitative analysis, key domains of distress, coping, and healing strategies among participating youth will be identified. Results will inform the development of an enhanced assessment process of youth distress and aim at improving youth support services in communities with similar levels of violence and histories of oppression.)

**Oral Paper Presentation**

**Thursday, November 6**  
**03:00 PM to 04:15 PM**  
**Chopin - SPANISH TRACK**

**Terapia Cognitiva Conductual para Trastorno por Estrés Post Traumático en Contusión Cerebral Leve (Cognitive Behavioral Therapy for PTSD in patients with and without MTBI)**

(Prevent, Acc/Inj-Assess Dx-Clinical Practice-Prevent, Adult, M, Industrialized)



**Roitman, Pablo, MD<sup>1</sup>**; Shalev, Arie, MD<sup>2</sup>; Gilad, Moran, MA<sup>1</sup>; Ankri, Yael, MA<sup>1</sup>

<sup>1</sup>*Hadassah University Hospital, Jerusalem, Israel*

<sup>2</sup>*Hadassah Hospital, Jerusalem, Israel*

**Introducción:** El trastorno por estrés postraumático (TEPT) y el traumatismo encefalocraneano leve (TEC I) ocurren simultáneamente en incidentes de alto impacto como las explosiones o los accidentes de tránsito. La pregunta planteada es si las secuelas neurocognitivas del TEC I influirán en una terapia cognitiva conductual efectiva del TEPT. **Material y Método:** Ciento veinticuatro sobrevivientes de accidentes de tránsito con y sin TEC I fueron aleatoriamente asignados a terapia o lista de espera. La sintomatología e incidencia de TEPT fueron medidas utilizando el cuestionario Clinician Administered PTSD Scale para DSM IV (CAPS IV). **Resultados:** El análisis de la variancia para medidas repetidas utilizando síntomas de TEPT como variable dependiente demostró un efecto significativo del tratamiento ( $F(1,120)=12.364, p=.001$ ) y del tiempo ( $F(1,120)=240.756, p<.001$ ), sin efecto significativo de lesión ( $F(1,120)=3.466, p=.065$ ) y una interacción no significativa de Tratamiento X Lesión X Tiempo ( $F(1,120)=0.689, p>.05$ ). Comparado con lista de espera, la terapia cognitiva conductual redujo significativamente los síntomas de TEPT tanto en aquellos sobrevivientes que tuvieron TEC I como en aquellos que no. **Conclusión:** El haber padecido un TEC I no influye negativamente en los resultados de la terapia cognitiva conductual del TEPT.

**(Introduction:** Posttraumatic Stress Disorder (PTSD) and mild Traumatic Brain Injury (mTBI) co-occur in high impact incidents like explosions or motor vehicle accidents (MVA). The aim of this study is to test the hypothesis that head injury with loss of consciousness will not prevent patients from making significant clinical improvement on Cognitive Behavioral Therapy (CBT). **Method:** One hundred and twenty four survivors of MVA with or without mTBI were randomly assigned to CBT or Wait List. Incidence and PTSD symptoms were measured by the Clinician Administered PTSD Scale for DSM IV (CAPS IV). **Results:** Repeated measures ANOVA using PTSD symptoms as the dependent variable showed significant main effect of treatment ( $F(1,120)=12.364, p=.001$ ) and time ( $F(1,120)=240.756, p<.001$ ), and no effect for injury ( $F(1,120)=3.466, p=.065$ ). Non-significant Time X Injury X Treatment interaction found. Compared to Waiting List, CBT significantly reduced PTSD symptoms in patients with and without mTBI. **Conclusion:** Mild Traumatic Brain Injury did not interfere with CBT for PTSD.)

## **Oral Paper Presentation**

**Thursday, November 6**

**03:00 PM to 04:15 PM**

**Chopin - SPANISH TRACK**

### **Evaluación Psicométrica de la Escala PCL Versión DSMIV y Estudio de Una Versión Adaptada de Acuerdo a Los Nuevos Criterios DSM V (Psychometric Properties of the PCL Scale, DSM-IV Version, and the Study of a New Version Adapted According to the DSM V New Criteria)**

(Assess Dx, Assess Dx, Adult, M, Latin Amer & Carib)

**Fresno, Andres, PsyD;** Ramos Alvarado, Nadia, Magister en Psicología; Spencer Contreras, Rosario, PsyD; Nuñez, Daniel, PsyD; Leiva, Marcelo, PhD; Rey, Ricardo, PsyD  
*Universidad de Talca, Talca, Región del Maule, Chile*

En el estudio del estrés postraumático uno de los elementos fundamentales es el diagnóstico rápido y eficiente. Actualmente se cuenta con distintas escalas que permiten evaluar la presencia de sintomatología de estrés traumático. Una de las más utilizadas es la Lista de Chequeo para TEPT (PSTD Checklist [PCL], Weathers, Litz, Herman, Huska y Keane, 1993) cuestionario de autoreporte de 17 ítems que se corresponde con los 17 síntomas de TEPT descritos en el DSM-IV. Con la aparición del DSM-V (American Psychiatric Association, 2011), se hace necesario contar con instrumentos actualizados que reflejen esta nueva comprensión del trastorno de estrés postraumático. El presente estudio tiene por objetivo adaptar al idioma español la versión específica de la Lista de

Chequeo para TEPT (PCL) reflejando los nuevos criterios del DSM-V. Se evaluó a 1194 adultos jóvenes, conformando una muestra final de 982 personas. La escala muestra un alfa de cronbach entre 0,90 y 0,94 dependiendo de la versión en estudio (DSM-IV o DSM-V), el análisis test-retest, con una muestra pareada de 311 sujetos, mostró un coeficiente Spearman Brown de 0,90 en ambas versiones. La validación para estas escalas se realizó mediante análisis factoriales exploratorios y confirmatorios. Los resultados obtenidos se discuten en base a los estudios previos de esta escala relacionados con la configuración de este trastorno.

(A fundamental aspect in the study of posttraumatic stress is quick, efficient diagnosis. Various scales are currently available to assess the presence of posttraumatic stress symptomatology. One of the most widely utilized is the PTSD Checklist (PCL; Weathers, Litz, Herman, Huska, & Keane, 1993), a self-report questionnaire with 17 items that correspond to the 17 symptoms of PTSD described in the DSM-IV. With the release of the DSM-V (American Psychiatric Association, 2011), it has become necessary to update the available instruments to reflect this new understanding of posttraumatic stress disorder. The present study's objective is to adapt into Spanish the version of the PTSD Checklist (PCL) that specifically reflects the new DSM-V criteria. 1194 young adults were evaluated and the final sample was made up of 982 people. The scale's Cronbach's alpha lies between 0.90 and 0.94, depending on the version in question (DSM-IV or DSM-V). Analysis of test-retest reliability in a paired sample of 311 participants yielded a Spearman-Brown coefficient of 0.90 for both versions of the DSM. The scales were validated through exploratory and confirmatory factor analyses. The results are discussed in connection with previous research findings on this scale and PTSD criteria.)

## **Symposium**

**Thursday, November 6**

**03:00 PM to 04:15 PM**

**Biscayne - BIOLOGY TRACK**

## **Advances in Neuroimaging of Traumatic Stress**

(Bio Med, Bio Med-Chronic-Refugee-Mil/Vets, Adult, M, N/A)

Bryant, Richard, PhD

*University of New South Wales, Sydney, NSW, Australia*

This symposium brings together four papers that reflect current work using neuroimaging paradigms to explore the mechanisms of traumatic stress. The first study reports an investigation of the neural effects of torture. Refugees who had been exposed to torture (N = 40) underwent fMRI during presentation of distressing stimuli; findings highlight the distinct activation of arousal-related networks associated with the effects of torture. The second study reports on abnormalities and structural connectivity in PTSD in OIF/IEF veterans (N = 85); PTSD showed changes in prefrontal-limbic network, which negatively affects integration with other brain networks. The third study compared complex PTSD and typical PTSD reactions during reappraisal of aversive information. Patients with each form of PTSD (N = 70) underwent fMRI during reappraisal of presented distressing information; findings indicated distinct patterns of neural response, providing basic support for the proposed distinction of Complex PTSD. In the fourth paper resting state fMRI recordings of PTSD patients indicated that hyperarousal and dissociation symptoms were associated with distinct neural profiles, consistent with the proposal of a dissociative subtype of PTSD. Overall, these studies indicate that PTSD responses vary markedly and these variations are reflected in distinct neural profiles.

## Symposium

Thursday, November 6

03:00 PM to 04:15 PM

Biscayne - BIOLOGY TRACK

### Mechanisms Underlying Threat Processing in Survivors of Torture: Preliminary fMRI Evidence

(Bio Med, Complex-Bio/Int-Refugee-Torture, Adult, M, Global)

**Liddell, Belinda, PhD<sup>1</sup>**; Felmingham, Kim, PhD<sup>2</sup>; Malhi, Gin, PhD<sup>3</sup>; Das, Pritha, PhD<sup>4</sup>; Bryant, Richard, PhD<sup>1</sup>

<sup>1</sup>*University of New South Wales, Sydney, NSW, Australia*

<sup>2</sup>*University of Tasmania, Hobart, TAS, Australia*

<sup>3</sup>*University of Sydney, St Leonards, NSW, Australia*

<sup>4</sup>*University of Sydney, Sydney, NSW, Australia*

Disrupted threat processing neural systems are now considered to be a central mechanism underlying traumatic stress symptoms. Accumulating evidence points to a pattern of hyperactivity in automatic threat detection systems (amygdala), coupled with reduced activity in medial prefrontal emotion regulatory systems. But it remains unclear how threat processing systems are affected in the long term amongst survivors with extensive histories of cumulative and prolonged exposure to human rights violations, like torture. Such patients frequently exhibit complex PTSD symptoms, characterized by emotion regulation difficulties. In this ongoing study, we will present data from refugee participants with a current diagnosis of PTSD both with and without a history of torture exposure. Participants underwent fMRI scanning during in a standard fear face (vs neutral) perception task. Torture survivors with PTSD showed greater dysregulation between amygdala and medial prefrontal regions compared with non-torture survivors with PTSD. Correlations with PTSD symptom and torture severity will also be presented. The findings suggest that exposure to excessive interpersonal trauma can have long term detrimental effects on emotion regulation networks in the brain. Implications for treatment strategies will be discussed.

## Symposium

Thursday, November 6

03:00 PM to 04:15 PM

Biscayne - BIOLOGY TRACK

### Intrinsic Network Connectivity in PTSD: Symptom Correlations

(Bio Med, Bio Med, Adult, M, Global)

Lanius, Ruth, MD, PhD<sup>1</sup>; Tursich, Mischa, PhD<sup>1</sup>; **Frewen, Paul, PhD<sup>1</sup>**; Ros, Tomas, PhD<sup>2</sup>

<sup>1</sup>*University of Western Ontario, London, Ontario, Canada*

<sup>2</sup>*University of Geneva, London, Ontario, Canada*

**BACKGROUND:** Three intrinsic connectivity networks in the human brain have been identified as crucial to the understanding of higher cognitive function: the central executive, salience (SN), and default mode (DMN) networks. The objective of this study was to pinpoint the intrinsic connectivity networks that significantly correlate with PTSD symptomatology. **METHODS:** Six minutes of fMRI resting state recordings were carried out in 21 PTSD patients. Independent component analysis was utilised to decompose the data into 20 spatiotemporally independent components. Multivariate regression analyses in the PTSD patients were used to pinpoint the ICNs that significantly correlate with trait symptom measures. **RESULTS:** Increased hyperarousal was associated with decoupling of the left ventral anterior insula and superior temporal gyrus within the SN. In contrast, increased severity of depersonalization/derealization symptoms was associated with decreased coupling of right perigenual anterior cingulate cortex and the ventromedial prefrontal cortex within the DMN. **CONCLUSIONS:** These findings provide

evidence for the involvement of distinct neural networks underlying symptoms of hyperarousal and depersonalization/derealization, the latter often associated with hypoarousal, and further inform the neurobiological correlates of the dissociative subtype of PTSD.

## **Symposium**

**Thursday, November 6**

**03:00 PM to 04:15 PM**

**Biscayne - BIOLOGY TRACK**

### **An fMRI Study of Reappraisal in PTSD and Complex PTSD**

(Bio Med, Bio Med-Chronic-Complex, Adult, M, N/A)

**Bryant, Richard, PhD**

*University of New South Wales, Sydney, NSW, Australia*

Complex PTSD is a term referring to complicated PTSD presentations, often after prolonged and particularly severe traumatic experiences, that are characterized by deficits in emotion regulation, sense of identity, and interpersonal relations. Much debate exists over its distinctiveness from more typical PTSD presentations. In this study we report an fMRI investigation of PTSD and Complex PTSD (N = 70) during reappraisal of emotional stimuli. Reappraisal was focused upon because it indexes the core feature of emotion regulation, purportedly a central defining feature of Complex PTSD. Participants were instructed to watch or reappraise (regulate emotional responses) in the scanner whilst they viewed distressing and neutral images. Analyses revealed that Complex PTSD was distinguished from PTSD in terms of BOLD response in neural circuits which are thought to be associated with emotion regulation. This study provides further neurobiological support to the case that Complex PTSD is distinct from other PTSD presentations, and validates emotion dysregulation as a key feature of this presentation.

## **Symposium**

**Thursday, November 6**

**03:00 PM to 04:15 PM**

**Biscayne - BIOLOGY TRACK**

### **Evidence for Disrupted Structural Connectivity and Loss of Small-World Topology in PTSD**

(Bio Med, Bio/Int, Adult, M, N/A)

**Marmar, Charles, MD**

*New York University School of Medicine, New York, New York, USA*

Objective: To use graph analysis to investigate relationships among volumetric abnormalities and structural connectivity in prefrontal limbic network and integration of this network in the rest of the brain. Methods: 85 male OIF/OEF veterans (45 PTSD neg, 40 PTSD pos) underwent 3T structural MRI. Subfield volumes were obtained using manual parcellation, cortical thickness and subcortical volumes obtained with FreeSurfer. Multiple linear regression was used to identify regions with volume loss in PTSD cases. Graph analysis was done with the Graph analytical Toolbox. Results: PTSD cases had a thinner rostral anterior cingulate ( $5.60 \pm 0.37$  vs.  $5.76 \pm 0.32$ ) and insular ( $6.10 \pm 0.32$  vs.  $6.2 \pm 0.24$ ) cortex but no hippocampal volume loss. PTSD was characterized by orbitofrontal and insular nodes with increased nodal degree, clustering coefficient and nodal betweenness in the restricted analysis and by decreased nodal degree (orbitofrontal, anterior cingulate) and clustering coefficients (thalamus) but increased nodal betweenness (insula, orbitofrontal) in the whole brain analysis and a reduced small world index ( $0.875$  vs.  $1.298$ ). Conclusion: PTSD associated changes in prefrontal-limbic network are consistent with increased

connectivity that negatively affected integration with the rest of the brain and resulting loss of the economical small world topology found in healthy brains.

## **Symposium**

**Thursday, November 6**

**03:00 PM to 04:15 PM**

**Brickell - MILITARY TRACK**

## **Treatments, Trials and Tribulations: Implementing Primary Care-Based Traumatic Stress Services in the Military**

(Prevent, Assess Dx-Clin Res-Clinical Practice-Mil/Vets, Adult, M, Industrialized)

Engel, Charles, MD<sup>1</sup>; Zatzick, Douglas, MD<sup>2</sup>

<sup>1</sup>*Uniformed Services, University of the Health Sciences, Bethesda, Maryland, USA*

<sup>2</sup>*University of Washington/Harborview Medical Center, Seattle, Washington, USA*

Well over 2 million US service members have deployed over the past 13 years, most to conflicts in Afghanistan and Iraq, arousing concerns for the mental health of personnel and their families. This symposium will review (1) data from one effort to implement an integrated military primary care approach to PTSD and depression, RESPECT-Mil; (2) the design and baseline and qualitative findings from a large controlled trial of a second generation primary care integration approach (the DoD-funded STEPS-UP Trial); and (3) data emerging from these efforts on suicidality and provider suicide assessments in military primary care.

## **Symposium**

**Thursday, November 6**

**03:00 PM to 04:15 PM**

**Brickell - MILITARY TRACK**

## **Suicide Risk and Correlates to PTSD, Depression, and Alcohol Misuse in Military Primary Care Populations**

(Clin Res, Assess Dx-Depr-Pub Health-Sub/Abuse, Adult, M, Industrialized)

Freed, Michael, PhD, EMT-B<sup>1</sup>; Engel, Charles, MD, MPh<sup>2</sup>; Belsher, Bradley, PhD<sup>3</sup>; Evatt, Daniel, PhD<sup>3</sup>; Wortmann, Jennifer, PhD<sup>4</sup>; Novak, Laura, BS<sup>3</sup>; Jaycox, Lisa, PhD<sup>2</sup>; Bray, Robert, PhD<sup>5</sup>

<sup>1</sup>*DCoE Deployment Health Clinical Center at Walter Reed NMMC / Uniformed Services University, Bethesda, Maryland, USA*

<sup>2</sup>*RAND Corporation, Arlington, Virginia, USA*

<sup>3</sup>*Deployment Health Clinical Center, Bethesda, Maryland, USA*

<sup>4</sup>*VA Boston Health Care System/Boston University, Boston, Massachusetts, USA*

<sup>5</sup>*RTI International, Research Triangle Park, North Carolina, USA*

Nearly 1% of visits in Army primary care clinics are positive for suicidality, with 25% being clinician-rated as either moderate or high risk (Engel, 2011, AFPHC Conference). Although the military continues to implement and refine system-wide behavioral health screening and intervention programs in primary care for PTSD, depression, and related problems (e.g., the Patient Centered Medical Home, PCMH-BH; formerly, RESPECT-Mil), little is known about the correlates to suicidality in this population. Moreover, service members significantly underreport mental health problems when screening is not anonymous, suggesting the aforementioned rates may be underestimates. In 1044 active duty service members eligible for RESPECT-Mil and who consented to participate in a 6-site DoD-

funded randomized trial testing enhancements to RESPECT-Mil (called STEPS UP), 11% endorsed suicidality (6% low risk; 5% moderate or high risk). Here, responses to non-anonymous suicide screening in primary care are compared with responses to screens completed in a more confidential research context. The relationship between suicide risk (as defined by the MINI-PLUS suicide risk module) and PTSD (PCL), depression (PHQ-9), alcohol misuse (AUDIT-C), and basic demographic variables is presented. Clinical and policy implications are discussed.

## **Symposium**

**Thursday, November 6**

**03:00 PM to 04:15 PM**

**Brickell - MILITARY TRACK**

### **Qualitative Study of Soldiers within Primary-Care Interventions to Improve PTSD and Depression**

(Clin Res, Depr-Mil/Vets, Adult, M, Industrialized)

**Jaycox, Lisa, PhD<sup>1</sup>**; Tanielian, Terri, MA<sup>1</sup>; Farmer, Carrie, PhD<sup>2</sup>; Woldetsadik, Mahlet, MPH<sup>3</sup>; Moen, Shaela, RN, MPH<sup>1</sup>

<sup>1</sup>*RAND Corporation, Arlington, Virginia, USA*

<sup>2</sup>*RAND Corporation, Pittsburgh, Pennsylvania, USA*

<sup>3</sup>*Pardee RAND Graduate School, Santa Monica, California, USA*

Within a large randomized controlled trial for enhancing treatment of PTSD and depression in military primary care clinics (the STEPS-UP project), we conducted a qualitative sub-study to understand patients' perspectives on the intervention and their experiences with the mental healthcare system. We present data from 36 randomly-selected patients interviewed 3 times each (across 6 months), representing the two different interventions under study and six different military installations. All patients who participated were screened into the study based on the presence of significant depression and/or PTSD symptoms, and followed in the interventions for up to a year post-screening. Interviews were coded in ATLAS-ti. In this presentation, we focus on barriers to mental health care and the intervention elements that were discussed as helping to overcome those barriers. We found barriers similar to those found in the civilian population (e.g., logistical barriers and wait-lists) as well as those that appear to be unique to the military (e.g., discouragement from the chain of command). Some elements of the intervention in STEPS-UP had low uptake, whereas other elements were more popular, and patients' explanations for these choices will be presented. Implications for other primary care interventions to improve mental health care will be discussed.

## **Symposium**

**Thursday, November 6**

**03:00 PM to 04:15 PM**

**Brickell - MILITARY TRACK**

### **RESPECT-Mil: Implementation of a Systems-Level Approach to Mental Health in Military Primary Care Settings**

(Prevent, Anx-Clinical Practice-Depr-Mil/Vets, Adult, M, Global)

**Curry, Justin, PhD**

*US Army, Bethesda, Maryland, USA*

In 2007, the US Army began implementing the Re-engineering Systems for the Primary Care Treatment of Depression and PTSD in the Military (RESPECT-Mil) program to enhance early identification and treatment engagement of Active Duty Service Members with mental health concerns. Based on the work of the MacArthur Foundation's RESPECT-Depression initiative (Oxman, T. E., et. al., 2002; Dietrich, A. J., et. al., 2004), the



RESPECT-Mil program employs two-stage mental health screening in primary care settings and provides primary care providers with trained Nurse Care Facilitators who serve as clinical extenders to monitor patient progress and to promote behavioral activation interventions. This presentation reviews the scaling of this program from its earliest implementation at a single primary care clinic to its current scope of over 90 clinics at more than 30 military installations around the world. Specific attention will be paid to monitoring efforts that the program established to ensure fidelity to the implementation model as the program expanded. Program outcomes related to implementation fidelity, program drift, and patient improvement will be discussed. The presentation will close with a discussion of program limitations and areas for improvement that have been taken up by more recent programmatic initiatives within the Military Health System.

## **Symposium**

**Thursday, November 6**

**03:00 PM to 04:15 PM**

**Brickell - MILITARY TRACK**

### **Collaborative Primary Care for Depression and PTSD in the U.S. Military Health System: Design and Early Findings from a Multisite Randomized Effectiveness Trial**

(Clin Res, Clin Res-Depr-Res Meth-Mil/Vets, Adult, M, Global)

**Engel, Charles, MD, MPH<sup>1</sup>**; Bray, Robert, PhD<sup>2</sup>; Jaycox, Lisa, PhD<sup>1</sup>; Freed, Michael, PhD, EMT-B<sup>3</sup>; Novak, Laura, BS<sup>4</sup>; Tanielian, Terri, MA<sup>1</sup>; Zatzick, Douglas, MD<sup>5</sup>; Katon, Wayne, MD<sup>6</sup>

<sup>1</sup>*RAND Corporation, Arlington, Virginia, USA*

<sup>2</sup>*RTI International, Research Triangle Park, North Carolina, USA*

<sup>3</sup>*DCoE Deployment Health Clinical Center at Walter Reed NMMC / Uniformed Services University, Bethesda, Maryland, USA*

<sup>4</sup>*Deployment Health Clinical Center, Bethesda, Maryland, USA*

<sup>5</sup>*University of Washington/Harborview Medical Center, Seattle, Washington, USA*

<sup>6</sup>*University of Washington, Seattle, Washington, USA*

High rates of PTSD and depression are related to the US military conflicts in Iraq and Afghanistan. Often, those affected have not seek care due to barriers and stigma. Evidence shows well specific primary care enhancements can improve clinical outcomes for anxiety and depression. We describe the design and early findings from a 6 base (18 clinic) randomized effectiveness trial (STEPS-UP) comparing collaborative care models for PTSD and depression in US Army primary care clinics. 666 soldiers were assigned to one of two arms and followed for 12 months. The control arm received collaborative care as widely disseminated in US Army clinics since 2007 (RESPECT-Mil). The STEPS-UP arm got collaborative care using a central implementation process. STEPS-UP included central oversight of care managers, added decision support automation, central care managers for transitions and assisted web and primary care phone therapy. Study design, enrollment, baseline characteristics and follow-up will be described. STEPS-UP will be the first large randomized effectiveness trial completed in the US Military Health System. With one year follow-up, high response rates (95%, 90% and 84% at 3-, 6-, and 12-months), and accompanying qualitative and cost analyses, STEPS-UP is a model for future scientific assessments of system change on clinical outcomes in military and veteran service systems.

**Symposium**  
**Thursday, November 6**  
**03:00 PM to 04:15 PM**  
**Flagler**

## **Interventions for Bereaved after Terror**

(Clin Res, Clin Res-Health-Prevent-Surv/Hist, Lifespan, M, Global)

Dyregrov, Kari, PhD; Dyregrov, Atle, PhD  
*Center for Crisis Psychology, Bergen, Norway*

The symposium will focus on different ways of helping bereaved after a potentially traumatizing death. The context for the presentations is the terror event that happened at Utøya in Norway July 22<sup>nd</sup> 2011 when 69 mostly very young persons were killed in a terror attack. Although it is common to consider the immediate biological family members as bereaved, the symposium will also include close friends when discussing interventions for bereaved after terror. Utilizing a family perspective, the importance of strengthening the care capacity of parents is emphasized in our focus on interventions for the bereaved parents and siblings who lost an adolescent in the terror killings. The symposium starts with a presentation of various intervention approaches for young bereaved emphasizing interventions that go beyond individual care. Thereafter the pro-active model for psychosocial follow-up initiated by the Norwegian Government as evaluated by the bereaved is presented, before the impact of going back to the site of the terror as a family intervention is described. Based on data from close friends of the deceased at Utøya, the last presentation will show why this group also should be included in follow-up programs.

**Symposium**  
**Thursday, November 6**  
**03:00 PM to 04:15 PM**  
**Flagler**

## **The Success of the Government's Pro-Active Follow-Up of Bereaved after the Terror-Killings in Norway 22.07.2011 – from a User Perspective**

(Commun, Prevent, Lifespan, M, Industrialized)

Dyregrov, Kari, PhD; Dyregrov, Atle, PhD; Kristensen, Pål, PhD; Johnsen, Iren, PhD Candidate  
*Center for Crisis Psychology, Bergen, Norway*

After the terror attack of July 20<sup>th</sup> 2011 at Utøya 69, mostly young people between 14-18 years were killed, leaving more than 200 siblings and parents behind. In line with the guidelines for the Norwegian Welfare State and knowledge of the potential for developing both PTSD and traumatic grief after such atrocities, the Norwegian Government initiated a pro-active psycho-social follow-up for the bereaved families. The implementation of the model implied that the service system initiated contact with the victims, that a permanent contact offered personal meeting, continuity of contact through a follow-up period of at least one year, and that there should be frequent contact during the initial period, and thereafter adapted to individual needs. Also, it was recommended that the contact person should have proper education and training and it was focused on stabilization, practical assistance and concrete support. An in-depth interview study, with 38 parents and siblings, document how the model worked as seen from the perspective of the close bereaved. This presentation will elaborate on the content and success of the pro-active model, as experienced by the bereaved parents and siblings.

**Symposium**  
**Thursday, November 6**  
**03:00 PM to 04:15 PM**  
**Flagler**

**Helping Young Bereaved Following A Terror Event – Reaching Various Groups**  
(Prevent, Comm/Int-Death-Terror, Child/Adol, M, Industrialized)

**Dyregrov, Atle, PhD;** Dyregrov, Kari, PhD; Johnsen, Iren, PhD Candidate; Kristensen, Pål, PhD  
*Center for Crisis Psychology, Bergen, Norway*

Bereavement after major terror events does not only affect close family members, but friends, schoolmates and fellow students. Traditionally grief is expected in close family members, while friends often are overlooked. However, friends may have comparable reactions to family members (cf. presentation in this symposium). New technology and social media leads to rapid spread of information often resulting in intense reactions in affected groups of friends and classmates. This ripple effect often challenges our existing follow-up systems that often restrict their helping efforts to close family members. How can we provide young members of the society with good immediate and long-term follow up in such situations? What role can parents play in helping their children? The “users” of the helping systems are often clear about the help they want; immediate and outreach help, help over time etc. They demand flexible systems that can help them cope. In this presentation, various intervention approaches for young bereaved are described with emphasis on interventions that go beyond individual care. While not considered treatment, the interventions may have therapeutic functions.

**Symposium**  
**Thursday, November 6**  
**03:00 PM to 04:15 PM**  
**Flagler**

**Returning to the Scene of the Catastrophe. Bereaved Family Members’ Experiences after the 22.07 Terror Attack on Utøya Island, Norway**  
(Clin Res, Death-Prevent-Terror-Grief, Lifespan, M, Industrialized)

**Kristensen, Pål, PhD;** Dyregrov, Kari, PhD; Johnsen, Iren, PhD Candidate; Dyregrov, Atle, PhD  
*Center for Crisis Psychology, Bergen, Norway*

In the aftermath of large-scale accidents and disasters with multiple deaths a certain practice has been developed in Norway during the last three decades where close family members are collectively brought to the site where death occurred. In this presentation I will report on findings from a longitudinal study after the 22.07.11 terror attack on Utøya Island in Norway where one terrorist killed 69 adolescents and young adults. Data from bereaved parents and siblings (N=115) on the potential benefit of visiting the site of death were collected by in-depth interviews and self-report measures approximately two years after the terror attack. Results showed that almost all the participants had visited the island in the aftermath of the attack, and the majority reported that the visit had been beneficial for processing their loss. Among the reported benefits were getting a more comprehensible and coherent picture of the circumstances of the death, and experiencing a connection or bond to the deceased. Around 1/3 reported that the visit had been burdensome, particularly the exacerbation of grief and trauma symptoms during or after the visit. Theoretical and practical implications will be discussed.

**Symposium**  
**Thursday, November 6**  
**03:00 PM to 04:15 PM**  
**Flagler**

**“Only a Friend” – Young Adults Needs to be Seen when Losing a Close Friend in Terror**

(Prevent, Complex-Death-Terror-Grief, Lifespan, M, Industrialized)

**Johnsen, Iren, PhD Candidate;** Kristensen, Pål, PhD; Dyregrov, Atle, PhD; Dyregrov, Kari, PhD  
*Center for Crisis Psychology, Bergen, Norway*

Bereaved friends are an understudied group in the field of grief and bereavement, and we need to know more about how young people are affected by losing a best friend. The terror attack at Utøya provides us with a unique sample of young adults that all lost a close friend to a traumatic death. Our sample that consists of 77 informants between the age of 15-46 years (71 % under the age of 20), that was measured on i.e. trauma reactions, grief reactions, mental health and general distress, functioning, and experiences at school and work. Results show that the bereaved friends have levels of grief and trauma reactions that are comparable to the reactions of immediate family, implying that this group needs growing attention and concern. Genetic bonds do not necessarily determine the affect a loss have on a person, and the intensity of the grief reactions could as well be predicted by the emotional relation one had to the deceased. The friends' reactions are also affecting their everyday life, showing in i.e. lower grades and absence from school. This presentation will elaborate on how the friend's grief and trauma reactions have affected their school/work functioning.

## **Symposium**

**Thursday, November 6**

**03:00 PM to 04:15 PM**

**Bayfront B - CHILD TRACK TWO**

## **Type of Trauma Exposure Matters: Broadening and Building on ACEs**

(Clin Res, CPA-CSA-Clinical Practice-Complex, Child/Adol, M, Industrialized)

Briggs, Ernestine, PhD

*National Center for Child Traumatic Stress, Durham, North Carolina, USA*

Expanding our understanding of trauma beyond a dose-response relationship is crucial to accurate diagnosis treatment selection, and development of national policies. Data from the National Child Traumatic Stress Network's Core Data Set were used to examine the relationship between trauma exposure, developmental progression, risk behaviors, and impairments in children and adolescents. This session will examine these patterns by broadening and building on the Adverse Childhood Experiences (ACEs) framework to explore differential outcomes. While a significant dose-response relationship exists between the number of trauma exposures and the risk for emotional, behavioral, and functional impairments (Briggs-King), the patterns of impairment varied with different trauma profiles (Hodgdon, Woods-Jaeger, Sprang). Within the context of relational trauma, psychological maltreatment had an earlier age of onset, longer duration, and a potentiating effect on a variety of emotional and behavioral outcomes. Similarly, trauma-exposed adolescents with caregivers who were impaired by substance use and mental illness had higher rates of emotional and behavioral problems. Finally those who were commercially-sexually exploited had higher rates of PTSD and risk behaviors. We will conclude our session with a rich discussion (Fairbank) of the clinical and policy implications of these findings.

## **Symposium**

**Thursday, November 6**

**03:00 PM to 04:15 PM**

**Bayfront B - CHILD TRACK TWO**

## **The Relationship between Parental Functioning and Negative Outcomes for Trauma-Exposed Youth**

(Clin Res, Assess Dx-Chronic-Complex-Fam/Int, Child/Adol, M, Industrialized)

**Woods-Jaeger, Briana, PhD<sup>1</sup>**; Briggs, Ernestine, PhD<sup>2</sup>; Vivrette, Rebecca, PhD<sup>3</sup>; Lee, Robert, MA<sup>4</sup>; Suarez, Liza, PhD<sup>5</sup>; Belcher, Harolyn, MD<sup>6</sup>

<sup>1</sup>*Children's Mercy, Kansas City, Missouri, USA*

<sup>2</sup>*National Center for Child Traumatic Stress, Durham, North Carolina, USA*

<sup>3</sup>*University of Maryland School of Medicine, Baltimore, Maryland, USA*

<sup>4</sup>*Duke University Medical Center, Durham, North Carolina, USA*

<sup>5</sup>*University of Illinois Chicago, Chicago, Illinois, USA*

<sup>6</sup>*Kennedy Krieger Institute Family Center, Baltimore, Maryland, USA*

Adolescents with trauma histories are at risk for numerous negative outcomes including mental health disorders, substance use, suicidal ideation, and self-injury and those with impaired caregivers may be at increased risk for trauma related sequelae. This study compared trauma-exposed adolescents with impaired caregivers due to substance use, mental illness, or both to those without to determine if impaired caregiver status is associated with mental and behavioral health problems. The study sample included 3,316 adolescents (12-18 years), who received

services from the National Child Traumatic Stress Network. Clinician ratings of symptoms, impairments, and disorders were used in conjunction with standardized assessment measures (CBCL, UCLA PTSD Reaction Index) to examine an array of emotional and behavioral outcomes. Results indicate that adolescents who had a caregiver with both substance use and mental illness, compared to the other three groups, reported the highest rates of mental and behavioral health problems including: suicidality (35.3%), self-injury (25.9%), PTSD (79.1%), Depression (82.8%), and clinically significant Internalizing (63.6%) and Externalizing (61.5%) behavioral problems. Further, these adolescents were significantly more likely to have CBCL total scores in the clinical range (OR = 1.52). The clinical implications of these findings will be discussed.

## **Symposium**

**Thursday, November 6**

**03:00 PM to 04:15 PM**

**Bayfront B - CHILD TRACK TWO**

### **Examination of Trauma Profiles among Youth in the NCTSN Core Data Set**

(Clin Res, CPA-Chronic-Complex, Child/Adol, M, Industrialized)

**Hodgdon, Hilary, PhD<sup>1</sup>**; Spinazzola, Joseph, PhD<sup>1</sup>; Liang, Li-Jung, PhD<sup>2</sup>; Layne, Christopher, PhD<sup>3</sup>; Gewirtz, Abigail, PhD LP<sup>4</sup>; Briggs, Ernestine, PhD<sup>5</sup>

<sup>1</sup>*Trauma Center at Justice Resource Institute, Brookline, Massachusetts, USA*

<sup>2</sup>*National Center for Child Traumatic Stress, Los Angeles, California, USA*

<sup>3</sup>*UCLA - National Center for Child Traumatic Stress, Los Angeles, California, USA*

<sup>4</sup>*University of Minnesota-Twin Cities Campus, St Paul, Minnesota, USA*

<sup>5</sup>*Duke University Medical Center/National Center for Child Traumatic Stress, Durham, North Carolina, USA*

Although psychological maltreatment (PM) is understudied relative to other forms of trauma, it has been identified as a “core component” of harm and is associated with an equivalent degree of risk for psychiatric symptomatology as physical and sexual abuse. PM may convey risk for negative outcomes due to unique trauma profiles, such as an earlier age of onset and more chronic course. This study examined trauma profiles of 5,058 youth ages 6-18 years who received services through the NCTSN. This study developed youth trauma profiles using age of onset, chronicity, number and type of co-occurring traumas, perpetrator, and standardized assessment measures. Youth were categorized into six mutually exclusive groups, defined as; PM only, physical abuse (PA) only, sexual abuse (SA) only, PA and SA (PA+SA), SA and PM (SA+PM), and PA and PM (PA+PM). Results indicate that PM and PA+PM exposed groups displayed an earlier age of onset (4.68 and 3.77 years respectively), longer duration (PM only 4.75, PA+PM 4.25, 5.75), and exposure to a greater number of types of trauma (PM only 3.2, PA+PM 3.5) than youth in the other three groups. Associated clinical outcomes and implications for development and implementation of trauma interventions will be discussed.

## **Symposium**

**Thursday, November 6**

**03:00 PM to 04:15 PM**

**Bayfront B - CHILD TRACK TWO**

### **The Trauma of Commercial Sexual Exploitation of Children (CSEC): A Comparison of CSEC Victims to Child Sexual Abuse Victims in a Clinical Sample**

(Practice, CSA, Child/Adol, M, N/A)

**Sprang, Ginny, PhD<sup>1</sup>**; Cole, Jennifer, PhD MSW<sup>1</sup>; Lee, Robert, MS/MA<sup>2</sup>; Cohen, Judith, MD<sup>3</sup>

<sup>1</sup>*University of Kentucky, Lexington, Kentucky, USA*

<sup>2</sup>*Duke University Medical Center/National Center for Child Traumatic Stress, Durham, North Carolina, USA*

<sup>3</sup>*Allegheny General Hospital, Pittsburgh, Pennsylvania, USA*



The commercial sexual exploitation (CSE) of children is not a new social problem, but awareness of the issue has grown over the past decade. Accurate identification and intervention by clinical providers requires a greater understanding of trauma history profiles, problem behaviors and symptoms. Propensity score matching was used to draw a comparison sample based on age, race, ethnicity, and primary residence from the National Child Traumatic Stress Network's Core Data Set (CDS) and included 215 help-seeking youth (M=14.9 years, SD =2.2) who were either exploited in prostitution (n=43) or sexually abused/assaulted but not exploited in prostitution (n =172). Statistically significant differences were noted on the Child Behavior Checklist and UCLA-PTSD Reaction Index. Prostitution- exploited adolescents had three times greater odds of being clinically significant on PTSD avoidance symptoms. Additionally, this group as compared to the matched group of sexually abused and assaulted youth, was more likely to display the following risk behaviors and impairments: running away from home, skipping school, alcohol use, and substance abuse. This study provides useful insight into the trauma history and symptom profiles of commercially sexually-exploited adolescents and highlights important clinical, policy, and research challenges and opportunities.

## **Symposium**

**Thursday, November 6**

**03:00 PM to 04:15 PM**

**Bayfront B - CHILD TRACK TWO**

## **Traumatic Childhood Experiences: Broadening and Building on the ACEs Framework**

(Practice, Assess Dx-Chronic-Complex-Prevent, Child/Adol, M, Industrialized)

**Briggs, Ernestine, PhD<sup>1</sup>**; Layne, Christopher, PhD<sup>2</sup>; Fairbank, John, PhD<sup>3</sup>; Greeson, Johanna, PhD<sup>4</sup>

<sup>1</sup>*Duke University Medical Center/National Center for Child Traumatic Stress, Durham, North Carolina, USA*

<sup>2</sup>*UCLA - National Center for Child Traumatic Stress, Los Angeles, California, USA*

<sup>3</sup>*Duke University School of Medicine, Durham, North Carolina, USA*

<sup>4</sup>*University of Pennsylvania, Philadelphia, Pennsylvania, USA*

The study objectives were to (a) examine the association between number of trauma types experienced and youth behavioral problems and (b) determine whether the number of trauma types experienced predicted youth behavioral problems above demographic characteristics. Data were from the National Child Traumatic Stress Network's (NCTSN) Core Data Set, which includes ethnically diverse youth assessed and treated for trauma across the United States. Participants with at least one trauma type were included in the sample (N = 11,028; age = 1½-18 years; 52% girls). Random effects models were used to account for possible intraclass correlations given services were provided across the NCTSN. Logistic regression analyses were used to examine associations among demographic characteristics, trauma exposure, and emotional and behavioral problems as measured by the Child Behavior Checklist (CBCL). Significant dose-response relations were found between total number of trauma types and behavior problems for nearly all CBCL scales. Thus, each additional trauma type endorsed significantly increased the odds for scoring above the clinical threshold. Results provide evidence of the robust associations between diverse traumatic experiences and a range of behavior problems, and underscore the need for a trauma-informed public health approach to prevention and early intervention for traumatized youth.

**Symposium**  
**Thursday, November 6**  
**03:00 PM to 04:15 PM**  
**Trade**

## **Psychological Health of Survivors of Natural Disasters**

(Train/Ed/Dis, Comm/Int-Health-Nat/Dis-Pub Health, Lifespan, M, Global)

Gudmundsdottir, Berglind, PhD<sup>1</sup>; Elklit, Ask, MSc<sup>2</sup>

<sup>1</sup>*Landspítali - the National University Hospital of Iceland, Reykjavik, Iceland*

<sup>2</sup>*University of Southern Denmark, Odense, Denmark*

In the past years, disaster research has increasingly focused on the importance of assessing the long-term effects of trauma on survivor's health. In accordance with this, the World Health Organization disaster guidelines emphasize the importance of follow-up, especially on how survivors experience the service offered post-disaster and community response. Studies assessing long-term effects of disasters are rare and results are inconclusive. Previous literature has shown that disasters can have a negative impact on victims' mental health with post-traumatic stress disorder (PTSD) being one of the most common mental health problems following disasters, which may become persistent and cause significant impairment in daily functioning if left untreated. Iceland has a long history of natural disasters. In the time period 1900-2012, seventy disasters have been documented; which together took the lives of more than 90 individuals. Due to the frequency of natural disasters and unique population registries allowing identification and complete population-based follow-ups, Iceland has a unique opportunity to contribute to knowledge in this area. In the symposium, the researchers will present results from Icelandic studies on the health effects of experiencing snow avalanches, volcano eruption and earthquake, along with a study on Swedish survivors of the Tsunami in South-East Asia.

**Symposium**  
**Thursday, November 6**  
**03:00 PM to 04:15 PM**  
**Trade**

## **Development of Psychological Morbidity Following an Exposure to an Earthquake**

(Res Meth, Health-Nat/Dis-Pub Health, Adult, M, N/A)

Gudmundsdottir, Berglind, PhD<sup>1</sup>; Hauksdóttir, Arna, PhD<sup>2</sup>; Thordardottir, Edda, PhD Candidate<sup>2</sup>

<sup>1</sup>*Landspítali - the National University Hospital of Iceland, Reykjavik, Iceland*

<sup>2</sup>*University of Iceland, Reykjavik, Iceland*

In spring 2008, an earthquake (6.3 on a Richter scale) struck in South Iceland. Approximately 15.000 inhabitants lived in the hardest hit area near the epicenter of the earthquake. We aimed to investigate the mental health trajectory of exposed individuals two to twelve months following the earthquake. In a prospective setting, 1516 individuals were randomly selected from the exposed population. On four different time points (two, four, eight and twelve months following the earthquake), participants answered a questionnaire including questions on demographic factors, psychological health (PTSD, depression and anxiety) and perceived social support. Preliminary analyses indicate that risk of experiencing anxiety was highest two months after the earthquake (OR 1.70 (1.02-2.84)) and then decreased over time, resulting in lowest risk twelve months later. Those who experienced highest risk of anxiety were women, younger age groups, those who had finished primary or secondary levels of education, had good financial status and received high social support. Data for other outcomes are currently being analyzed. Data on mental health sequel following exposure to earthquake are scarce, especially on predictors for adverse

development of symptoms. Findings provide directives for identifying vulnerable subgroups that should be targeted for intervention.

## **Symposium**

**Thursday, November 6**

**03:00 PM to 04:15 PM**

**Trade**

### **Post-Traumatic Stress Symptoms in Children and Adolescents 16 Years after Catastrophic Avalanches in Iceland**

(Res Meth, Health-Nat/Dis-Pub Health, Child/Adol, M, Industrialized)

**Thordardottir, Edda, PhD Candidate<sup>1</sup>**; Gudmundsdottir, Berglind, PhD<sup>2</sup>; Valdimarsdottir, Unnur, PhD<sup>1</sup>; Hansdottir, Ingunn, PhD<sup>3</sup>; Resnick, Heidi, PhD<sup>4</sup>; Shipherd, Jillian, PhD<sup>5</sup>

<sup>1</sup>*University of Iceland, Reykjavik, Iceland*

<sup>2</sup>*Landspítali - the National University Hospital of Iceland, Reykjavik, Iceland*

<sup>3</sup>*Hadassah Hospital, Jerusalem, Reykjavik, Iceland*

<sup>4</sup>*Medical University of South Carolina, Charleston, South Carolina, USA*

<sup>5</sup>*National Center for PTSD, Boston VA Medical Center and Boston University School of Medicine, Boston, Massachusetts, USA*

Research on the long-term effects of natural disasters on children's and adolescent's health is scarce. In 1995 two villages in Iceland were struck by avalanches, taking the lives of many inhabitants and causing considerable damage. This study assesses, 16 years post-disaster, post-traumatic stress symptoms (PTSD) in survivors 2-19 years old at the time of the avalanches (n= 108). Questionnaires were used to assess outcomes. PTSD symptoms were assessed with the Post-traumatic Diagnostic Scale (PDS). Data were collected in 2011. Response rate was 66%. Multiple logistic regression was used to test if specific caregiver reactions to trauma significantly ( $p=.05$ ) predict children's or adolescent's PTSD symptoms 16 years later. Overall, fifteen percent (15/102) of survivors experience avalanche-specific PTSD symptoms (PDS score > 14) 16 years post-trauma. When adjusted for age, caregiver responses of being emotionally numb ( $F=(2, 87) = 6.245, p < 0.01, R^2 = 0.126$ ) or showing intense fear or shock ( $F=(2, 85) = 3.853, p < 0.05, R^2 = 0.083$ ) significantly predicted avalanche-specific PTSD symptoms. Having caregivers who cried or showed feelings of anger or helplessness did not predict PTSD symptoms in survivors. This study indicates that natural disasters can have a long-lasting effect on children and adolescents and that parent's reactions may predict later symptomatology.

## **Symposium**

**Thursday, November 6**

**03:00 PM to 04:15 PM**

**Trade**

### **Early Disaster Evacuation and Long-Term Post-Traumatic Stress**

(Prevent, Nat/Dis-Pub Health, Adult, M, Global)

**Gudmundsdottir, Ragnhildur, MSc<sup>1</sup>**; Hultman, Christina, PhD<sup>2</sup>; Valdimarsdottir, Unnur, PhD<sup>3</sup>

<sup>1</sup>*Center of Public Health Sciences, University of Iceland, Reykjavik, Iceland*

<sup>2</sup>*Karolinska Institutet, Stockholm, Sweden*

<sup>3</sup>*University of Iceland, Reykjavik, Iceland*

Disasters leave survivors at risk for morbidity; it is unknown whether timing of evacuation modifies this risk. The aim was to investigate contentment with evacuation time and whether duration at disaster site following the 2004

Asian tsunami was associated with long-term morbidity. In this population-based follow-up of 10,116 Swedish tsunami survivors who returned to Sweden in the first three weeks post tsunami, 4,932 (49%) answered a questionnaire 14 months later. More than half of survivors (53%) were content with evacuation time while 33% wanted later evacuation and 13% earlier evacuation. Compared with those evacuated 14-21 days post tsunami, individuals evacuated at day 1-4 presented with increased risk of post-traumatic stress symptoms (adjusted odds ratio (aOR) 2.0, 95% confidence interval (CI) [1.3, 3.0]), and impaired mental health (aOR = 1.4, 95% CI [1.0, 2.0]). In total, 2,134 survivors had children with them on the trip whom they still lived with or were in close contact with 14 months post-disaster, and 1,506 survivors were responsible for supervision of children when the tsunami hit. With possible implications for future rescue work, our findings indicate that early evacuation from natural disaster sites may be associated with long-term post-traumatic stress symptoms in survivors.

## **Symposium**

**Thursday, November 6**

**03:00 PM to 04:15 PM**

**Trade**

### **The Health Consequences of Exposure to a Volcanic Eruption - a Population-Based Study**

(Res Meth, Anx-Health-Nat/Dis-Pub Health, Lifespan, M, N/A)

Hauksdóttir, Arna, PhD; Valdimarsdóttir, Unnur, PhD; Pétursdóttir, Gudrun, PhD, **Thordardóttir, Edda, PhD**  
**Candidate**

*University of Iceland, Reykjavík, Iceland*

The Eyjafjallajökull eruption in Iceland in spring 2010 posed an unusual opportunity to study psychological health following a volcanic eruption. Iceland presents a modern and affluent society, with a strong infrastructure. Particularly important in the present context was to utilize the national registration number which is unique for every inhabitant in Iceland. In fall 2010, all inhabitants 18-80 years old (N=1500), living in an area close to the eruption answered a questionnaire, including questions on demographics, physical and psychological health and levels of experience of exposure to the eruption. In addition, a control group of 700 people, living in northern part of Iceland, matched for age, was included for comparison. These group were contacted again in fall 2013. Results from 2010 indicated increased risk of several physical and psychological outcomes, especially for those living close to the volcano, both for adults and children. Results from 2013 are currently being analysed and will focus on the development of these outcomes three years post the eruption. The findings will hopefully give knowledge on psychological health for this group and provide base for future guidelines on how to reduce potential morbidity following such a natural disaster.

**Panel Presentation**  
**Thursday, November 6**  
**03:00 PM to 04:15 PM**  
**Gusman/Tuttle**

**In the Wake of Tragedy: Increasing Local Capacities to Meet Phase-Based Needs of a Community Impacted by a Mass-Casualty Event**

(Practice, Clinical Practice-Prevent-Terror, Lifespan, M, N/A)

**Epstein, Carrie, LCSW<sup>1</sup>; Marans, Steven, PhD<sup>1</sup>; Southwick, Steven, MD<sup>2</sup>; Goslin, Megan, PhD<sup>1</sup>**

<sup>1</sup>*Yale University School of Medicine Child Study Center, New Haven, Connecticut, USA*

<sup>2</sup>*National Center for PTSD Clinical Neurosciences Division/Yale University Dept. of Psychiatry, West Haven, Connecticut, USA*

The Sandy Hook tragedy impacted large numbers of children, parents, teachers, and members of the community of Newtown, Connecticut. The traumatic effects of any disaster, terrorist attack, or other mass casualty event can be complex and potentially long-lasting. While creating challenges to disaster response, the clinical phenomena of trauma can also act as a guide to inform the development of effective strategies for response in the acute, peri-traumatic and longer-term phases of trauma that follow a mass casualty event. Examined in the context of Yale University's trauma response and recovery efforts after the shooting in Newtown, this presentation will highlight efforts to capitalize on our knowledge of the phenomena of trauma to inform response and intervention strategies. The presentation will illustrate how these principles guided our efforts in the following areas: 1) building trauma-informed capacities of local mental health and medical providers to screen, identify and assess impacted children, families and adults in each of the three phases of traumatic reactions; 2) providing workshops for parents and teachers to establish a frame of reference for enhancing their support of children's recovery; 3) creating a trauma-informed classroom; and, 4) providing training for local providers in evidence-based trauma-focused mental health treatments.

**Workshop Presentation**

**Thursday, November 6**  
**03:00 PM to 04:15 PM**

**Merrick**

**Healing Families through Shared Meaning of Trauma: Applying Narrative Practice Principles in Family Trauma Work**

(Prevent, Fam/Int-Neglect-Prevent, Lifespan, A, Industrialized)

**Collins, Kathryn, PhD MSW<sup>1</sup>; Clarkson Freeman, Pamela, PhD MSW<sup>1</sup>; Strieder, Frederick, PhD, MSSW<sup>1</sup>; Beegle, Christopher, MSW, LCSW<sup>2</sup>**

<sup>1</sup>*University of Maryland School of Social Work, Baltimore, Maryland, USA*

<sup>2</sup>*University of Maryland, Baltimore, Maryland, USA*

This presentation provides video demonstrations and outcome data supporting the use of narrative family work within family informed trauma treatment. Participants of the session will learn how to apply narrative strategies via active role plays and case discussions. A Family Shared Meaning of Trauma is a family-based clinical strategy of Trauma Adapted Family Connections (TA-FC). TA-FC, an evidence supported prevention intervention, is grounded in public health and social work perspectives and builds on ten years of community based family intervention research that has evolved in assisting families exposed to traumatic experiences. A Family Shared Meaning applies Narrative Therapy and uses stories in the development and expression of interpersonal and intrapersonal problems. Data supports findings that caregiver's trauma symptomatology may cloud caregiver perceptions of child trauma symptomatology and family dysregulation. Narrative questioning uncovers meanings, emotions, and cognitive

processes rather than just providing information. The family is able to identify and process the elements of their current or historical trauma saturated stories. Through this process, we will show through video demonstrations how families begin to externalize counterproductive or harmful attributions about their traumatic situation.

## **Oral Paper Presentation**

**Thursday, November 6**

**03:00 PM to 04:15 PM**

**Sevilla - LONG-TERM EFFECTS OF CHILD TRAUMA TRACK**

## **Long-Term Effects of Childhood Trauma (1)**

### **Childhood Trauma as a Predictor of Risk for Child Abuse Perpetrated by Mothers**

(Social, CPA-DV-Fam/Int-QoL, Adult, M, C & E Europe & Indep)

**Ajdukovi , Marina, PhD;** Sušac, Nika, PhD Candidate; Rajhvajn Bulat, Linda, PhD

*University of Zagreb; Department of Social Work, Zagreb, Croatia*

The aim of study was to assess the contribution of mothers' traumatic childhood experiences with family violence, stress-related current life events, relationship with the partner, current stress and quality of support to the risk of violence toward children. The sample included 486 mothers of 13-year-old children of both genders. The instruments used for examining the predictors were designed for the purpose of this study, while the Child Abuse Potential Inventory (Milner, 1986) was used to measure risk of violence toward children. A hierarchical regression analysis showed that all blocks of predictors contributed significantly and explained 49% of variance of child abuse potential. In the final step of the analysis, the quality of partner relationships proved to be the most important predictor, but other current life events, support and financial situation, as well as childhood exposure to violence, were also predictive of the risk for current child abuse. On the other hand, socio-demographic variables such as mother's age or the child's gender were not predictive of the criterion. Contribution of specific predictors to better understanding of the child abuse potential and the implications of these findings will be discussed in the presentation.

## **Oral Paper Presentation**

**Thursday, November 6**

**03:00 PM to 04:15 PM**

**Sevilla - LONG-TERM EFFECTS OF CHILD TRAUMA TRACK**

### **The Effect of Childhood Trauma on Depressive and Anxiety Disorders: Do Personality and Psychosocial Characteristics Matter?**

(Clin Res, Anx-Clinical Practice-Depr-Neglect, Adult, M, Industrialized)

**Hovens, Jacqueline, MD**

*Leiden University, Leiden, Zuid Holland, Netherlands*

This study investigates the effect of personality and psychosocial factors on the unfavorable course of childhood trauma on psychopathology in adults. Methods: Longitudinal data were collected from 1,474 participants in the Netherlands Study of Depression and Anxiety, with a baseline diagnosis of depressive or anxiety disorder, based on the CIDI. Childhood trauma was assessed retrospectively to identify emotional neglect, psychological, physical and sexual abuse prior to age 16. Personality questionnaires, recent life events and psychosocial characteristics were administered. Time to remission within a 4-year period was the primary outcome variable. Cox regression models



were used to calculate hazard ratios comparing participants with and without reported childhood abuse. Results: Personality subscales, the number of adverse life events and psychosocial factors were significantly associated with a history of childhood trauma ( $p < 0.05$ ). Of the trauma domains, emotional neglect was only associated with lower remission ( $HR = 0.70$ ,  $p = 0.001$ ). Neuroticism, extraversion and conscientiousness were independent predictors of poor outcome ( $p < 0.001$ ). The psychosocial characteristics or life events were not associated. Conclusion: Routine assessment of childhood trauma in adults with depressive and anxiety seems warranted to identify a 'high risk' group that needs a more intensive treatment.

## **Oral Paper Presentation**

**Thursday, November 6**

**03:00 PM to 04:15 PM**

### **Sevilla - LONG-TERM EFFECTS OF CHILD TRAUMA TRACK**

#### **Traumatic Exposure, Traumatic Distress, Resilience, and Physical Health in a Female Adult Community Healthcare Sample: The Impact of Cumulative Child and Adult Traumatic Exposure**

(Assess Dx, Cog/Int-Complex-Illness-Pub Health, Adult, M, Industrialized)

**Petretic, Patricia, PhD**; Chaisson, Elizabeth, PhD; Karlsson, Marie, MA PhD Student; Calvert, Maegan, MS PhD Student

*University of Arkansas, Fayetteville, Fayetteville, Arkansas, USA*

Research has suggested that broad exposure to a range of traumatic experiences, particularly in childhood, is more predictive of both psychological and physical distress/dysfunction in adulthood as opposed to chronicity of exposure to one form of childhood adverse event, such as child abuse. However, many factors affect long-term outcome of trauma, which shows considerable variability. Women ( $N = 209$ ) presenting to an obstetrical/gynecological practice completed measures of childhood and adult trauma history (ITR-R, ACE), psychological distress, (TSI), resilience (CD-RISC), and health (PILL, BRFSS). Rates of trauma exposure were high ( $n = 142$ ; 68.9%), with 19% reporting child sexual abuse, 16% physical abuse, 21% psychological maltreatment and 25.8% emotional neglect. Regression analyses indicated trauma exposure was a significant predictor of distress, resilience, and somatic malaise. Traumatic distress partially mediated the relation between trauma exposure and somatic malaise. Resilience did not moderate the relation between trauma exposure and either somatic malaise or traumatic distress, but interacted with trauma exposure to account for more variance in the prediction of somatic malaise. Results confirm cumulative trauma exposure as the most significant predictor of health outcomes; with even subclinical traumatic distress mediating the impact of traumatic exposure.

## **Oral Paper Presentation**

**Thursday, November 6**

**03:00 PM to 04:15 PM**

### **Sevilla - LONG-TERM EFFECTS OF CHILD TRAUMA TRACK**

#### **Childhood Adversity and Risk for Post-Traumatic Distress in Humanitarian Aid Deployment**

(Global, CPA-Prevent, Other: Humanitarian Aid Workers, I, Global)

**Eriksson, Cynthia, PhD<sup>1</sup>**; Currier, Joseph, PhD<sup>2</sup>; Kaiser, Reinhard, MD MPH<sup>3</sup>; Olf, Miranda, PhD<sup>4</sup>; Snider, Leslie, MD MPH<sup>5</sup>

<sup>1</sup>Fuller Graduate School of Psychology, Pasadena, California, USA

<sup>2</sup>University of South Alabama, Mobile, Alabama, USA

<sup>3</sup>World Health Organization, Highlands, Harare, Zimbabwe

<sup>4</sup>*Academic Medical Center at the University of Amsterdam and Arq Psychotrauma Expert Group, Amsterdam, Noord-Holland, Netherlands*

<sup>5</sup>*War Trauma Foundation, Diemen, Holland, Netherlands*

Expatriate aid workers frequently encounter potentially traumatic events during international deployments. Yet, many of these workers enter the field with histories of childhood trauma exposure and family risk factors (e.g. removal from home, death of a parent, Eriksson et al., 2012), which might compound the effects of deployment-related stressors. Drawing on information from a prospective longitudinal study, we examined the potentially unique contribution of childhood trauma/adversity on post-traumatic stress at post-deployment and a 3 to 6 month follow-up assessment among 168 aid workers. Previous work documented that PTSD symptomatology was surprisingly low in this sample (Lopes Cardozo et al, 2012). However, we found that PTSD symptomatology significantly increased from pre-deployment, to post-deployment, and follow-up. In addition, exposure to childhood adversity (as assessed at pre-deployment) contributed significantly to post-deployment levels of PTSD, even when accounting for PTSD at pre-deployment and exposure to life-threatening deployment traumas. However, childhood trauma and family risk factors were not significantly related to PTSD symptomatology at follow-up. These results suggest that aid workers with a history of maltreatment or adversity might indeed be more at risk for post-traumatic reactions in the immediate context of work-related trauma exposure.

## CONCURRENT SESSION 4

**Master Methodologist**

**Thursday, November 6**

**04:30 PM to 05:45 PM**

**Chopin - SPANISH TRACK**

*Presented in Spanish with simultaneous translation to English*

### **Modelos de Variables Latentes con Datos Longitudinales - Aplicaciones a la Investigación del Trauma (Latent Variable Modeling of Longitudinal Data with Applications to Trauma Research)**

(Res Meth, Res Meth, Lifespan, M, Global)

**Llabre, Maria, PhD**

*University of Miami, Coral Gables, Florida, USA*

Applications of latent variable modeling (LVM) are becoming more frequent with the availability of efficient software. Importantly, many research questions and challenges in the area of stress and trauma can potentially benefit from careful applications of LVM. Experimental and/or observational longitudinal studies designed to understand the process of change over time map well onto a variety of latent growth models and are able to accommodate common measurement and missing data problems. This invited lecture will review LVM in the context of longitudinal designs and illustrate their features, advantages and limitations using real and simulated examples.

## **Symposium**

**Thursday, November 6**

**04:30 PM to 05:45 PM**

**Biscayne - BIOLOGY TRACK**

### **Sleep Research Approaches the Treatment Room: Relationships between Sleep, Therapeutic Processes and HPA-Axis Functioning in PTSD**

(Bio Med, Affect/Int-Cog/Int-Bio/Int-Sleep, Adult, M, Industrialized)

Nijdam, Mirjam, PhD<sup>1</sup>; Mellman, Thomas, MD<sup>2</sup>

<sup>1</sup>*Academic Medical Center, University of Amsterdam, Amsterdam, Noord-Holland, Netherlands*

<sup>2</sup>*Howard University College of Medicine, Washington, District of Columbia, USA*

Disturbed sleep is one of the key symptoms of post-traumatic stress disorder (PTSD) and may be important in development, maintenance, and recovery from PTSD. In this symposium, four researchers present findings from polysomnographic experimental studies examining relationships between sleep and trauma disclosure, fear extinction, emotional memory processing, and neuroendocrine functioning in PTSD populations. These findings can help us understand how sleep is related to processes in trauma-focused treatment and how sleep influences HPA-axis functioning. Clinical implications, strengths and limitations of the different studies are discussed.

## Symposium

Thursday, November 6

04:30 PM to 05:45 PM

Biscayne - BIOLOGY TRACK

### Relationships between Sleep Following Trauma Narrative Disclosure and PTSD Symptom Reduction

(Bio Med, Affect/Int-Cog/Int-Sleep, Adult, M, Industrialized)

**Kobayashi, Ihori, PhD**; Altaee, Duaa, BA; Lavela, Joseph, BA; Wilson, Bryonna, BS; Mellman, Thomas, MD  
*Howard University College of Medicine, Washington, District of Columbia, USA*

Sleep has been implicated in learning processes that are relevant to traumatic memory processing. Poor sleep quality, insomnia, and increased rapid-eye-movement (REM) activity have been associated with reduced benefit from psychotherapy with anxiety and/or depressive disorders. To date 15 adults (age 18–55) with PTSD wrote about an index trauma in two pairs of 30-min sessions with and without intervening sleep (8PM and 8AM session pair, and 8AM/8PM pair). Sleep was measured using polysomnography at baseline and between the 8PM and 8 AM sessions. PTSD severity was assessed using the Clinician Administered PTSD Scale (CAPS) at baseline and one week after the fourth session. CAPS scores significantly decreased from baseline to follow-up ( $M=55.3$  vs.  $23.7$ ,  $t=7.19$ ,  $p<.001$ ). After the 8PM sessions, participants slept more (383 vs. 312 min,  $t=-3.78$ ,  $p=.002$ ) and had more stage 2 (60 vs. 53%,  $t=-2.26$ ,  $p=.04$ ), and less stage 3 (20 vs. 29%,  $t=2.68$ ,  $p=.02$ ) than at baseline. Regression analyses showed that post-writing wake after sleep onset ( $\beta=.51$ ,  $p=.05$ ), stage 2 ( $\beta=.59$ ,  $p=.05$ ), and REM density ( $\beta=.54$ ,  $p=.04$ ) positively predicted follow-up CAPS scores controlling for baseline CAPS scores. Results suggest that sleep may influence the outcome of exposure-based PTSD treatment.

## Symposium

Thursday, November 6

04:30 PM to 05:45 PM

Biscayne - BIOLOGY TRACK

### Sleep and Emotional Memory Processing in Veterans and Police Officers with PTSD

(Bio Med, Cog/Int-Sleep-Mil/Vets, Adult, M, Industrialized)

**Nijdam, Mirjam, PhD<sup>1</sup>**; de Boer, Marieke, MSc<sup>2</sup>; Hofman, Winni, PhD<sup>2</sup>; Jongedijk, Ruud, MD<sup>3</sup>; Talamini, Lucia, PhD<sup>2</sup>; Olff, Miranda, PhD<sup>4</sup>

<sup>1</sup>*Academic Medical Center, University of Amsterdam, Amsterdam, Noord-Holland, Netherlands*

<sup>2</sup>*University of Amsterdam, Amsterdam, Noord-Holland, Netherlands*

<sup>3</sup>*Centrum 45, Arq Research, Diemen, Noord-Holland, Netherlands*

<sup>4</sup>*Academic Medical Center at the University of Amsterdam and Arq Psychotrauma Expert Group, Amsterdam, Noord-Holland, Netherlands*

Sleep appears to play an important role in emotional recovery and resilience. A previous sleep study in healthy subjects suggests that adaptive changes occur in sleep architecture after emotional experiences, which benefit emotional housekeeping and the attenuation of emotional responses to negative emotional experiences. The current controlled patient study aims to replicate this experimental design in PTSD patients. It assesses the impact of an emotionally distressing film fragment on sleep parameters in PTSD patients, including the distribution of sleep stages, REM sleep-related variables and EEG power spectral parameters. Traumatized police officers and veterans with PTSD ( $n=25$ ) and without PTSD ( $n=25$ ) are compared. Neutral or distressing film fragments are presented in the evening, followed by full polysomnography of undisturbed, whole night sleep, and cued recall of film content on

the next evening. The order of the film conditions is counterbalanced across subjects. Emotional and physiological measures are assessed before and after film viewing and recall. Preliminary results on sleep architecture in the PTSD group (n = 13) indicated a strong increase of superficial sleep (stage N1) and decrease of deep sleep (stage N3). Effects of the emotional stressor on sleep architecture will be presented and discussed.

## **Symposium**

**Thursday, November 6**

**04:30 PM to 05:45 PM**

**Biscayne - BIOLOGY TRACK**

### **Sleep Effects On the Consolidation and Generalization of Extinction and Habituation—Relevance to Development and Perpetuation of PTSD**

(Bio Med, Cog/Int-Sleep, Adult, M, Industrialized)

**Pace-Schott, Edward, PhD<sup>1</sup>**; Orr, Scott, PhD<sup>2</sup>; Pitman, Roger, MD<sup>1</sup>; Germain, Anne, PhD<sup>3</sup>; Milad, Mohammed, PhD<sup>4</sup>

<sup>1</sup>*Harvard Medical School, Massachusetts General Hospital, Charlestown, Massachusetts, USA*

<sup>2</sup>*Massachusetts General Hospital, Harvard Medical School, Boston, Massachusetts, USA*

<sup>3</sup>*University of Pittsburgh, Pittsburgh, Pennsylvania, USA*

<sup>4</sup>*Massachusetts General Hospital, Harvard Medical School, Charlestown, Massachusetts, USA*

Extinction of conditioned fear and habituation to aversive stimuli are forms of brain plasticity exploited in exposure-based therapies for anxiety disorders. Like other forms of emotional memory, extinction and habituation can be modified, following encoding, by offline processes that affect their expression when later retrieved. Consolidation and generalization of extinction memory and between-session habituation are two such processes that are promoted by sleep and deficient in PTSD. Discussed will be experiments showing that sleep enhances generalization of extinction memory, promotes psychophysiological habituation to repeatedly encountered negative and startling stimuli and enhances extinction memory and generalization following simulated exposure therapy. Also discussed will be potential effects of circadian rhythms on acquisition and expression of extinction. We hypothesize that acute post-traumatic sleep disturbance may result in failure of extinction memory to persist and generalize and that this may be one mechanism by which poor sleep contributes to the etiology of PTSD. Continued poor sleep may additionally impair efficacy of exposure-based therapy. Trauma may lead to multiple positive feedback interactions among activated stress systems, chronically disturbed sleep and impaired extinction memory that contribute to the etiology of PTSD in vulnerable individuals.

## **Symposium**

**Thursday, November 6**

**04:30 PM to 05:45 PM**

**Biscayne - BIOLOGY TRACK**

### **Relationship between Adrenocorticotrophic Hormone (ACTH) Response to Metirapone and Delta Sleep in Individuals with Post-Traumatic Stress Disorder (PTSD)**

(Clin Res, Clin Res-Sleep, Adult, M, Industrialized)

**Rao, Madhu, MD<sup>1</sup>**; Madden, Erin, MPH<sup>2</sup>; Inslicht, Sabra, PhD<sup>1</sup>; Talbot, Lisa, PhD<sup>1</sup>; Richards, Anne, MD MPH<sup>3</sup>; O'Donovan, Aoife, PhD<sup>3</sup>; Neylan, Thomas, MD<sup>2</sup>

<sup>1</sup>*San Francisco VA Medical Center and UCSF, San Francisco, California, USA*

<sup>2</sup>*San Francisco VA Medical Center (VAMC-SF), San Francisco, California, USA*

<sup>3</sup>University of California, San Francisco and San Francisco VAMC, San Francisco, California, USA

Delta sleep is decreased in PTSD. Alterations in hypothalamic-pituitary adrenal axis (HPA) functioning may play a key role. We examined whether changes in adrenocorticotrophic hormone (ACTH) responses to metyrapone (a cortisol blocker) predict changes in delta sleep in individuals with and without PTSD. Participants were medically healthy, medication-free individuals with PTSD (n=31) and age and gender-matched, controls with no history of psychiatric conditions (n=32). Participants were admitted to the Research Center for 3 days and underwent: polysomnography (for determination of delta sleep); metyrapone administration (on Day 3); and overnight blood sampling (for determination of ACTH) on nights 2 and 3. Area under the curve (AUC) for ACTH increased after metyrapone, but there was no significant difference in ACTH responses between groups with and without PTSD ( $p=0.77$ ) and delta sleep decreased similarly in both groups after metyrapone ( $p=0.95$ ). However, the relationship between change in ACTH AUC and change in delta sleep varied with PTSD status. Specifically, the association between change in delta sleep and change in ACTH AUC was negative among PTSD+ participants but null among controls (PTSD x change in ACTH  $p$ -value= 0.004). This data suggest that PTSD moderates the relationship of the HPA on the regulation of delta sleep.

## **Symposium**

**Thursday, November 6**

**04:30 PM to 05:45 PM**

**Windsor/Sandringham**

## **Developing a Statewide Trauma-Informed System of Care for Children**

(Train/Ed/Dis, Commun-Pub Health-Social-Train/Ed/Dis, Child/Adol, M, Industrialized)

Franks, Robert , PhD

*Judge Baker Children's Center, Boston, Massachusetts, USA*

We describe efforts in Connecticut to develop an integrated statewide trauma-informed network of child-serving systems. We will present the context, partners, legislation, and funding involved in developing trauma-informed systems over the past 7 years, including behavioral health, child welfare, pediatrics, juvenile justice, and law enforcement. Additional detail will be provided about three key pieces of this work. First, we will describe efforts to promote trauma-informed care within the child welfare system, including workforce development and policy changes. Pre-, post- and follow-up data from over 1500 child welfare staff will be presented. Second, we will describe efforts to train child welfare staff to conduct trauma screening and to make referrals to EBPs, including the results of a pilot screening program and item analysis of trauma screening items. Third, we will describe statewide dissemination of TF-CBT using learning collaboratives, including a Coordinating Center model used to provide quality assurance and to sustain EBPs across a large network of providers following implementation. Data from four years post-implementation on children served, child outcomes, and implementation costs will be presented, including data from over 500 clinicians and 2500 children. Lessons learned about developing trauma-informed systems will be provided.

## **Symposium**

**Thursday, November 6**

**04:30 PM to 05:45 PM**

**Windsor/Sandringham**

## **Trauma Screening in Child Welfare**

(Train/Ed/Dis, CPA-CSA-Chronic-Train/Ed/Dis, Other: Child Welfare Professionals, M, N/A)



**Shanley, Paul, LCSW<sup>1</sup>**; Lang, Jason, PhD<sup>2</sup>; Connell, Christian, PhD<sup>3</sup>

<sup>1</sup>*Connecticut Department of Children and Families, Hartford, Connecticut, USA*

<sup>2</sup>*Child Health and Development Institute, Farmington, Connecticut, USA*

<sup>3</sup>*Yale School of Medicine, New Haven, Connecticut, USA*

We will describe efforts to implement a standardized trauma and mental health screening tool in Connecticut's child welfare system. Descriptions of the process used to develop and implement the screening tool and screening process will be provided, including selection of a screening tool, considerations for integration into a state child welfare data system and case planning procedures, and linkages to community service providers of trauma-focused evidence-based treatments. We will describe results from initial pilots of trauma screening by child welfare staff, perceptions of child welfare staff about implementation of trauma screening and usefulness in their CPS practice, and challenges and considerations about integration of trauma screening into the child welfare system. Results will be presented from item analysis of Child Post-traumatic Stress Scale (CPSS) data collected through 6 TF-CBT provider sites. These analyses reveal that as few as six items can be used to reliably screen for post-traumatic stress disorder symptoms with a high degree of sensitivity and specificity. Recommendations will be made for development and integration of a trauma and/or mental health screening and referral into child welfare practice and for policy and practice changes necessary to support screening.

## **Symposium**

**Thursday, November 6**

**04:30 PM to 05:45 PM**

**Windsor/Sandringham**

### **A Model for Sustaining Evidence-Based Practices**

(Train/Ed/Dis, Commun-Pub Health-Social-Train/Ed/Dis, Child/Adol, M, Industrialized)

**Lang, Jason, PhD**

*Child Health and Development Institute, Farmington, Connecticut, USA*

Connecticut was among the first states to begin using learning collaboratives for the statewide implementation of a behavioral health EBP in 2007. In the past seven years, TF-CBT has been disseminated to 29 community mental health agencies in Connecticut using learning collaboratives. However, sustaining EBPs following implementation is a challenge that many states and agencies face due to increased costs, staff turnover, and fidelity drift. The EBP Coordinating Center model was developed to provide quality assurance to sustain the TF-CBT network in Connecticut, using a standardize approach and economies of scale to reduce costs. This model will be described, and data about sustained use of TF-CBT including costs, successes, and challenges will be shared. Implementation and outcome data will be shared from 29 agencies, including over 500 clinicians and 2,500 children, and qualitative and quantitative factors related to sustainability up to six years after initial implementation will be discussed. Data will be presented on agency, clinician, and child variables that are related to implementation and sustainability. Recommendations for sustaining EBPs following implementation will be made.

## **Symposium**

**Thursday, November 6**

**04:30 PM to 05:45 PM**

**Windsor/Sandringham**

### **Enhancing Child Welfare System Readiness and Capacity to Provide Trauma-Informed Care**

(Train/Ed/Dis, CPA-Train/Ed/Dis, Other: Child Welfare Staff, M, Industrialized)

**Connell, Christian, PhD<sup>1</sup>**; Cloud, Marilyn, LCSW<sup>2</sup>; Lang, Jason, PhD<sup>3</sup>; Crusto, Cindy, PhD<sup>2</sup>

<sup>1</sup>*Yale School of Medicine, New Haven, Connecticut, USA*

<sup>2</sup>*Connecticut Department of Children and Families, Hartford, Connecticut, USA*

<sup>3</sup>*Child Health and Development Institute, Farmington, Connecticut, USA*

Connecticut is two years into a federally funded initiative to enhance the capacity of the State's child welfare system to provide trauma-informed care. This presentation will describe two key activities to enhance this capacity. First, we will describe a review process of trauma-related state child welfare policies. Second, we will describe a year-long implementation effort of the NCTSN Child Welfare Trauma Toolkit with over 450 managers, supervisors, and directors and over 1000 caseworkers and front-line staff. Evaluation data to be presented will include pre, post, and 3-month follow-up survey data on changes in trauma knowledge and practice, and qualitative data on implementation of action plans to reinforce training materials. Repeated measures MANOVAs reveal significant improvements in knowledge and self-reported practice for participants at all organizational levels and moderate success at implementing action plan strategies, with qualitative results highlighting potential barriers and facilitators to this process. In addition, results of a planned second round of system-wide trauma readiness and capacity assessment will be presented to highlight potential effects of these efforts on change in system capacity to provide trauma-informed care.

## **Symposium**

**Thursday, November 6**

**04:30 PM to 05:45 PM**

**Brickell - MILITARY TRACK**

## **An Examination of Military Trauma Exposure on Parents and Children: Effectively Helping Children Heal**

(Clin Res, Fam/Int, Lifespan, M, Industrialized)

Howard, Jamie, PhD

*Child Mind Institute, New York, New York, USA*

Trauma exposure can have a negative effect on the parenting process, and PTSD has been associated with angry, reactive parenting (Chemtob & Carlson, 2004), as well as permissive, ineffective parenting (Howard et al., 2011). U.S. military veterans with PTSD are three times more likely to report significant parenting problems than veterans without PTSD (Jordan et al., 1992), and symptoms of PTSD are associated with lower parenting satisfaction (Ruscio et al., 2002). Parenting difficulties are associated with child mental health problems, including anxiety, depression, and oppositionality (e.g., Kazdin, 1997), and research shows that children of U.S. military families are particularly at increased risk for mental health problems (Mansfield et al., 2011). More information is needed about specific factors that confer risk for parenting problems and child mental health problems in U.S. military families. Moreover, clinical improvements are needed to reduce barriers to care for U.S. military children and to reduce the elevated rates of mental health problems among this vulnerable population. This symposium will address these issues in a series of presentations focused on parental risk factors for children's mental health problems, parental concerns about their children and barriers to care, and effective treatment models to help children of U.S. military families.

## **Symposium**

**Thursday, November 6**

**04:30 PM to 05:45 PM**

**Brickell - MILITARY TRACK**

### **Associations between Mental Health, Parenting Variables and Pediatric Psychosocial Problems in a Sample of Veterans**

(Prevent, Fam/Int-Mil/Vets, Adult, M, N/A)

**Creech, Suzannah, PhD<sup>1</sup>**; Michaelson, Gillian, Undergraduate<sup>1</sup>; Massa, Andrea, BA<sup>2</sup>; Howard, Jamie, PhD<sup>3</sup>

<sup>1</sup>*Providence VA Medical Center, Brown University, Providence, Rhode Island, USA*

<sup>2</sup>*National Center for PTSD and VA Boston Healthcare System, Boston, Massachusetts, USA*

<sup>3</sup>*Child Mind Institute, New York, New York, USA*

The effect of mental health problems such as PTSD symptoms among Veterans on family functioning and child outcomes is of increasing concern in the field, yet few studies have examined mental health symptoms in concert with parenting variables and child outcomes. The goal of this study was to examine the associations between parenting variables and mental health symptoms on parent ratings of their children's psychosocial problems including internalizing, externalizing and attention symptoms in a multigenerational sample of Veterans. As part of a larger study of Veteran family functioning, 74 Veterans completed measures of mental health symptoms, parent-child relationship functioning, and the Pediatric Symptom Checklist. Hierarchical multiple regressions revealed a significant, unique contribution of parenting satisfaction above all other predictors including demographics, symptoms of depression, PTSD, alcohol use, and other parenting variables for PSC scores overall, externalizing, and attention symptoms. The only exception was that for internalizing symptoms, both positive parenting and parenting satisfaction were significant predictors. These early results suggest parenting satisfaction explained Veterans' ratings of children's psychosocial functioning and imply further work to improve the parent-child relationship in Veteran samples may be beneficial to children's outcomes.

## **Symposium**

**Thursday, November 6**

**04:30 PM to 05:45 PM**

**Brickell - MILITARY TRACK**

### **Parenting Young Children through the Deployment Cycle: Perceptions from Service Members and At-Home Parents**

(Commun, Clin Res-Commun-Pub Health-Mil/Vets, Lifespan, M, N/A)

**DeVoe, Ellen, PhD MSW<sup>1</sup>**; Ross, Abigail, Doctoral Student<sup>1</sup>; Chaplin, Christopher, MSW<sup>1</sup>; Currei, Andrew, BA<sup>2</sup>

<sup>1</sup>*Boston University School of Social Work, Boston, Massachusetts, USA*

<sup>2</sup>*Boston University, Boston, Massachusetts, USA*

We present qualitative findings from the first phase of a larger intervention study designed to support post-deployment family adaptation among service members with very young children (birth to 5 years). Semi-structured interviews were conducted with N=70 recently returned OEF/OIF service members (N=40) and their spouses/partners (N=30). One-third of service members met screening criteria for PTSD (PCL-M). Families were primarily from the National Guard/Reserve and had experienced an average of 2 deployments to Afghanistan or Iraq. Participants were asked to reflect upon their experiences of parenting from the war zone and at home, communication strategies, and their children's emotional and behavioral responses to deployment separation. Interview data were analyzed using the six steps of thematic analysis articulated by Braun & Clarke (2006) and provide thick description of parental and child responses during the transitions of the deployment cycle. Emerging

themes include the phase-specific nature of parenting stress and child responses, the unique impact of parental mental health distress, including PTSD, on young children and parenting, and perceived service needs to support military families with very young children in the post-deployment period. The application of these findings to inform the development of a military-specific reintegration program will be discussed.

## **Symposium**

**Thursday, November 6**

**04:30 PM to 05:45 PM**

**Brickell - MILITARY TRACK**

### **Impact of a Parenting Program for National Guard and Reserve Component**

#### **Military Families: After Deployment, Adaptive Parenting Tools**

(Clin Res, Clin Res-Fam/Int-Mil/Vets, Lifespan, M, Industrialized)

**Gewirtz, Abigail, PhD LP<sup>1</sup>**; Zamir, Osnat, PhD MSW<sup>2</sup>; DeGarmo, David, PhD<sup>3</sup>

<sup>1</sup>*University of Minnesota-Twin Cities Campus, St Paul, Minnesota, USA*

<sup>2</sup>*University of Minnesota, St. Paul, MN 55108, Minnesota, USA*

<sup>3</sup>*University of Oregon, Eugene, Oregon, USA*

An increasing body of literature is emerging to document the detrimental impact of a parent's deployment to war on child adjustment. Data suggest that the impact of deployment on children may be mediated through its disruption of key parenting practices (Gewirtz & Zamir, 2014). This presentation reports one year follow up data from a large scale randomized trial of a parenting program to enhance resilience among children in National Guard and Reserve (NGR) families. Families (i.e. parents and an index child between 5-12; N=320) in which a parent served in Iraq or Afghanistan were randomly assigned to 'services-as-usual' or a 14-week group-based, web-enhanced parenting program. Multi-method, multi-informant data were gathered on children's adjustment (child behavioral, emotional, academic and, social functioning), parenting and parental adjustment, at baseline, 6 months, and 12 months post-baseline. Intent-to-treat analyses indicated significant improvements of the intervention group compared to the services-as-usual group in observed and self-report measures of parenting, as well as parent emotion regulation. Results are discussed in the context of the opportunity for family-based prevention programs to promote resilience among military families, and especially those in the Reserve Component.

## **Symposium**

**Thursday, November 6**

**04:30 PM to 05:45 PM**

**Brickell - MILITARY TRACK**

### **Military Parents Concerns about Children's Mental Health and Barriers to Care**

(Clin Res, Mil/Vets, Lifespan, M, Industrialized)

**Howard, Jamie, PhD<sup>1</sup>**; Creech, Suzannah, PhD<sup>2</sup>; Isler, Yael, MA<sup>1</sup>

<sup>1</sup>*Child Mind Institute, New York, New York, USA*

<sup>2</sup>*Providence VA Medical Center, Brown University, Providence, Rhode Island, USA*

Children of U.S. military families exhibit significantly higher rates of mental health problems than civilian children. Despite the existence of high quality evidence-based treatments that reduce childhood psychiatric problems, children in military families are not receiving the care they need. This study examines the factors that may prevent U.S. military families from obtaining needed child mental health treatment. Survey data will be presented on veteran/service members' concerns about their children's internalizing (e.g., tearfulness and worries) and externalizing (e.g., oppositionality and hyperactivity) behaviors, as well as concerns about their children's

functioning, focusing on key areas of functional impairment (school performance, family interactions, friendships, and engagement in activities). Additionally, data will be presented on veteran/service members' perceptions about major barriers to child mental health care, including low levels of parental knowledge about child mental health problems, practical barriers (cost, distance), negative beliefs about mental healthcare (stigma, self-reliance), and general confusion and negative emotions about the process of obtaining child mental healthcare. Recommendations will be presented to improve accessibility of mental healthcare for children of U.S. military families.

## **Symposium**

**Thursday, November 6**

**04:30 PM to 05:45 PM**

**Trade**

## **Development and Evaluation of the PCL-5, PC-PTSD-5 and CAPS-5**

(Assess Dx, Train/Ed/Dis, Adult, I, N/A)

Prins, Annabel, PhD<sup>1</sup>; Lang, Ariel, PhD<sup>2</sup>

<sup>1</sup>National Center for PTSD and National Center for Telehealth and Technology, Menlo Park, California, USA

<sup>2</sup>UC San Diego / VA San Diego Health Care System, San Diego, California, USA

The National Center for PTSD has updated its diagnostic assessments for greater consistency with the DSM-5. The first presenter will describe changes to the PCL, and compare the psychometric properties of the PCL-5 and the PCL in two trauma-exposed college samples. The second presenter will describe three primary care based studies evaluating sequential changes to the PC-PTSD. The third presenter will describe changes to the CAPS, and examine the operating characteristics of the PCL-5 and the PC-PTSD-5 relative to the CAPS-5.

## **Symposium**

**Thursday, November 6**

**04:30 PM to 05:45 PM**

**Trade**

## **Performance of the PCL-5 and PC-PTSD-5 Relative to the CAPS-5 in Diagnosing PTSD among Veterans**

(Assess Dx, Clin Res-Clinical Practice-Mil/Vets, Adult, I, N/A)

Marx, Brian, PhD<sup>1</sup>; Prins, Annabel, PhD<sup>2</sup>; Bovin, Michelle, PhD<sup>3</sup>; Weathers, Frank, PhD<sup>4</sup>; Schnurr, Paula, PhD<sup>5</sup>; Kaloupek, Danny, PhD<sup>1</sup>; Keane, Terence, PhD<sup>6</sup>

<sup>1</sup>National Center for PTSD, VA Boston Healthcare System and Boston University, Boston, Massachusetts, USA

<sup>2</sup>National Center for PTSD, VA Palo Alto Health Care System, Menlo Park, California, USA

<sup>3</sup>VA - National Center for PTSD, Boston, Massachusetts, USA

<sup>4</sup>Auburn University, Auburn, Alabama, USA

<sup>5</sup>VA National Center for PTSD, Executive Division, White River Junction, Vermont, USA

<sup>6</sup>National Center for PTSD, VA Boston Healthcare System, Boston University School of Medicine, Boston, Massachusetts, USA

Objective: We examined the performance of the newly created PCL-5 and PC-PTSD-5, relative to the CAPS-5, in a sample of veterans. Method: One hundred forty veterans participated in a study designed to validate the aforementioned assessment instruments that were recently revised to reflect the changes to the PTSD diagnostic

criteria in DSM-5. . Depending upon study phase, veterans completed a variety of diagnostic interviews and self-report questionnaires. Results: Preliminary findings provide strong evidence for the reliability and validity of the PCL-5 and PC-PTSD-5. Specifically, PCL-5 and PC-PTSD-5 scores correlate strongly with the CAPS-5 total score ( $r_s = .78$  and  $.66$ , respectively). A PCL-5 score of 38 (sensitivity =  $.81$ , specificity =  $.72$ , PPV =  $.78$ , NPV =  $.85$ , efficiency =  $.80$ ) and a PC-PTSD-5 score of 4 (sensitivity =  $.83$ , specificity =  $.75$ , PPV =  $81\%$ , NPV =  $78\%$ , efficiency =  $.80$ ) showed the greatest diagnostic utility. Using these cutoffs,  $52\%$  and  $57\%$  of the sample would be classified as PTSD+ on the PCL-5 and PC-PTSD-5, respectively, while  $56\%$  would be classified as PTSD+ using the CAPS-5. Conclusion: Both the PCL-5 and PC-PTSD-5 have strong psychometric properties and excellent diagnostic utility. Application to different populations and settings will be discussed.

## Symposium

**Thursday, November 6**

**04:30 PM to 05:45 PM**

**Trade**

### **The PTSD Checklist for DSM-5 (PCL-5): Overview of Revisions and Initial Psychometric Analyses**

(Assess Dx, Assess Dx, Adult, I, Industrialized)

**Blevins, Christy, MS PhD Student**; Weathers, Frank, PhD; Davis, Margaret, MS; Witte, Tracy, PhD; Domino, Jessica, MS

*Auburn University, Auburn, Alabama, USA*

The PTSD Checklist (PCL) is a widely used, DSM-correspondent self-report measure of PTSD. The PCL was recently revised to reflect DSM-5 changes to the PTSD criteria. Notable revisions include adding three items to reflect new DSM-5 symptoms, rewording other items, and modifying the rating scale from 1-5 to 0-4. This presentation will provide an overview of the revision process and initial psychometric analyses comparing the PCL-5 and PCL in two samples of trauma-exposed college students. In Sample 1 ( $N = 278$ ), PCL-5 scores exhibited strong internal consistency ( $\alpha = .94$ ), test-retest reliability ( $r = .82$ ), and convergent and discriminant validity. Confirmatory factor analysis indicated adequate fit with the implicit DSM-5 four-factor model. In Sample 2 ( $N = 558$ ), the PCL-5 demonstrated similarly strong reliability and validity. Prevalence of presumptive PTSD based on the PCL-5 was similar across samples (Sample 1 =  $14\%$ , Sample 2 =  $12\%$ ) and identical to prevalence based on the PCL (following DSM-IV criteria) in Sample 1 ( $14\%$ ). Overall, results indicate that the PCL-5 is a psychometrically sound measure of PTSD and is highly similar to the PCL. Clinical implications of the PCL-5, including the clinical utility across age, gender, and ethnicity, will be discussed.

## Symposium

**Thursday, November 6**

**04:30 PM to 05:45 PM**

**Trade**

### **Revising the PC-PTSD Screen for DSM-5**

(Assess Dx, Train/Ed/Dis, Adult, I, N/A)

**Prins, Annabel, PhD<sup>1</sup>**; Jenkins-Guarnieri, Michael, PhD<sup>2</sup>; Smolenski, Derek, PhD, MPH<sup>2</sup>; Marx, Brian, PhD<sup>3</sup>; Kimerling, Rachel, PhD<sup>4</sup>; Kaloupek, Danny, PhD<sup>3</sup>; Schnurr, Paula, PhD<sup>5</sup>; Leyva, Yani, PhD<sup>6</sup>; Tiet, Quyen, PhD<sup>6</sup>

<sup>1</sup>*National Center for PTSD and National Center for Telehealth and Technology, Menlo Park, California, USA*

<sup>2</sup>*National Center for Telehealth & Technology, Tacoma, Washington, USA*

<sup>3</sup>*National Center for PTSD, VA Boston Healthcare System and Boston University, Boston, Massachusetts, USA*

<sup>4</sup>*National Center for PTSD – Dissemination and Training Division, VA Palo Alto Health Care System, Palo Alto,*



California, USA

<sup>5</sup>National Center for PTSD/White River Junction VA, White River Junction, Vermont, USA

<sup>6</sup>National Center for PTSD – Dissemination and Training Division, VA Palo Alto Health Care System, Menlo Park, California, USA

We evaluated revisions to the PC-PTSD using three separate samples of VA primary care patients. In study 1, a revised stem was introduced to improve specificity, and the operating characteristics of this new PC-PTSD-R screen were compared to the original PC-PTSD using the DSM-IV-TR MINI PTSD module as the diagnostic standard. Results supported the new stem, with specificity improving from .81 to .91 and overall accuracy from .83 to .93, when using a cut score of 3. In study 2, we compared PC-PTSD-R and PC-PTSD performance using a modified MINI PTSD module revised for consistency with DSM-5 criteria, and for which we established preliminary validity evidence through CFA analyses. Our findings again supported the appropriateness and utility of the revised stem. In study 3, we added a new item capturing guilt and blame to match DSM-5 criteria to create the PC-PTSD-5, and analyzed its performance compared to the PC-PTSD-R. Results indicated that the 5th item improved content validity, and that a cut score of 3 or 4 might be optimal depending on the clinical setting. Preliminary analyses suggested that the operating characteristics of the PC-PTSD, PC-PTSD-R and PC-PTSD-5 did not differ as a function of age, gender, or ethnicity.

## **Panel Presentation**

**Thursday, November 6**

**04:30 PM to 05:45 PM**

**Bayfront A - CHILD TRACK ONE**

## **Mass Violence Involving School-Age Children: The Integration of Best-Practice Guidelines into Real-World Response**

(Global, Terror, Child/Adol, M, Global)

**Brymer, Melissa, PhD, PsyD<sup>1</sup>; Walker, Douglas, PhD<sup>2</sup>; Gurwitsch, Robin, PhD<sup>3</sup>; Dyb, Grete, MD PhD<sup>4</sup>**

<sup>1</sup>National Center for Child Traumatic Stress at UCLA, Los Angeles, California, USA

<sup>2</sup>Mercy Family Center, New Orleans, Louisiana, USA

<sup>3</sup>Duke University Medical Center, Durham, North Carolina, USA

<sup>4</sup>Norwegian Center for Violence and Traumatic Stress Studies (NKVTS), Oslo, Norway

This panel will build upon current consensus guidelines supporting the core principals and best-practice interventions currently utilized to assist children and adolescents in the aftermath of mass trauma events by discussing detailed accounts of response and recovery to recent incidents of mass violence. Internationally recognized guidelines (Inter-Agency Standing Committee 2007), empirically supported intervention principals (Hobfoll et al, 2007), and proof of concept (WHO, 2013) have significantly improved the planning, preparation and response to mass trauma events over the past several years. Integration of essential elements of mass trauma intervention (i.e., safety, calming, self/collective efficacy, social connectedness and hope), guidelines and proof of concept will be described by panelists who draw from the mental health responses to the Alfred P. Murrah Federal Building Bombing-Oklahoma City, The Utøya terror attack-Norway, Sandy Hook Elementary School Shooting-Newtown, Connecticut and the Westgate Mall terrorist attack-Nairobi. This panel will also discuss the recent changes in policy regarding school safety in the United States, and innovations in training and implementation of evidence-informed interventions within the field of child and adolescent disaster mental health.

## **Panel Presentation**

**Thursday, November 6**

**04:30 PM to 05:45 PM**

**Gusman/Tuttle**

### **The Bio-Psycho-Social Approach: What's most Important in Understanding Post-Traumatic Stress in Children Following Medical Trauma?**

(Bio Med, Acc/Inj-Assess Dx-Clinical Practice-Fam/Int, Child/Adol, M, Industrialized)

**Nelson, Lara, MD<sup>1</sup>; Delahanty, Douglas, PhD<sup>2</sup>; Marsac, Meghan, PhD<sup>3</sup>; Gold, Jeffrey, PhD<sup>1</sup>**

<sup>1</sup>*Children's Hospital Los Angeles - University of Southern California, Los Angeles, California, USA*

<sup>2</sup>*Kent State University, Kent, Ohio, USA*

<sup>3</sup>*University of Pennsylvania School of Medicine, Philadelphia, Pennsylvania, USA*

Applying a bio-psycho-social model of post-traumatic stress disorder (PTSD), panelists will discuss the biological, psychological, behavioral, and social aspects of PTSD following exposure to potentially traumatic medical events. Specifically, we will focus on the unique child and caregiver post-traumatic responses, as well as the parent-child interactions following potentially traumatic medical events. Panelists will highlight: a) the significant relations among pre-, peri-, and post-trauma symptoms and PTSD in children on the pediatric intensive care unit (PICU); b) the potential importance of the interaction between children and parents in early recovery following pediatric injury; c) critical biological, physiological, and behavioral markers for the development of PTSD in children and their parents with medical trauma; and d) clinical implications for children and youth who have experienced pediatric medical trauma. The discussion will highlight the importance of a bio-psycho-social model of assessment and intervention, the salience of family-centered care, and strategies for early detection and intervention. The panelists will include recommendations for future research and clinical practice.

## **Workshop Presentation**

**Thursday, November 6**

**04:30 PM to 05:45 PM**

**Bayfront B - CHILD TRACK TWO**

### **Child-Parent Psychotherapy with Intimate Partner Violence-Offending Fathers; Preparation and Practice**

(Practice, Chronic-Clinical Practice-DV-Prevent, Lifespan, M, Industrialized)

**Willheim, Erica, PhD**

*New York Presbyterian Hospital, New York, New York, USA*

Child exposure to Intimate Partner Violence (IPV) is well documented in terms of adverse impact (Finkelhor et al., 2009; Graham-Bermann & Levendosky, 2011). Clinical intervention with IPV exposed young children is typically conducted with non-abusing caregivers and is critical in determining post-traumatic adjustment (Scheeringa & Zeanah, 2001). The relationship between the child and offending parent is not typically an equal focus of clinical attention. Safety concerns, lack of abusive parent accountability, system/worker bias, legal constraints, and lack of reliable assessment have all been realistic barriers to therapeutic intervention (Groves, Van Horn, & Lieberman, 2006). Since abusive fathers are nonetheless regularly given visitation rights, a unique opportunity exists to intervene in the intergenerational transmission of violence. This presentation describes: (1) A collaboration between two New York City domestic violence agencies in developing a novel attachment-informed, trauma-informed group intervention for abusive fathers of young children with the goal of preparing them for successful engagement in Child-Parent Psychotherapy (CPP; Lieberman, Van Horn, & Gosh Ippen, 2005). (2) CPP case material that highlights specific clinical considerations in conducting CPP with offending fathers and their young children following completion of the group intervention.

## **Workshop Presentation**

**Thursday, November 6**

**04:30 PM to 05:45 PM**

**Merrick**

### **“I’m Not Telling You Nothing”; The Role of Assessment in Creating Openings for Engagement and Integrating a Client-Driven Approach in the Treatment of Complex PTSD**

(Assess Dx, Commun-Complex-Dev/Int-Fam/Int, Child/Adol, M, N/A)

**Blaustein, Margaret, PhD<sup>1</sup>; Kagan, Richard, PhD<sup>2</sup>; Habib, Mandy, PsyD<sup>3</sup>**

<sup>1</sup>*Trauma Center at Justice Resource Institute, Brookline, Massachusetts, USA*

<sup>2</sup>*Parsons Child and Family Center, Albany, New York, USA*

<sup>3</sup>*Adelphi University, Garden City, New York, USA*

Engaging children and families as treatment partners and adapting treatments to client needs remains a primary challenge for application of evidence-informed treatment, especially following abuse/neglect. In this interactive workshop, NCTSN recommended Complex PTSD treatment components will be introduced and model developers for 3 evidence-supported treatments (ARC, RLH, SPARCS) will share strategies and tools that have proved effective in overcoming common challenges to initiating and sustaining treatment. Presenters will highlight methods for engaging hard-to-reach clients, mapping out supports, identifying triggers, and developing formulation-driven plans through the targeted use of evidence-supported assessment and evaluation processes, including trauma exposure screens and symptom surveys e.g. CANS, UCLA PTSD RI & TSCC. Part of the workshop time will be reserved for participants to apply the content to a case study using an assessment integration framework matched to NCTSN Complex PTSD treatment components. Participants will be challenged to identify practical strategies to overcome common barriers to treatment. Discussion will be guided to consider adaptations of approaches to support client needs and strengths, paying attention to developmental level, attachment, safety, program mandates, practitioner time limitations, cultural background, and systems of care.

## **Oral Paper Presentation**

**Thursday, November 6**

**04:30 PM to 05:45 PM**

**Sevilla - LONG-TERM EFFECTS OF CHILD TRAUMA TRACK**

### **Long-Term Effects of Childhood Trauma (2)**

#### **Externalizing Problem Trajectories in a Sample of Maltreated Children: Social Support and Social Competence as Predictors of Outcome**

(Res Meth, CPA-CSA-Neglect, Child/Adol, M, Industrialized)

**Poehacker, Stefanie, BS; Lauterbach, Dean, PhD**

*Eastern Michigan University, Ypsilanti, Michigan, USA*

Research links early child maltreatment to significant externalizing behavior problems throughout development. Longitudinal research examining heterogeneity in change over time is limited and focuses primarily on childhood risk factors. The current study aimed to identify unobserved subgroups of externalizing behavior trajectories among maltreated and at risk children from Age 4 to Age 14. This study used a sample of 1354 children (51.5% girls) from the Longitudinal Studies of Child Abuse and Neglect. On average, the children were 2.5 years old at first referral to CPS and had 6.3 maltreatment allegations by Age 14. Children were assessed in two-year intervals using the

Externalizing Problem subscale of the CBCL. Growth Mixture Modeling (GMM) was used to identify the number of latent trajectory classes. A 1-, 2-, 3-, 4-, and 5-class model was tested and GMM supported the viability of a 4-class model controlling for the impact of maltreatment severity. The trajectories can be described as low-stable, moderate-stable, moderate-inverted u-shape, and high-u-shape. Findings will be presented on protective factors predictive of group membership including 3 types of social support (maternal emotional support, paternal involvement, and parental academic involvement) and 3 types of social competence (perceived social acceptance, peer relationships, and social problem-solving skills).

## **Oral Paper Presentation**

**Thursday, November 6**

**04:30 PM to 05:45 PM**

### **Sevilla - LONG-TERM EFFECTS OF CHILD TRAUMA TRACK**

#### **The Long-Term Association between Post-Traumatic Stress Disorder and Depression: Findings from the Detroit Neighborhood Health Study**

(Assess Dx, Depr-Pub Health, Adult, M, Industrialized)

**Horesh, Danny, PhD<sup>1</sup>**; Lowe, Sarah, PhD<sup>2</sup>; Galea, Sandro, MD PhD<sup>2</sup>; Uddin, Monica, PhD<sup>3</sup>; Koenen, Karestan, PhD<sup>4</sup>

<sup>1</sup>*Bar-Ilan University, Ramat Gan, Israel*

<sup>2</sup>*Columbia University, Mailman School of Public Health, New York, New York, USA*

<sup>3</sup>*Wayne State University, Detroit, Michigan, USA*

<sup>4</sup>*Columbia University School of Public Health, New York, New York, USA*

Objective: PTSD and depression are known to be highly co-morbid. However, previous findings regarding the nature of this co-morbidity are inconclusive. This study prospectively examined the prevalence and underlying mechanisms of PTSD-depression co-morbidity in an economically disadvantaged, urban sample. Methods: 942 male and female residents of Detroit were interviewed by phone at three consecutive time points, one year apart. At each time point, they were assessed for PTSD, depression, trauma exposure, stressful life events, and socio-demographics. Results: PTSD-depression co-morbidity was more prevalent than either of the disorders by itself. Females were found to be at higher risk of suffering from both PTSD and depression, at all time points. A cross-lagged analysis revealed a bidirectional association between PTSD and depression among females, wherein PTSD predicted later depression, and vice versa. However, among males only early PTSD predicted later depression. A confirmatory factors analysis showed better fit for a two-factor solution (i.e., depression and PTSD as separate diagnostic entities) than for a one-factor solution. Conclusions: PTSD and depression are separate but highly correlated consequences of trauma exposure. Men and women differ in both the risk of suffering from these disorders across time, and the nature of the long-term association between them.

## **Oral Paper Presentation**

**Thursday, November 6**

**04:30 PM to 05:45 PM**

### **Sevilla - LONG-TERM EFFECTS OF CHILD TRAUMA TRACK**

#### **A Longitudinal Examination of the Relationship between Childhood Emotional Abuse and Anxiety among Young Adolescents: Distress Tolerance as a Moderating Factor**

(Assess Dx, Anx-CPA-Comm/Int-Pub Health, Child/Adol, M, Industrialized)

**Banducci, Anne N., MS**; MacPherson, Laura, PhD; Lejuez, C.W., PhD

*University of Maryland, College Park, College Park, Maryland, USA*

Childhood emotional abuse (CEA) predicts elevated rates of anxiety (ANX) above and beyond physical and sexual abuse (e.g. Wright et al., 2009). Despite strong associations between CEA and ANX, not all youth develop ANX following abuse, suggesting the importance of moderating factors. Low distress tolerance (DT), or the inability to persist in goal-directed behavior when upset may be an important moderator of this relationship. Low DT is associated with ANX among adults (Keough et al., 2010) and internalizing among girls (Daughters et al., 2009). DT is a stable, trait-like characteristic (Cummings et al., 2013), suggesting youth with low DT, who are exposed to CEA, may be at heightened risk for ANX. We examined the relationship between baseline CEA and DT on ANX across five annual assessments among 277 young adolescents (baseline age = 11) using the Revised Child Anxiety and Depression Scale, Childhood Trauma Questionnaire, and Behavioral Indicator of Resiliency to Distress. We used multilevel modeling to examine ANX as a function of DT, CEA, their interaction, and covariates. As hypothesized, DT moderated the relationship between CEA and ANX ( $\beta = .55$ ,  $SE = .26$ ,  $t(224) = 2.11$ ,  $p = .026$ ), such that youth with high CEA and low DT had the highest ANX over time. When exploring the relationship between abuse and anxiety among youth, considering trait-like characteristics like DT is critical.

## **Oral Paper Presentation**

**Thursday, November 6**

**04:30 PM to 05:45 PM**

### **Sevilla - LONG-TERM EFFECTS OF CHILD TRAUMA TRACK**

#### **The Contribution of Adverse Childhood Experiences to Psychological Effects of Acute Injury in Urban Black Men in the US**

(Assess Dx, Acc/Inj-Depr-Health, Adult, M, Industrialized)

**Richmond, Therese, RN, PhD<sup>1</sup>**; Kassam-Adams, Nancy, PhD<sup>2</sup>; Reilly, Patrick, MD<sup>2</sup>; Rich, John, MD<sup>3</sup>; Shults, Justine, PhD<sup>2</sup>; Wiebe, Douglas, PhD<sup>2</sup>

<sup>1</sup>*University of Pennsylvania, Philadelphia, Pennsylvania, USA*

<sup>2</sup>*University of Pennsylvania School of Medicine, Philadelphia, Pennsylvania, USA*

<sup>3</sup>*Drexel University School of Public Health, Philadelphia, Pennsylvania, USA*

Our purpose was to examine the contribution of adverse childhood experiences (ACEs) to PTSD and depression after recent serious injury in Black men. 156 men (mean age = 36.9) were enrolled during admission for injury at a large urban US hospital and ACEs data were collected. Injury was classified as unintentional (52%) or intentional, i.e. the results of interpersonal violence (48%). Mean number of ACEs was 2.43; 81% reported at least 1 ACE and 33% reported 4 or more ACEs. PTSD (PTSD Checklist; PCL-C) and depression (Quick Inventory of Depressive Symptoms-Self Report; QID-SR) were assessed at 3 months post-discharge. No association was found between number of ACEs and whether the index injury was intentional versus unintentional. Intentional injuries were associated with higher mean PCL-C scores (43.8 vs. 31.8,  $p < .0001$ ) and higher mean QID-SR scores (10.4 vs. 7.6,  $p = .002$ ). In adjusted multiple regressions, younger age, intentional injury, and number of ACEs were independently associated with higher PCL-C scores. Intentional injury and number of ACEs were independently associated with higher QID-SR scores. This sample of urban Black men reported substantial histories of childhood trauma and adversity. Results provide further evidence that adverse childhood experiences increase the risk for PTSD and depression after serious injury.

**Oral Paper Presentation**  
**Thursday, November 6**  
**04:30 PM to 05:45 PM**  
**Flagler**

## **Bereavement, Grief and Trauma Assessment**

### **Trauma Assessment Screenings for Foster Youth at The Village Family Services: A Trauma Informed Foster Family and Adoptions Agency**

(Commun, Chronic-Complex-Health-Train/Ed/Dis, Child/Adol, I, Industrialized)

**Hoffman, Deborah, PsyD**

*The Village Family Services, North Hollywood, California, USA*

Foster youth are faced with trauma on a regular basis. The Village Family Services' foster care program has recognized the urgency to adopt trauma informed practices into the work being done with these youth. Trauma informed care is an approach to engaging people with histories of trauma that recognizes the presence of trauma symptoms and acknowledges the role that trauma has played in their lives (SAMHSA, 2013). The Village Family Services' foster care program implemented a trauma screening protocol with all newly admitted foster youth (ages 6 and up) from March 2013 to September 2013. Each assessment packet consisted of three screening tools that have been widely utilized—the Pediatric Symptom Checklist, the Child's Reaction to Traumatic Events Scale Revised, and the National Child Traumatic Stress Network's Core Clinical Characteristic General Trauma Information Form. Two-hundred assessment packets were collected from unique foster youth during this period, and each packet provided vital information about the youth's trauma history which helped to guide the social workers with their treatment plans and goals. This presentation will highlight the outcomes of this study and inferences that can be made relating to this sample population of Los Angeles County based foster youth.

**Oral Paper Presentation**  
**Thursday, November 6**  
**04:30 PM to 05:45 PM**  
**Flagler**

### **Post-Traumatic Growth among Parentally Bereaved Adolescents Reared in Institutions: Relationships with Resilience, Coping and Social Support**

(Clin Res, Death-Health-Surv/Hist, Child/Adol, M, E Asia & Pac)

**Chen, Jieling, MSocSc, MPhil; Wu, Xinchun, PhD**

*School of Psychology, Beijing Normal University, Beijing, China*

**Background:** Studies on positive psychological outcome among parentally bereaved adolescents in the long term was limited. Current study aimed to study their post-traumatic growth and its relationships with resilience, coping and social support. **Methods:** 105 adolescents who were parentally bereaved in Wenchuan earthquake and then reared in two institutions were surveyed at 4 1/2 years following earthquake with self-reported measures. **Results:** Parentally bereaved adolescents showed moderate level of post-traumatic growth at 4 1/2 years following earthquake. Multiple linear regression analysis indicated that resilience and social support seeking positively predicted post-traumatic growth, while social support and other coping styles had no significant effect on post-traumatic growth. Further a mediation model was tested and supported, which indicated social support seeking had partially mediated the relationship between resilience and post-traumatic growth. **Conclusions:** Resilience and social support seeking coping style had salutogenic effects of on post-traumatic growth among parentally bereaved



adolescents reared in institutions. Psychological interventions and care were suggested to improve individual's resilience and effective coping style in the face of adversity to facilitate post-traumatic growth, rather than to provide as much social support as possible.

### **Oral Paper Presentation**

**Thursday, November 6**

**04:30 PM to 05:45 PM**

**Flagler**

### **Self-Regulatory Cognitive Mechanisms Linking Post-Traumatic Stress and Persistent Grief following a School Shooting**

(Prevent, Comm/Vio-Death-Terror-Grief, Lifespan, M, Industrialized)

**Smith, Andrew, MA PhD Student<sup>1</sup>**; Abeyta, Andrew, MA<sup>2</sup>; Hughes, Michael, PhD<sup>3</sup>; Jones, Russell, PhD<sup>3</sup>

<sup>1</sup>*Virginia Tech, Blacksburg, Virginia, USA*

<sup>2</sup>*North Dakota State University, Fargo, North Dakota, USA*

<sup>3</sup>*Virginia Polytechnic Institute and State University, Blacksburg, Virginia, USA*

The addition of persistent complex bereavement-related disorder to the appendix of DSM-5 calls for research that furthers understanding of traumatic grief reactions. The current study sought to understand self-regulatory/cognitive processes that mediate between post-traumatic stress symptoms and complicated grief in the wake of the mass-shooting that occurred on Virginia Tech's campus on April 16, 2007. Specifically, we tested a conceptual model merging anxiety buffer disruption and social cognitive theories to predict complicated grief among 245 students who lost a close friend, significant other, and/or professor/teacher in the shootings. A serial-mediation path model tested post-traumatic stress symptom severity (PTS) 3-to-4 months post-shooting (Time 1) as an indirect predictor of complicated grief 1-year post shootings (Time 2) through cognitive processes (self-efficacy and disrupted worldview). Results showed that the model predicted 61% of the variance in Time 2 complicated grief. Hypotheses were supported, demonstrating that Time 1 PTS severity indirectly, positively predicted Time 2 complicated grief through disrupting self-efficacy, which in turn predicted more severely disrupted worldview (serial mediation effect,  $B = 0.06$ ,  $SE = 0.03$ , 95% CI [0.007, 0.133]). Direct and indirect hypothesized were supported. Clinical and empirical implications are discussed.

### **Oral Paper Presentation**

**Thursday, November 6**

**04:30 PM to 05:45 PM**

**Flagler**

### **A Latent Profile Analysis of Persistent Complex Bereavement Disorder Symptoms and PTSD Symptoms in Bosnian Adolescents: Association with Overall Functioning**

(CulDiv, Cul Div-Death-Grief-Civil/War, Child/Adol, M, C & E Europe & Indep)

**Claycomb, Meredith, MA<sup>1</sup>**; Charak, Ruby, MA PhD Student<sup>2</sup>; Kaplow, Julie, PhD, ABPP<sup>3</sup>; Elhai, Jon, PhD<sup>1</sup>; Layne, Christopher, PhD<sup>4</sup>

<sup>1</sup>*University of Toledo, Toledo, Ohio, USA*

<sup>2</sup>*VU University, Amsterdam, North Holland, Netherlands*

<sup>3</sup>*University of Michigan Medical School, Ann Arbor, Michigan, USA*

<sup>4</sup>*UCLA - National Center for Child Traumatic Stress, Los Angeles, California, USA*

We employed a latent profile analysis to empirically identify discrete subgroups of adolescents based on PTSD and Persistent Complex Bereavement Disorder (PCBD) symptoms. Participants were 1064 bereaved Bosnian secondary

school students who completed a screening survey two years after the 1992-1995 Bosnian war. The survey included the UCLA PTSD Reaction Index as a measure of PTSD symptoms, the Grief Screening Survey, which served as a prototype measure of PCBD symptoms, and the Reminders of War Trauma Index as a measure of overall functioning at home, with friends, and at school. Latent profile analyses revealed a three-profile solution differing in severity of PCBD and PTSD symptoms (BIC=78851.04, Entropy=.91, LMR test=1834.03,  $p<.001$ ). The three distinct classes consisted of Low (Class 1; 31.8%), Moderate (Class 2; 41.2%), and High (Class 3; 27.0%). Analysis of profile membership in relation to students' overall functioning revealed that students in the High PCBD and PTSD group reported poorer functioning than students in the Low (OR=.03,  $p<.001$ ) and Moderate (OR=.19,  $p<.001$ ) groups. We conclude by discussing clinical and theoretical implications relating to the risks PCBD and PTSD pose to functional impairment, and clinical assessment and diagnosis.

## Friday, November 7

### Keynote Address

Friday, November 7

09:00 AM to 10:15 AM

Versailles

### **“This is My Story, I Am!” Facing Childhood Trauma within the Individual and the Community**

(Clin Res, Complex-Gen/Int-Global-Social, Lifespan, M, Global)

**Schauer, Maggie, PhD**

*University of Konstanz & vivo international, Konstanz, Germany*

Childhood trauma is not just traceable to a single event in a young life, but reorganizes a heritage that has been shaped by stressful experiences of ancestors. The individual memories combine with those that are passed on across generations: through communal culture, by parenting style, and as epigenetically transmitted experiences, which cause an unfavorable impact on the DNA-methylation status of children. Emotional neglect, abuse and inconsistent parenting by stressed caregivers, play a key role in life-long mental health complications, health risk behavior and disease in the parents of tomorrow who are raised in burdened families or under continuous trauma conditions, prone to pile up building blocks for mental disease. Given the high prevalence globally, of familial, sexual, organized violence and of relational victimization, a paradigm-shift prioritizing evidence-based short-term treatments that are low-threshold and disseminable is needed, in order to face a multitude of social relational pain and violent trauma. To heal individuals and communities a cascade model of trauma-focused care, including biographical approaches of narrative *in-sensu* exposure and testifying to human rights violations, will deactivate the transgenerational transmission and lead to enhanced functionality and health.

# CONCURRENT SESSION 5

**Workshop Presentation**

**Friday, November 7**

**10:30 AM to 11:45 AM**

**Chopin - SPANISH TRACK**

*Presented in Spanish with simultaneous translation to English*

**Modelos Eficaces Para Tratar el Trauma Infantil: Una Introducción de la Terapia Cognitiva Conductual Enfocada en el Trauma (TF-CBT) y Psicoterapia**

**Diádica/Vincular (CPP)**

**(Effective Treatment Models to Address Trauma in Children and Adolescents: An Introduction to Trauma Focused Cognitive Behavioral Therapy (TF-CBT) and Child Parent Psychotherapy (CPP))**

(Practice, Acute-Complex-Fam/Int-Prevent, Child/Adol, I, Global)

**Rivas-Hermina, Lisette, M.S. Counseling, LMFT<sup>1</sup>; Norona, Carmen, MSW<sup>2</sup>**

<sup>1</sup>*Private Practice, Glendale, California, USA*

<sup>2</sup>*Boston Medical Center, Boston, Massachusetts, USA*

Este taller abordará las diferentes maneras que los niños de 0–18 son afectados por situaciones traumatizantes y la importancia del vínculo con las figuras primarias para ayudar al niño o adolescente a recuperarse después de eventos traumatizantes. Se discutirá el impacto de las experiencias traumáticas desde la perspectiva del niño/adolescente, de las relaciones vinculares y del rol en las figuras parentales. Se ilustrará cómo estas experiencias pueden afectar diferentes aspectos en el desarrollo infantil. Introduciremos dos modelos que utilizan la importancia de los vínculos paternos y han demostrado en investigaciones clínicas que son eficaces para tratar los síntomas que exhiben los niños y sus familias. El modelo de Terapia Cognitiva Conductual enfocada en el trauma infantil (Cohen, Mannarino, & Deblinger, 2006) está diseñado para reducir los síntomas de PTSD, depresión, ansiedad y problemas de comportamiento comunes en niños que han sido expuestos a eventos traumatizantes. El modelo de la Psicoterapia Diádica/Vincular (Lieberman & Van Horn, 2005) está diseñada para ayudar a los padres y al niño a: 1) Comprender y modular respuestas a recordatorios traumáticos 2) Encontrar maneras de auto-regularse 3) Restaurar la confianza mutua 4) Tratar las desconexiones, desajustes entre el niño y los padres. Se discutirá el uso de estos modelos con familias Latinoamericanas.

(This workshop will explore the ways in which children 0 -18 are impacted by traumatic events and how attachment increases the children's ability to cope and heal. We will discuss how children perceive and experience traumatic events individually and in the context of their relationships with their caregivers. The discussion will highlight how these experiences can impact the child's developmental progress. Two evidenced based models will be discussed to illustrate how to effectively treat children and their parents who have been impacted by trauma. Trauma Focused Cognitive Behavioral Therapy (Cohen, Mannarino, & Deblinger, 2006) is a treatment model that has demonstrated to reduce the symptoms of PTSD, depression, anxiety and other common behavioral problems in traumatized children and their families. Child Parent Psychotherapy (Lieberman & Van Horn, 2005) is designed to help children manage and regulate their emotions and triggers, build mutual trust, and restore or increase their attachment with their caregiver. The discussion will focus on the use of this model with Latin American families.)

**Symposium**  
**Friday, November 7**  
**10:30 AM to 11:45 AM**  
**Versailles**

## **PTSD and Related Disorders: Further Progress in ICD-11 Development at WHO**

(Train/Ed/Dis, Assess Dx, N/A, I, N/A)

Maercker, Andreas, PhD, MD  
*University of Zurich, Zurich, Switzerland*

The international working group on disorders specifically associated with stress provided new or revised versions for the following disorders: Post-traumatic stress disorder, complex post-traumatic stress disorder, prolonged grief disorder, and adjustment disorder (see recent papers in *The Lancet*, 2013, and *World Psychiatry*, 2013). Field studies in six countries from all world regions had been conducted that investigate validity, reliability, and utility of the definitions and criteria by multi-method assessment in diverse populations. Findings of an online field study on our proposals will be presented. For PTSD, complex PTSD, and prolonged grief disorders members of the WHO working group will present on recent studies conducted all over the world.

**Symposium**  
**Friday, November 7**  
**10:30 AM to 11:45 AM**  
**Versailles**

## **Results of Internet-based Field Studies for ICD-11 Disorders Specifically Associated with Stress**

(Res Meth, Assess Dx-Global, Prof, I, Global)

Keeley, Jared, PhD  
*Mississippi State University, Mississippi State, Mississippi, USA*

The World Health Organization has adopted a novel field study strategy as part of its revision of the International Classification of Diseases (ICD) to the 11th edition. Given WHO's focus on improving the clinical utility of the manual, it has undertaken a series of internet-based field studies to investigate practicing clinicians' decision making process when using the diagnostic guidelines of the ICD. These studies are experimental designs employing a vignette methodology that allows the investigators to manipulate the presence of specific information in a way that cannot be done with in-person, clinic-based field trials. This session will outline selected findings from the internet-based field trial of the Disorders Specifically Associated with Stress. For example, the addition of Complex PTSD seems to clarify the diagnostic landscape relative to diagnostic options available under ICD-10, but the addition of functional impairment to the definition of PTSD may have limited utility beyond what clinicians are already recognizing. These findings will highlight the ability of this methodology to improve the clinical utility of the manual through suggesting specific revisions to the current ICD-11 proposals based upon how practicing clinicians use the new diagnostic guidelines under controlled settings.

**Symposium**  
**Friday, November 7**  
**10:30 AM to 11:45 AM**  
**Versailles**

### **Implications of Simplifying the Measurement of PTSD in ICD-11**

(Assess Dx, Assess Dx-Comm/Vio-Tech/Dis, Adult, I, Industrialized)

**Brewin, Chris, PhD**

*University College London, London, United Kingdom*

Using the most common approach to diagnosing PTSD there are around 80,000 different combinations of qualifying symptoms under DSM-IV, rising to over 636,000 combinations in DSM-5. Recent research has confirmed a high degree of variability in presentation with over 1,800 different combinations of qualifying symptoms present in a single large dataset of U.S. servicemen and women with DSM-IV PTSD. If ICD-11 is approved there will be 27 valid combinations of symptoms that could lead to a PTSD diagnosis. I will report re-analyses of data from two existing studies, one of victims of a man-made disaster and one of crime victims, to examine the overlap between ICD-11 and earlier DSM PTSD diagnoses, as well as comparisons of risk factors for both methods of diagnosis. The results will provide evidence about the consequences of simplifying PTSD and whether this is likely to result in the identification of different patient cohorts.

**Symposium**  
**Friday, November 7**  
**10:30 AM to 11:45 AM**  
**Versailles**

### **An International Approach to Diagnoses: Evidence for the Validity and Clinical Utility of ICD-11 PTSD and Complex PTSD**

(Assess Dx, Complex-Cul Div-Global, Lifespan, I, Global)

**Cloitre, Marylene, PhD**

*National Center for PTSD-Dissemination and Training Division, Menlo Park, California, USA*

The ICD-11 Stress and Trauma Workgroup was tasked by the World Health Organization to organize a spectrum of stress and trauma related disorders based on the principle of clinical utility. Clinical utility includes the organization of diagnoses that are in accord with clinicians' intuitive mental health taxonomies, that can be relatively easily assessed and identified, and that have transparent implications for treatment. This presentation will review the proposed distinction between PTSD and Complex PTSD along these criteria. First, evidence regarding the construct validity of this distinction will be presented. Data from four different samples indicate the presence of two distinct classes of individuals (those with PTSD and with CPTSD). The distinction was observed across both clinical and national epidemiological samples as well as from samples with different kinds of traumatic exposures and from different countries. We will also report on the results of an international survey that includes vignette presentation which indicate that clinicians value the distinction and that the distinction between the two disorders is reliably made across many cultures and nationalities. Implications for assessment and treatment will be discussed.



**Symposium**  
**Friday, November 7**  
**10:30 AM to 11:45 AM**  
**Versailles**

**Prolonged Grief Disorder in ICD-11**

(Assess Dx, Clinical Practice-Death, Lifespan, I, Global)

**Bryant, Richard, PhD**

*University of New South Wales, Sydney, NSW, Australia*

This paper provides an overview of the new Prolonged Grief Disorder that is proposed for ICD-11. This review gives an historical account of how psychiatry has addressed complex bereavement-related conditions, and considers the reasons for and against introducing the new diagnosis. It describes the considerable evidence for the distinctive syndrome of Prolonged Grief, the contribution it makes to persistent impairment, and the specific treatment needs of people diagnosed with Prolonged Grief Disorder. Its passage to date through the ICD-11 process is juxtaposed with the DSM-5 process, which decided to not recognize Prolonged Grief as a primary psychiatric disorder but an area which requires further study. Finally, the resistance to the new diagnosis is discussed and balanced against the needs of those suffering with this condition.

**Symposium**  
**Friday, November 7**  
**10:30 AM to 11:45 AM**  
**Biscayne - BIOLOGY TRACK**

## **Sex-Specific Genetic and Epigenetic Markers of Trauma Exposure, PTSD, and Related Endophenotypes**

(Bio Med, Bio Med-CSA-Gen/Int-Health, Adult, M, Industrialized)

Wolf, Erika, PhD  
*National Center for PTSD, VA Boston Healthcare System, Boston University School of Medicine, Boston, Massachusetts, USA*

There is a wealth of literature suggesting differential prevalence of trauma exposure and post-traumatic stress disorder (PTSD) across men and women. The primary focus of this has been on possible environmental and psychosocial explanations for these differences, and it is only quite recently that sex-specific genetic and epigenetic links to trauma and PTSD have been investigated. This symposium features research showing sex-specific genetic and epigenetic markers of trauma exposure, PTSD, and PTSD-relevant endophenotypes. Specifically, the papers describe cutting-edge work on: (1) acquired chromosomal changes and epigenetic alterations in women following exposure to childhood sexual abuse; (2) variants in the corticotropin releasing hormone receptor 2 (*CRHR-2*) gene and reduced risk for PTSD among trauma-exposed women; (3) a variant in the FK binding protein 5 (*FKBP5*) gene and deficits in fear discrimination among trauma-exposed men; and (4) methylation of the histone deacetylase 4 (*HDAC4*) gene and risk for PTSD in women. Collectively, these studies suggest that there may be basic biological differences in the pathophysiology of post-traumatic psychopathology across men and women and underscore the need for additional research on sex-specific genetic markers of trauma-related phenomena.

**Symposium**  
**Friday, November 7**  
**10:30 AM to 11:45 AM**  
**Biscayne - BIOLOGY TRACK**

## **A Discordant Monozygotic (MZ) Twin Study of Childhood Sexual Abuse: Effects on Acquired Epigenetic and Chromosomal Instability Alterations**

(Bio Med, CSA-Gen/Int-Bio/Int, Adult, M, Industrialized)

**Amstadter, Ananda, PhD<sup>1</sup>**; York, Timothy, PhD<sup>1</sup>; Brumelle, Jenni, PhD<sup>2</sup>; Dochelli, Kate, PhD Candidate<sup>2</sup>; Juusola, Jane, PhD<sup>2</sup>; Kendler, Kenneth, MD<sup>1</sup>; Eaves, Lindon, PhD<sup>1</sup>; Aggen, Steven, PhD<sup>1</sup>; Latendresse, Shawn, PhD<sup>3</sup>; Jackson-Cook, Colleen, PhD<sup>2</sup>

<sup>1</sup>*Virginia Institute for Psychiatric and Behavioral Genetics, VCU, Richmond, Virginia, USA*

<sup>2</sup>*Virginia Commonwealth University, Richmond, Virginia, USA*

<sup>3</sup>*Baylor College of Medicine, Richmond, Virginia, USA*

Childhood sexual abuse (CSA) increases risk for health problems across the lifespan. We hypothesize that CSA exerts its effects on health via acquired somatic chromosomal and epigenetic alterations. To test this hypothesis we collected blood from female adult monozygotic (MZ) twins (17 pairs, 34 individuals) who were discordant for CSA. Acquired chromosomal changes were measured using the cytokinesis-block micronucleus (MN) assay, which scores numerical and structural anomalies. Epigenetic alterations were quantified by DNA methylation profiles using the Illumina 450K BeadChip. CSA+ twins exhibited a 1.63-fold increase in MN frequency compared to their CSA-cotwin (Paired t-test,  $t_{16}=2.65$ ,  $p=0.017$ ). Extrapolating from normative data, the observed increase in MN in the

CSA+ twins represents a 9.9 year biological age increase compared to their CSA- cotwin. Divergence in methylation profiles were detected for 465 sites (FDR of 15%). The majority of these differences (393 sites; 84.5%) were attributable to hypomethylation in the CSA+ twins, suggesting that abused twins may have activation of normally inactivated genomic regions. The hypomethylated cytosines were preferentially located in sites outside of CpG islands, in CpG shores or “open sea” sequences (Binomial test  $p=0.06$ ). Results support a link between CSA and both epigenetic and chromosomal instability frequencies in adults.

## **Symposium**

**Friday, November 7**

**10:30 AM to 11:45 AM**

**Biscayne - BIOLOGY TRACK**

### **The Corticotropin Releasing Hormone Receptor 2 (CRHR-2) Gene and PTSD: Evidence for Association in Trauma-Exposed Women**

(Bio Med, Bio Med-Gen/Int-Bio/Int, Adult, M, Industrialized)

**Wolf, Erika, PhD<sup>1</sup>**; Mitchell, Karen, PhD<sup>2</sup>; Logue, Mark, PhD<sup>3</sup>; Miller, Mark, PhD<sup>1</sup>

<sup>1</sup>*National Center for PTSD, VA Boston Healthcare System, Boston University School of Medicine, Boston, Massachusetts, USA*

<sup>2</sup>*National Center for PTSD, Women's Health Sciences Division, VA Boston Healthcare System and Boston University School of Medicine, Boston, Massachusetts, USA*

<sup>3</sup>*Boston University School of Medicine, Boston, Massachusetts, USA*

Corticotropin releasing hormone (CRH) is important for mounting human physiological and behavioral responses to stressors and for returning the body to a state of homeostasis following stressor exposure. The CRH receptor-2 (CRHR-2) is particularly important for modulating the stress response system and reducing symptoms of anxiety. The aim of this study was to examine the association between the *CRHR-2* gene and risk for PTSD in a sample of 491 White, non-Hispanic, trauma-exposed veterans and their trauma-exposed intimate partners, approximately 60% of whom met criteria for a lifetime diagnosis of DSM-IV PTSD. Information on genetic variability was drawn from a 2.5 million single nucleotide polymorphism (SNP) array and variants within *CRHR-2* were examined in comparison to lifetime PTSD diagnosis and latent PTSD severity. After correcting for multiple-testing across the gene, two SNPs (rs8192496 and rs2190242) were significantly associated with reduced risk for PTSD and lower PTSD severity (corrected  $ps = .01$ ); these effects were specific to women. Findings are consistent with animal research supporting female-specific associations between CRHR-2 and anxiety and depression-like behavior.

## **Symposium**

**Friday, November 7**

**10:30 AM to 11:45 AM**

**Biscayne - BIOLOGY TRACK**

### **FKBP5 Genotype and Fear Discrimination in Males Exposed to Combat or Civilian Trauma**

(Bio Med, Complex-Mil/Vets, Adult, M, Industrialized)

**Norrholm, Seth, PhD<sup>1</sup>**; Jovanovic, Tanja, PhD<sup>2</sup>; Bradley, Bekh, PhD<sup>1</sup>; Almlie, Lynn, PhD<sup>2</sup>; Smith, Alicia, PhD<sup>2</sup>; Ressler, Kerry, MD PhD<sup>2</sup>

<sup>1</sup>*Atlanta VAMC/Emory University, Decatur, Georgia, USA*

<sup>2</sup>*Emory University School of Medicine, Atlanta, Georgia, USA*

Polymorphisms in the FKBP5 gene have been associated with risk for PTSD after exposure to traumatic events. Other HPA axis regulating genes show sex-specific activity, with only males exhibiting the risk phenotypes. The risk allele of the FKBP5 SNP rs1360780 has also been linked to decreased hippocampal volume and function and alterations in white matter tracts in the brain. These brain regions are involved in stimulus memory and discrimination between danger and safety signals. The current study examined the association between FKBP5 genotype and discrimination of fear-conditioned stimuli in males and females with varying degrees of trauma exposure and trauma type. In a sample of male combat veterans (N=91), we found that T allele carriers of rs1360780 showed less discrimination between a conditioned danger cue and safety cue  $F(1,90)=4.87$ ,  $p=.03$ , even after controlling for level of combat exposure ( $p=.05$ ). In a sample of civilians with significant childhood trauma, males (N=89) with the T allele showed less fear discrimination compared to CC genotype,  $F(1,88)=3.89$ ,  $p=.05$ , while females (N=157) did not show an effect of genotype. These results suggest that in males, but not females, genes related to HPA axis function and its neural substrates might be associated with intermediate phenotypes for PTSD.

## Symposium

**Friday, November 7**

**10:30 AM to 11:45 AM**

**Biscayne - BIOLOGY TRACK**

### **Genetic and Epigenetic Associations of HDAC4 in Women with PTSD**

(Bio Med, Chronic-Complex-Gen/Int, Adult, M, Industrialized)

**Smith, Alicia, PhD<sup>1</sup>**; Almli, Lynn, PhD<sup>1</sup>; Kilaru, Varun, MS<sup>1</sup>; Conneely, Karen, PhD<sup>1</sup>; Binder, Elisabeth, MD PhD<sup>2</sup>; Ressler, Kerry, MD PhD<sup>1</sup>

<sup>1</sup>*Emory University School of Medicine, Atlanta, Georgia, USA*

<sup>2</sup>*Emory University, Atlanta, Georgia, USA*

DNA methylation differences associate with post-traumatic stress disorder (PTSD). Despite higher PTSD rates in women, no study has evaluated sex-specific epigenetic effects. We examined DNA methylation (HumanMethylation450), RNA expression (HT-12) and genotypes (OmniExpress/Quad) from 410 subjects (57.8% female) from the Grady Trauma Project. For all genes expressed in blood, we examined the association between each CpG site and PTSD diagnosis (Modified PTSD Symptom Scale) using linear models that adjusted for cell proportions and age as covariates. A false discovery rate (FDR) of 5% was used to correct for multiple tests. CpG sites in histone deacetylase 4 (*HDAC4*) and *N4BP2* associate with PTSD ( $FDR<.05$ ;  $p=4.8 \times 10^{-7}$ ) in women, but not in men ( $p>.05$ ). The function of *N4BP2* is not clear, but *HDAC4* is involved in long-term memory formation and behavior through interaction with specific proteins including estrogen receptor alpha, suggesting a potential sex-specific mechanism. DNA methylation of *HDAC4* CpG sites appear to influence its expression level ( $p=2.2 \times 10^{-6}$ ), and single nucleotide polymorphisms in *HDAC4* also associate with PTSD in women ( $p=.0052$ ). Sex-specific genetic and epigenetic predictors of PTSD may help to explain the genetic heterogeneity in PTSD. These data suggest that regulation and expression of *HDAC4* may contribute to PTSD in women.

**Symposium**  
**Friday, November 7**  
**10:30 AM to 11:45 AM**  
**Windsor/Sandringham**

## **Prevention of Trauma, Violence, and Associated Negative Outcomes**

(Prevent, Clin Res-DV-Rape, Adult, M, N/A)

Johnson, Dawn, PhD  
*University of Akron, Akron, Ohio, USA*

Violence is a significant public health problem in American society. Little is known about both the prevention of violence and the prevention of violence-associated negative outcomes in traumatized populations. This symposium will address this gap in the violence and trauma literature, presenting a series of diverse studies all focusing on prevention. Research related to two interventions specifically designed to prevent violence in high risk populations will be presented. First, results of a randomized clinical trial of a domestic violence prevention intervention in returning veterans will be presented. Next, research on a rape prevention intervention for university students will be described. Then, data from two interventions designed to prevent some of the negative health outcomes associated with violence and trauma will be presented. First, data from an open trial of a HIV risk prevention intervention for victims of intimate partner violence will be presented. Finally, preliminary pilot data from an obstetric care program designed to reduce negative birth outcomes in abused pregnant women will be presented. Future directions for prevention research for violence and associated negative outcomes will be discussed.

**Symposium**  
**Friday, November 7**  
**10:30 AM to 11:45 AM**  
**Windsor/Sandringham**

## **Strength at Home Couples Partner Violence Prevention Program: Randomized Clinical Trial Findings**

(Prevent, DV-Mil/Vets, Adult, M, N/A)

**Taft, Casey, PhD<sup>1</sup>**; Creech, Suzannah, PhD<sup>2</sup>; Stavitsky Gilbert, Karina, PhD<sup>3</sup>; Massa, Andrea, BA<sup>4</sup>; Howard, Jamie, PhD<sup>5</sup>; Monson, Candice, PhD<sup>6</sup>

<sup>1</sup>*National Center for PTSD at VA Boston Healthcare System and Boston University, Boston, Massachusetts, USA*

<sup>2</sup>*Providence VA Medical Center, Brown University, Providence, Rhode Island, USA*

<sup>3</sup>*National Center for PTSD, Boston VA Medical Center, Boston, Massachusetts, USA*

<sup>4</sup>*National Center for PTSD and VA Boston Healthcare System, Boston, Massachusetts, USA*

<sup>5</sup>*National Center for PTSD / Boston University, Boston, Massachusetts, USA*

<sup>6</sup>*Ryerson University, Toronto, Ontario, Canada*

Studies indicate that intimate partner violence (IPV) occurs at a higher rate among military and Veteran samples compared to civilian samples. The Strength at Home- Couples (SAH-C) program is a cognitive-behavioral, trauma informed dyadic group intervention designed to prevent IPV in returning male service members and their intimate female partners. In this presentation we will present final results from a randomized clinical trial comparing the efficacy of the SAH-C intervention to a supportive dyadic group treatment (ST). Initial analyses of follow-up data 6 months after the treatment for 78 couples revealed a significant effect of group whereby both Veteran and partner perpetrated psychological IPV were significantly lower in couples in the SAH-C condition than in the ST condition ( $F(1,46) = 6.37, p = .015$ ;  $F(1,46) = 7.64, p = .008$ ). There was no significant effect of group type on physical IPV perpetration by either the Veteran or partner ( $p$ -values  $>.05$ ), and physical IPV did not significantly increase at 6

month follow-up, which was expected since violent couples were screened out at baseline. These preliminary results suggest the efficacy of the SAH-C intervention for preventing and reducing psychological IPV.

## **Symposium**

**Friday, November 7**

**10:30 AM to 11:45 AM**

**Windsor/Sandringham**

### **Rapid HIV Testing and Counseling in Battered Women in Shelters**

(Prevent, Clin Res-DV, Adult, M, N/A)

**Johnson, Dawn, PhD<sup>1</sup>**; Zlotnick, Caron, PhD<sup>2</sup>; Johnson, Nicole, Doctoral Student<sup>1</sup>; Baker, Brittany, Doctoral Student<sup>1</sup>

<sup>1</sup>*University of Akron, Akron, Ohio, USA*

<sup>2</sup>*Brown University Warren Alpert Medical School, Providence, Rhode Island, USA*

More than one million Americans are living with HIV, with over 20% unaware of their HIV status. Early detection of HIV status is crucial to prevent transmission to others and to link those who are HIV positive to medical care and other clinical services. A growing body of literature highlights the association between intimate partner violence (IPV) and HIV risk. Given the prevalence of battered women's shelters, as well as a the safe, supportive, and resource rich environment provided by them, shelters present an opportune setting for providing health care services for women. This presentation will describe the development and results of an open trial evaluating the feasibility, acceptability, and initial efficacy of a RESPECT-IPV. RESPECT-IPV was adapted from an established CDC Diffusion of Effective Behavioral Interventions (DEBI) to address safety and other unique needs of women in shelters. Preliminary analyses with the first 43 women who participated in RESPECT-IPV support the feasibility and acceptability of the intervention. Overall satisfaction with the intervention is high (i.e., average satisfaction rating of 3.84 on 4.0 scale) and women report significant gains as a result. Qualitative and quantitative outcome analyses of the intervention, as well as implications for future research will be discussed.

## **Symposium**

**Friday, November 7**

**10:30 AM to 11:45 AM**

**Windsor/Sandringham**

### **Defined Lines: Going beyond Bystander Intervention to Prevent Sexual Violence on College Campuses**

(Prevent, Commun-Rape, Adult, M, N/A)

**Johnson, Nicole, MA<sup>1</sup>**; Johnson, Dawn, PhD<sup>2</sup>

<sup>1</sup>*University of Akron, Copley, Ohio, USA*

<sup>2</sup>*University of Akron, Akron, Ohio, USA*

Until recently, rape prevention programs taught women how to avoid being victims and educated men on how not to be rapists. In 1995, Katz proposed the bystander approach to rape prevention. Although research has supported the efficacy of such programs in decreasing rape myth acceptance and increasing individuals' willingness to intervene in potential rape scenarios, research has demonstrated little to no effect of such programming on actual bystander behavior. Therefore, Defined Lines (DL) was designed as a "bystander-plus" model, which takes the benefits of bystander models, while going beyond such models to address the existent limitations. This presentation will describe the series of studies conducted to create DL. In a study of 503 undergraduate students, the best fitting model of rape culture was a hierarchical latent model with five underlying constructs: sex role stereotyping, hostile



sexism, adversarial sexual beliefs, hostility towards women, and acceptance of violence. No relationship was identified between rape culture and bystander behavior, suggesting the importance of targeting variables other than bystander behavior within rape prevention programming. Further discussion of these findings and their implications, as well as preliminary data on the efficacy of DL will be presented.

## **Symposium**

**Friday, November 7**

**10:30 AM to 11:45 AM**

**Windsor/Sandringham**

### **Improving Pregnancy Outcomes for Survivors of Abuse using Trauma-sensitive Obstetric Care**

(Clin Res, Bio Med-CSA-Health, Adult, M, Industrialized)

**Stevens, Natalie, PhD<sup>1</sup>**; Anaya, Heather, DO<sup>1</sup>; Hobfoll, Stevan, PhD<sup>2</sup>

<sup>1</sup>*Rush University Medical Center, Chicago, Illinois, USA*

<sup>2</sup>*Rush Medical College, Chicago, Illinois, USA*

Abuse and post-traumatic stress (PTS) are powerful risk factors for adverse pregnancy outcomes. Given that obstetric care is invasive and can exacerbate PTS during pregnancy, interventions are needed to increase women's coping and minimize retraumatization. The aim of this pilot study is to develop a multi-level (psychological and medical) trauma-sensitive intervention to promote Control, Anxiety-Reduction, and Empowerment (TO-CARE) for pregnant abuse survivors. Adult pregnant abuse survivors with PTS were invited to receive 1) Cognitive-Behavioral Therapy (CBT) addressing self-blame, relaxation skills, assertive communication, and self-care, and 2) Trauma-sensitive Obstetric Care from trained physicians during prenatal visits. 78 pregnant patients were screened and 36 qualified. Of those (64% African-American), 42% reported childhood physical abuse, 37% reported childhood sexual abuse, and 29% reported multiple lifetime sexual traumas. 19 women completed baseline assessment and 9 received the CBT and Trauma-sensitive Obstetric Care. Paired-samples t-tests revealed significant improvement in PTS,  $t(8) = 2.751$ ,  $p < .05$ ,  $d = 1.07$  and depression  $t(8) = 7.341$ ,  $p < .01$ ,  $d = 3.62$ . Obstetric physicians were observed during prenatal visits and used 30-75% of trauma-sensitive behaviors. Data show that TO-CARE is a promising, feasible and acceptable intervention for pregnant abuse survivors.

**Symposium**  
**Friday, November 7**  
**10:30 AM to 11:45 AM**  
**Bayfront A - CHILD TRACK ONE**

## **Addressing Violence in Community-Based and Clinical Interventions for Children and Families: To what Degree Does a Trauma-Focus Add to Understanding and Changing Child Outcomes?**

(Commun, CPA-Clin Res-DV-Fam/Int, Child/Adol, M, Industrialized)

De Schipper, J. Clasien, PhD<sup>1</sup>; Goldbeck, Lutz, PhD<sup>2</sup>  
<sup>1</sup>*VU University, Amsterdam, Noord Holland, Netherlands*  
<sup>2</sup>*University Ulm, Ulm, Baden-Wuerttemberg, Germany*

Guidelines for treating post-traumatic stress disorders in children state that therapy with a trauma-focus is superior to no trauma focus (AACAP, 2010). The evidence for a trauma focus in treatment after interpersonal violence is less elaborate. In this symposium, three empirical studies in community-based mental health care programs are presented. The first presentation reports on an RCT on the effectiveness of an evidence based treatment for family conflict/coercion and child physical abuse in community agencies. Both changes in child PTS outcomes and parental functioning will be discussed. The second study, an RCT on a community –based intervention for children exposed to interparental violence compared to an alternative program without specific treatment factors, will also report on changes in child PTS outcomes and parental functioning as well as intervention factors that may promote mechanisms of change. The third study is situated in mental health care and will address to what degree (young) adolescents exposed to interpersonal violence both within and outside the family report a traumatic impact of these violence experiences. Furthermore, associations with severity of their mental health problems are presented. Through different lenses, these studies will evaluate the need for a trauma focus when children are exposed to interpersonal violence.

**Symposium**  
**Friday, November 7**  
**10:30 AM to 11:45 AM**  
**Bayfront A - CHILD TRACK ONE**

## **An RCT of Alternatives for Families: A Cognitive Behavioral Therapy (AF-CBT) for Aggressive/Abusive Families Referred to Community Practitioners: Clinical Effectiveness**

(Commun, Aggress-CPA-Clin Res-Fam/Int, Child/Adol, M, Industrialized)

**Kolko, David, PhD, ABPP**  
*University of Pittsburgh School of Medicine, Pittsburgh, Pennsylvania, USA*

The Partnerships for Families project is a randomized clinical effectiveness trial designed to evaluate the dissemination of Alternatives for Families: A Cognitive-Behavioral Therapy (AF-CBT), an evidence based treatment for family conflict/coercion and child physical abuse. Across 10 community agencies, practitioners were randomized to receive 6 months of AF-CBT training (n = 90) using a learning community model (workshops, consultation visits, tape reviews) or training as usual (TAU; n = 92) which provided trainings per agency routine. To evaluate the clinical effectiveness of this approach, we recruited families who were referred to

practitioners in the AF-CBT (n = 106) and TAU (n = 89) conditions and collected outcomes at 4 time points (0, 6, 12, and 18 months post baseline). Relative to TAU, families receiving AF-CBT showed several significant improvements in child (e.g., fewer behavior problems and trauma symptoms) and parental functioning (e.g., less aggression, lower risk status risks) based on HLM analyses. Within-group changes documented greater reductions in the use of any severe violence in AF-CBT (vs. TAU) and in the proportion of cases meeting the clinical cutoff for child trauma symptoms. These findings are discussed in the context of the need to serve families presenting with heightened level of anger/abuse in community settings.

## **Symposium**

**Friday, November 7**

**10:30 AM to 11:45 AM**

**Bayfront A - CHILD TRACK ONE**

### **Treatment Factors and Mechanisms of Change in Intervention for Child-Witnesses of Interparental Violence**

(Clin Res, Chronic-Commun-DV-Prevent, Child/Adol, M, Industrialized)

**Overbeek, Mathilde, PhD;** De Schipper, J. Clasien, PhD; Willemsen, Agnes, PhD; Lamers-Winkelmann, Francien, PhD; Schuengel, Carlo, PhD

*VU University, Amsterdam, Noord Holland, Netherlands*

Children exposed to interparental violence (IPV) are at heightened risk for developing PTS-symptoms. An important question regards the conditions for children to recover from the impact of experiencing IPV. Effectiveness of treatment factors used in IPV-focused intervention for children and mechanisms of change were tested. Parent-child dyads were randomized to 1) a trauma-focused program or 2) a common factors program. Measurements of PTS in 139 IPV-exposed children (aged 6-12 years, 54% boys) were fitted in a multilevel model. Tested mechanisms of change were children's emotion-differentiation and coping skills, parenting stress, parental psychopathology and parent-child interaction. In both conditions exposure to non-specific, general specific and trauma-specific intervention factors was coded from videotaped sessions. No difference in effectiveness between conditions was found. Improved parental mental health mediated the link between more exposure to non-specific treatment factors and a decrease in PTS-symptoms. More exposure to non-specific treatment factors in sessions was associated with more positive parent-child interaction. Results show that children exposed to IPV benefit from intervention. Inclusion of parents in intervention is important. The effect of trauma-specific factors in intervention is less clear, and so far appears not to be clearly beneficial.

## **Symposium**

**Friday, November 7**

**10:30 AM to 11:45 AM**

**Bayfront A - CHILD TRACK ONE**

### **Family Violence and Other Potentially Traumatic Interpersonal Events among Nine to Seventeen-Year-Old Children Attending a Child and Adolescent Mental Health Clinic**

(Assess Dx, CPA-Clin Res-DV, Child/Adol, M, Industrialized)

**Hultmann, Ole, Doctoral Student**

*University of Gothenburg, Gothenburg, Sweden*

The purpose of this study was to compare children attending child- and adolescent mental health care (CAM) subjected to potentially traumatic InterPersonal Events outside the family (IPE), family violence (FV) or FV plus IPE (FV + IPE), with children reporting no exposure to FV or IPE. Using an adapted version of the Life Incidence of Traumatic Events questionnaire (LITE), 305 consecutively enrolled nine to seventeen-year-old patients were routinely asked about their experiences of IPE and FV. Experiences of interpersonal violence were reported by 67 percent of the patients: FV + IPE (27 %), FV (21 %), IPE (19 %), no exposure to FV or IPE (33 %). Outcome measures were: impact of experiences peri- and post-trauma, mental health (Strength and Difficulties Questionnaire) and DSM IV diagnoses. Statistically significant associations were found between violence exposure and impact of the violence experience, self-reported symptoms and diagnoses. Children in the no-violence group and IPE group showed few associations with background variables and outcome measures. We recommend that staff in CAMs routinely ask about experiences of FV and IPE. Given the magnitude of the problem and its importance for correct case management, there is a need for more studies on exposure to FV and IPE in CAM and its relation to psychiatric symptomatology.

## **Symposium**

**Friday, November 7**

**10:30 AM to 11:45 AM**

**Brickell - MILITARY TRACK**

## **Training U.S. Department of Veterans Affairs Clinicians in Prolonged Exposure Therapy: Evaluation Data and Lessons Learned**

(Train/Ed/Dis, Clin Res-Clinical Practice-Train/Ed/Dis-Mil/Vets, Prof, M, Industrialized)

Rosen, Craig, PhD<sup>1</sup>; Ruzek, Josef, PhD<sup>2</sup>

<sup>1</sup>VA Palo Alto Health Care System, National Center for PTSD/Stanford University, Menlo Park, California, USA

<sup>2</sup>National Center for PTSD – Dissemination and Training Division, VA Palo Alto Health Care System, Menlo Park, California, USA

This symposium reports on ongoing efforts to train U.S. Department of Veterans Affairs (VA) VA clinicians in prolonged exposure (PE; Foa, Rothbaum, and Hembree, 2007), one of the evidence-based treatments for PTSD. Three presentations involve evaluation data from a VA initiative that has trained over 1,200 clinicians in PE. Dr. Crowley will first discuss provider receptivity to PE and how trainees' beliefs about PE changed during different phases of the training process. Dr. Eftekhari will review outcomes data from 3,133 veterans treated by participants in the training program to assess whether PE can be effective with a predominantly male veteran patient population and whether clinicians with varying types of prior experience can learn to deliver PE effectively. Dr. Rosen will report on providers' use of PE after training and factors that influenced their continued use of PE. The intensive in-person training model discussed in the first three talks is effective but expensive in staff time and travel costs. As an example of an alternative approach, Dr. Kuhn will discuss use of a web-based training program, PEWeb (PE.musc.edu; Ruggiero et al., 2013), as part of psychiatry residents' psychotherapy training, and will review residents' and supervisors' experiences with this pilot program.

**Symposium**  
**Friday, November 7**  
**10:30 AM to 11:45 AM**  
**Brickell - MILITARY TRACK**

**Effects of Training on Clinician Beliefs about and Intention to Use Prolonged Exposure Therapy**

(Train/Ed/Dis, Clinical Practice-Train/Ed/Dis-Mil/Vets, Prof, M, Industrialized)

Rosen, Craig, PhD<sup>1</sup>; **Crowley, Jill, PhD<sup>2</sup>**; Eftekhari, Afsoon, PhD<sup>2</sup>; Ruzek, Josef, PhD<sup>2</sup>; Kuhn, Eric, PhD<sup>2</sup>; Karlin, Brad, PhD<sup>3</sup>

<sup>1</sup>VA Palo Alto Health Care System, National Center for PTSD/Stanford University, Menlo Park, California, USA

<sup>2</sup>National Center for PTSD – Dissemination and Training Division, VA Palo Alto Health Care System, Menlo Park, California, USA

<sup>3</sup>EDC (Education Development Center), New York, New York, USA

Scientific evidence for the efficacy of a given treatment does not guarantee its adoption in clinical practice. The U.S. Department of Veterans Affairs (VA) training initiative aimed to not only give clinicians the requisite skills needed to deliver PE effectively, but also to instill attitudes that would support their continued use of this treatment. The VA PE Training Program involves two major components: a 4-day interactive training workshop followed by a minimum of six months of expert case consultation on the implementation of PE with at least two cases. Nine hundred forty three clinicians completed measures of their treatment goals, beliefs about how PE would impact their patients and themselves, and self-efficacy prior to the 4-day interactive workshop, after the workshop, and after completing case consultation. Expectations that patients would benefit from PE, beliefs that patients would not be harmed by PE, and self-efficacy to deliver PE improved during the workshop and were further enhanced during case consultation. Clinicians' concerns about PE being too emotionally burdensome and too time-consuming were not impacted by the workshop but were substantially reduced after trainees got experience using PE in the case consultation phase of training.

**Symposium**  
**Friday, November 7**  
**10:30 AM to 11:45 AM**  
**Brickell - MILITARY TRACK**

**Using PEWeb in Psychiatry Resident Training and Supervision in Prolonged Exposure Therapy**

(Train/Ed/Dis, Clinical Practice-Tech-Train/Ed/Dis-Mil/Vets, Prof, M, Industrialized)

Rosen, Craig, PhD<sup>1</sup>; **Kuhn, Eric, PhD<sup>2</sup>**; Hugo, Emily, PhD<sup>3</sup>

<sup>1</sup>VA Palo Alto Health Care System, National Center for PTSD/Stanford University, Menlo Park, California, USA

<sup>2</sup>National Center for PTSD – Dissemination and Training Division, VA Palo Alto Health Care System, Menlo Park, California, USA

<sup>3</sup>VA Palo Alto Health Care System, Menlo Park, California, USA

Effectively disseminating evidence-based psychotherapies for PTSD presents a tremendous challenge for healthcare systems. Conventional training models typically entail a multiday, in-person course requiring enormous resources in terms of time and cost and are inherently inconvenient for busy clinicians. Web-based programs hold promise to meet this training need as they are relatively inexpensive once built, highly scalable to deploy, and convenient to use. We discuss integrating PEWeb (PE.musc.edu; Ruggiero et al., 2013) into psychiatry residents' 6-month VA PTSD psychotherapy training. We highlight how using PEWeb has affected the PE training experience of both the

residents (N = 5) and supervisors (N = 2). We note how residents experienced integration of PEWeb with in-person didactics, and how they used it throughout supervision while implementing PE. We will share our impressions of the advantages, disadvantages, and unexpected consequences of bringing PEWeb into an existing PE training program. Feedback has been generally favorable. Residents have valued the convenience afforded by the web training. Supervisors have appreciated the time it has freed up during supervision, allowing for more emphasis on implementing PE practices with patients as well as the residents' developmental needs rather than focusing on didactic content.

## **Symposium**

**Friday, November 7**

**10:30 AM to 11:45 AM**

**Brickell - MILITARY TRACK**

### **Outcomes of Prolonged Exposure Therapy in VA Care: Provider and Patient Factors**

(Train/Ed/Dis, Clin Res-Clinical Practice-Train/Ed/Dis, Adult, M, Industrialized)

Rosen, Craig, PhD<sup>1</sup>; Eftekhari, Afsoon, PhD<sup>2</sup>; Crowley, Jill, PhD<sup>2</sup>; Ruzek, Josef, PhD<sup>2</sup>; Garvert, Donn, MS<sup>3</sup>; Karlin, Brad, PhD<sup>4</sup>

<sup>1</sup>VA Palo Alto Health Care System, National Center for PTSD/Stanford University, Menlo Park, California, USA

<sup>2</sup>National Center for PTSD – Dissemination and Training Division, VA Palo Alto Health Care System, Menlo Park, California, USA

<sup>3</sup>National Center for PTSD, Menlo Park, California, USA

<sup>4</sup>EDC (Education Development Center), New York, New York, USA

Although the efficacy of prolonged exposure (PE) psychotherapy for PTSD has been demonstrated in numerous clinical trials, it was unclear how effective it would be with veterans treated by clinicians newly trained in this treatment. This paper reports outcomes of 3,133 veterans treated by 1,105 mental health providers who were participating in the VA PE training program. Patients completed biweekly assessments with the PTSD Checklist and Beck Depression Inventory during treatment. Most patients experienced clinically and statistically significant reductions in PTSD (pre-post  $d = .95$ ) and depression symptom severity (pre-post  $d = .75$ ) during treatment. Patient-level predictors of lower PTSD and depression severity at the end of treatment included receiving a full “dose” of 8 or more sessions, being female, lower initial depression severity and (for PTSD Checklist only) lower PTSD severity. Depression improved slightly more among Veterans with non-military, post-childhood trauma. Positive patient outcomes were achieved by providers of every theoretical orientation, level of clinical experience treating PTSD, and prior PE training experience. Social workers obtained marginally better outcomes than did psychologists. Results demonstrate that clinicians of varying backgrounds can be trained through interactive training workshops and case consultation to deliver PE effectively.

## **Symposium**

**Friday, November 7**

**10:30 AM to 11:45 AM**

**Brickell - MILITARY TRACK**

### **Use of Prolonged Exposure Therapy after Completion of Training**

(Train/Ed/Dis, Clin Res-Clinical Practice-Train/Ed/Dis-Mil/Vets, Prof, M, Industrialized)

Rosen, Craig, PhD<sup>1</sup>; Ruzek, Josef, PhD<sup>2</sup>; Eftekhari, Afsoon, PhD<sup>2</sup>; Crowley, Jill, PhD<sup>2</sup>; Kuhn, Eric, PhD<sup>2</sup>; Karlin, Brad, PhD<sup>3</sup>



<sup>1</sup>VA Palo Alto Health Care System, National Center for PTSD/Stanford University, Menlo Park, California, USA

<sup>2</sup>National Center for PTSD – Dissemination and Training Division, VA Palo Alto Health Care System, Menlo Park, California, USA

<sup>3</sup>EDC (Education Development Center), New York, New York, USA

This paper reports on adoption of prolonged exposure psychotherapy (PE) by 810 clinicians who were trained in the U.S. Department of Veterans Affairs (VA) PE training initiative. Mean post-training intent to use PE was very high (mean of 6.7 on a 1-7 scale). Providers' intent to use PE was influenced by changes in their beliefs during the training process, especially during the phase when they treated their first patients and got case consultation. Over three-quarters (77%) of respondents to a follow-up survey were using PE six months after completing training. However, the number of patients whom trainees were treating with PE varied substantially: many were treating only 1 or 2 patients with PE, whereas others were using it more widely. The number of patients that providers were treating with PE depended not only on providers' intent to use PE, but also on providers' degree of control over their schedule, self-efficacy for delivering PE, and self-efficacy for generating referrals. PE being emotionally demanding for the provider was not a barrier to using PE. These results suggest that adoption of PE is influenced by organizational factors (work load and referral processes) as well as by provider buy-in.

## **Symposium**

**Friday, November 7**

**10:30 AM to 11:45 AM**

**Sevilla - LONG-TERM EFFECTS OF CHILD TRAUMA TRACK**

## **Predictors of the Longitudinal Course of Post-Traumatic Stress**

### **Symptoms**

(Assess Dx, Assess Dx, Adult, A, Industrialized)

Sadeh, Naomi, PhD

*National Center for PTSD, VA Boston Healthcare System, Boston University School of Medicine, Boston, Massachusetts, USA*

Four researchers will present findings from prospective studies examining the course of PTSD symptoms in veterans, college students, and emergency room patients. Predictors of PTSD symptoms examined include personality traits, emotion regulation, social support factors, and timing, frequency, and types of stress exposure. Results show that the course of PTSD symptoms is affected by a range of psychosocial and environmental factors.

## **Symposium**

**Friday, November 7**

**10:30 AM to 11:45 AM**

**Sevilla - LONG-TERM EFFECTS OF CHILD TRAUMA TRACK**

## **Effects of Personality and Adverse Life Events on the Course of Post-Traumatic Stress Symptoms in Veterans: A Cross-Lagged Analysis**

(Assess Dx, Anx-Assess Dx, Adult, A, Industrialized)

Sadeh, Naomi, PhD<sup>1</sup>; Wolf, Erika, PhD<sup>1</sup>; Reardon, Annemarie, PhD<sup>2</sup>; Prince, Lauren, BA<sup>3</sup>; Hein, Christina, BA<sup>3</sup>; Ryabchenko, Karen, PhD<sup>1</sup>; Miller, Mark, PhD<sup>1</sup>

<sup>1</sup>National Center for PTSD, VA Boston Healthcare System, Boston University School of Medicine, Boston, Massachusetts, USA

<sup>2</sup>VA Boston Healthcare System, Boston, Massachusetts, USA

<sup>3</sup>VA Boston Healthcare System, National Center for PTSD; Boston University School of Medicine, Boston, Massachusetts, USA

Research shows that personality traits confer vulnerability for the development of post-traumatic stress symptoms (PTSS) following trauma exposure, but the relative influences of personality traits vs. symptom severity on the course of PTSS over time has not been clearly established. In a sample of 242 veterans, the present study examined the transactional effects of broad domains of normal personality (i.e., negative emotionality, positive emotionality, and constraint) and PTSS over a 2-year period using a cross-lagged panel analysis design. We also examined whether exposure to new adverse life events between the baseline and 2-year follow-up assessment mediated the interrelationships of personality traits and PTSS. Trait negative emotionality at baseline predicted higher PTSS severity at follow-up, but PTSS at baseline did not predict later personality trait levels. Exposure to new adverse life events mediated the relationship of personality traits at baseline (specifically high negative emotionality and low constraint) with PTSS severity at the 2-year follow-up. Findings indicate that trait differences in negative emotionality and dysconstraint influence the course of PTSS severity over time via exposure to new adverse life events.

## **Symposium**

**Friday, November 7**

**10:30 AM to 11:45 AM**

**Sevilla - LONG-TERM EFFECTS OF CHILD TRAUMA TRACK**

### **Psychosocial Predictors of Initial versus Chronic PTSD Symptomatology in Female and Male Veterans of OEF/OIF**

(Clin Res, Mil/Vets, Adult, A, Industrialized)

**Vogt, Dawne, PhD<sup>1</sup>**; Smith, Brian, PhD<sup>1</sup>; Fox, Annie, PhD<sup>2</sup>

<sup>1</sup>National Center for PTSD, VA Boston Healthcare System and Boston University, Boston, Massachusetts, USA

<sup>2</sup>VA Boston Healthcare System, National Center for PTSD, Boston, Massachusetts, USA

Studies indicate that risk factors for the development versus maintenance of PTSD may differ (e.g., Koenen et al., 2003; Wolfe, et al., 1999). Further, while most individuals recover, a substantial minority experience chronic PTSD over many years (Schnurr, Lunney, & Sengupta, 2004). It is therefore important to identify predictors of initial versus chronic PTSD. While studies point to pre-trauma circumstances and characteristics of the traumatic event as risk factors, less is known about the role of post-trauma variables in PTSD chronicity. In addition, little is known about the impact of psychosocial factors on initial versus ongoing PTSD among veterans of the recent wars in Iraq and Afghanistan. The aim of this study is to document risk factors for probable PTSD within two years of return from deployment, as compared to approximately four years postdeployment in a large national sample of OEF/OIF veterans. Gender differences will also be examined. While analyses of predictors of maintenance of PTSD await Time 2 data collection, results based on Time 1 (T1; N = 752) indicate that predeployment stress exposure, combat exposure, perceived threat, concerns about family disruptions, postdeployment stress exposure, postdeployment social support, and postdeployment family functioning were all significant predictors of probable PTSD.

## Symposium

Friday, November 7

10:30 AM to 11:45 AM

### Sevilla - LONG-TERM EFFECTS OF CHILD TRAUMA TRACK

#### Prospective Trajectories of Post-Traumatic Stress in College Women Following a Campus Mass Shooting

(Prevent, Comm/Vio, Adult, A, Industrialized)

**Orcutt, Holly, PhD<sup>1</sup>**; Bonanno, George, PhD<sup>2</sup>; Hannan, Susan, MA<sup>1</sup>; Miron, Lynsey, MA PhD Student<sup>1</sup>

<sup>1</sup>*Northern Illinois University, DeKalb, Illinois, USA*

<sup>2</sup>*Teachers College, Columbia University, New York, New York, USA*

Incidents of targeted mass violence are increasing and have significant public health consequences. The aim of the current study was to examine prospective trajectories of post-traumatic stress (PTS) symptoms following a mass shooting and to identify predictive factors associated with trajectory membership. Female participants (N = 660) completed seven waves of a longitudinal study beginning in August, 2006 and ending 31 months post-shooting. Four distinct trajectories were identified: minimal impact-resilience (60.91%), high impact-recovery (29.10%), moderate impact-moderate symptoms (8.19%), and chronic dysfunction (1.79%). Individuals in each trajectory class remained or returned to pre-shooting levels of PTS approximately 6 months post-shooting. The minimal impact-resilience class reported less prior trauma exposure, less shooting exposure, and greater emotion regulation skills than all other classes. The chronic dysfunction class endorsed higher rates of experiential avoidance prior to the shooting than the minimal impact-resilient and high impact-recovery classes, as well as greater shooting exposure than the recovery class. Findings suggest that pre-shooting functioning and emotion regulation distinguish between those who experience prolonged distress following mass violence and those who gradually recover.

## Symposium

Friday, November 7

10:30 AM to 11:45 AM

### Sevilla - LONG-TERM EFFECTS OF CHILD TRAUMA TRACK

#### Psychopathology after Injury: Does Personality Matter?

(Assess Dx, Acc/Inj, Adult, A, Industrialized)

**Fletcher, Susan, PGDip Psych<sup>1</sup>**; Forbes, David, PhD<sup>2</sup>; O'Donnell, Meaghan, PhD<sup>2</sup>

<sup>1</sup>*ACPMH, University of Melbourne, Carlton, Victoria, Australia*

<sup>2</sup>*Australian Centre for Post-Traumatic Mental Health, University of Melbourne, Carlton, Victoria, Australia*

This presentation presents data on a longitudinal study which investigated the extent to which the development of PTSD and related disorders is determined by an individual's pre-trauma personality. 300 patients admitted to a level I trauma service with a serious physical injury completed retrospective assessments of pre-injury personality (Multidimensional Personality Questionnaire) and psychopathology (Structured Clinical Interview for DSM-IV Axis I Disorders [SCID]) during their hospital admission. Participants were followed up and re-administered the SCID and a range of self-report measures (assessing anxiety, depression, PTSD, alcohol use, anger) at 3 and 12 months post-injury. Latent profile analysis identified three classes of participants based on pre-injury personality traits. Each class was associated with a particular pattern of psychopathology, with this finding consistent at both baseline and follow-up. The study extends previous cross-sectional findings to show that personality is a meaningful way of understanding the development of disorder over time, in addition to explaining relationships between disorders once established. Implications for intervention will be discussed.

**Symposium**  
**Friday, November 7**  
**10:30 AM to 11:45 AM**  
**Merrick**

## **Conservation of Resources Theory: How Community Loss Shapes Risk and Resource Caravans and their Passageways across Development**

(Social, Chronic-Comm/Int-Health-Pub Health, Lifespan, M, Global)

Layne, Christopher, PhD; Pynoos, Robert, MD MPH  
*UCLA - National Center for Child Traumatic Stress, Los Angeles, California, USA*

Conservation of resources (COR) theory proposes that resources create, aggregate, and sustain one another in *resource caravans*. In turn, *resource caravan passageways* are environmental conditions that support, enrich, and protect the resources of individuals, families, and organizations, or alternatively undermine or obstruct resource reservoirs. This symposium links three level of analysis, including theory, community risk, and individual child and family experiences. We first discuss COR theory's proposition that environments in which people live powerfully shape their ability to develop and maintain resource caravans, and the roles caravans play in strengthening resilience or increasing vulnerability. We then present evidence that *place matters*: Resource scarcity at the community level (neighborhood disadvantage) creates caravan passageways that increase residents' risk for—and vulnerability to the effects of—adverse life events including job loss, foreclosure, incarceration, and sudden death. Last, we introduce a complementary individual-level concept, *risk factor caravan*, which refers to co-occurring clusters of adverse life events (child neglect, physical abuse) that accompany their host across development. Using the National Child Traumatic Stress Network Core Data Set, we illustrate “trajectories” through which risk factors aggregate across early development.

**Symposium**  
**Friday, November 7**  
**10:30 AM to 11:45 AM**  
**Merrick**

## **Caravan Passageways and the Creation of Trauma Resilience**

(Clin Res, Comm/Int-Nat/Dis-Rape-Civil/War, Adult, M, Global)

Hobfoll, Stevan, PhD  
*Rush Medical College, Chicago, Illinois, USA*

According to COR theory, resources do not occur separately, but instead aggregate and create and sustain one another, which has been termed resource caravans. This, in turn, introduces the concept of resource caravan passageways, which create, sustain, promote, or conversely, limit and impede resources. Caravan passageways are the environmental conditions that support, foster, enrich, and protect the resources of individuals, families, and organizations, or that detract, undermine, obstruct, or impoverish people's resource reservoirs. People are best capable of developing and maintaining their resource caravans, or will contrariwise fail to develop and maintain them, mainly in response to the overall structure and culture of their social and environmental setting. Resilient individuals are the product of settings that catalyze and enhance resilience, and limit or buffer destructive, loss-generating aspects of the environment. Creating and sustaining such passageways requires considerable resource investment, and this, in turn, rests in a large part on the collective pool of resources available within the family,

organization, social setting, or society. Traumatic circumstances clearly challenge resource caravan passageways, depending in part on the source of the trauma (e.g., familial, disaster, zone of conflict).

## **Symposium**

**Friday, November 7**

**10:30 AM to 11:45 AM**

**Merrick**

### **The Community Loss Index: A New Indicator of Social Disadvantage**

(Commun, Commun-Cul Div-Pub Health, N/A, M, Industrialized)

**Abramovitz, Miriam, DSW**

*Hunter College School of Social Work, New York, New York, USA*

Neighborhood resources and conditions powerfully affect local resident's well-being. The Community Loss Index (CLI), a new indicator of social disadvantage, captures the understudied role of "place" as a source of stress and a community-level aggregator of residents' individual experiences. The CLI consists of six losses strongly associated with stress: Incarceration, Foster Care, Sudden Death, Long-Term Hospitalization, Job Loss, and Foreclosure. These losses regularly co-occur in poor neighborhoods—where residents routinely suffer multiple losses—yet are rarely measured collectively as place-based stressors with community-wide impacts. Informed by Hobfoll's conservation of resources theory, the CLI operationally defines collective loss among neighborhood residents as chronic exposure to co-occurring resource losses. The CLI is being used to "unpack" poverty in a large study exploring the hypothesis that stress operates as a pathway between a variety of adverse neighborhood conditions and a variety of health and social problems, both sets of which co-occur in non-random clusters in some neighborhoods. The CLI utilizes maps to reveal the spatial distributions of the six losses in NYC. Analysis of groups living in high- versus low-loss neighborhoods suggests that a group's vulnerability to the adverse effects of community loss depends on "place," or where people live.

## **Symposium**

**Friday, November 7**

**10:30 AM to 11:45 AM**

**Merrick**

### **Using the UCLA Trauma History Profile to Unpack Risk Factor Caravans and their Consequences across Development**

(Prevent, Chronic-Comm/Int-Complex-Dev/Int, Child/Adol, M, Global)

**Layne, Christopher, PhD<sup>1</sup>**; Kaplow, Julie, PhD, ABPP<sup>2</sup>; Pynoos, Robert, MD MPH<sup>1</sup>

<sup>1</sup>*UCLA - National Center for Child Traumatic Stress, Los Angeles, California, USA*

<sup>2</sup>*University of Michigan Medical School, Ann Arbor, Michigan, USA*

The concept of *risk factor caravan* was introduced by Layne and Hobfoll (2009) to complement the concept of *resource caravan* as proposed in Hobfoll's conservation of resources (COR) theory. The two terms work in tandem as conceptual vehicles for explaining processes through which resource loss cycles and resource gain cycles respectively originate, persist, accelerate, or recede over time. Just as resources (self-esteem, mastery) co-occur and "travel" in caravans that bolster their host's wellbeing and stress resistance, some types of trauma and loss (physical abuse, emotional abuse, neglect) tend to co-occur, cluster, accumulate, "travel", and cascade in ways that increase their host's risk and vulnerability across development. These concepts illustrate the powerful role that *caravan passageways* (community resources and conditions) play in promoting resource loss and resource gain cycles in the lives of resident children and families. We illustrate the use of the Trauma History Profile (the screening portion of

the UCLA PTSD Reaction Index) in visualizing and “unpacking” different trajectories of risk factor caravans across development using a large sample of clinic-referred youth taken from the National Child Traumatic Stress Network Core Data Set. We conclude by discussing implications for unpacking complex trauma histories, risk screening, and early intervention.

## **Symposium**

**Friday, November 7**

**10:30 AM to 11:45 AM**

**Trade**

## **The Impact of Traumatic Stress on Diverse Family Relationships: Marital, Parent-Child and Sibling Functioning**

(Clin Res, Clin Res-Fam/Int, Lifespan, M, Global)

Fainsilber Katz, Lynn, PhD

*The University of Washington, Seattle, Washington, USA*

Increasing evidence suggests that post-traumatic stress symptoms are associated with intimate relationship problems. However, few studies have examined important familial relationships other than the marital dyad (e.g., parent-child, siblings). Although links between traumatic stress and relationship problems are higher in military (vs. civilian) samples, the range of civilian samples tested has been limited. Finally, few studies have searched for mechanisms that may explain relations between traumatic stress and relationship problems. This symposium examines the impact of traumatic stress on diverse family relationships, including marital, parent-child and sibling relations. A broad range of traumatic exposures in both military and civilian samples are sampled, including families exposed to intimate partner violence, families whose child has cancer, deployed military personnel and Israeli civilians exposed to mixed traumas. Emotion regulation and depression are tested as mechanisms by which traumatic stress may impact family relations. Studies use multi-source/multi-methods including self-report, interview and observational methodologies, investigate families both concurrently and longitudinally, and incorporate both basic science and intervention research. This new body of research will point to important new directions for intervention with trauma-exposed populations.

## **Symposium**

**Friday, November 7**

**10:30 AM to 11:45 AM**

**Trade**

## **Links Between Maternal Post-Traumatic Stress Symptoms and Parenting: The Mediating Role of Mother's Emotion Regulation**

(Clin Res, Clin Res-Fam/Int, Lifespan, M, Industrialized)

Fainsilber Katz, Lynn, PhD; Gurtovenko, Kyrill, Doctoral Student

*The University of Washington, Seattle, Washington, USA*

Parental post-traumatic stress symptoms (PTSS) has been linked to more insensitive, unstructured, & hostile parenting (Van Ee, et al., 2012), however, mechanisms that may explain such relations have not been identified. Emotion regulation (ER) have received attention as a mechanism through which PTS symptoms may develop and persist, and parents who are dysregulated may have difficulty helping children manage emotions. We examine whether mother's ER mediates relations between maternal PTSS and parenting around children's emotions. Sixty-



four mothers who experienced inter-partner violence and their 6-12 year old children participated. Mothers reported on their post-traumatic stress symptoms and parenting using the Post-Traumatic Stress Diagnostic Scale and the Coping with Children's Negative Emotions Scale respectively. Mother's ER was measured by coding of the Meta-Emotion Interview. Using bootstrapping for mediation testing, mothers' PTSS severity showed a significant indirect effect of -0.02 (95% CI -.038 to -.002) on Expressive Encouragement via mothers' ER. Similar indirect effects were observed for Emotion-Focused and Problem-Focused Reactions. Analyses show that higher PTSS relates to lower ER abilities, which in turn predicts less adaptive parenting. Thus, mother's ER is one mechanism by which maternal PTSS impacts parenting around children's emotions.

## **Symposium**

**Friday, November 7**

**10:30 AM to 11:45 AM**

**Trade**

### **Relations between Parental Post-Traumatic Stress Symptoms, Marital Adjustment and Sibling Relationships in Families when Children are Diagnosed with Cancer**

(Clin Res, Clin Res-Fam/Int, Lifespan, M, Industrialized)

Gurtovenko, Kyrill, Doctoral Student; **Fainsilber Katz, Lynn, PhD**; Kawamura, Joy, Doctoral Student  
*The University of Washington, Seattle, Washington, USA*

A diagnosis of pediatric cancer is stressful for the entire family, and is risk factor for post-traumatic stress symptoms (PTSS) in parents (Landolt et al., 2012). Little is known about how caregiver PTSS impacts the entire family when children are being treated for cancer and whether parent coping can buffer the impact of parental PTSS on family functioning. Considerable evidence indicates that PTSD/PTSS is associated with intimate relationship problems. We examine relations between caregiver PTSS, marital adjustment and the quality of sibling relationship in the context of pediatric cancer, and whether caregiver coping can buffer the effects of PTSS on family relations. 113 primary caregivers of children with cancer participated. Caregivers reported their own PTSS and coping style, dyadic marital adjustment and sibling relationships. Results showed that caregiver's PTSS severity significantly predicted multiple dimensions of lower marital ( $r's = -.21$  to  $-.25$ ,  $p's < .05$ ) and sibling adjustment ( $r's = .20$ -.30,  $p's < .05$ ). Caregivers high (+1SD) in disengagement coping had a significant positive relation between PTSS and sibling Antagonism ( $B = .15$ ,  $p < .01$ ) and Quarreling ( $B = .19$ ,  $p < .01$ ). Results suggest that PTSS is associated with marital and sibling conflict in face of pediatric cancer and caregiver coping can buffer some of these relations.

## **Symposium**

**Friday, November 7**

**10:30 AM to 11:45 AM**

**Trade**

### **Emotion Regulation, Parenting, and Child Distress: Longitudinal Association in a Deployed Military Sample**

(Clin Res, Clin Res-Fam/Int-Mil/Vets, Lifespan, M, Industrialized)

**Zamir, Osnat, PhD MSW<sup>1</sup>**; Gewirtz, Abigail, PhD LP<sup>2</sup>; DeGarmo, David, PhD<sup>3</sup>

<sup>1</sup>*University of Minnesota, St. Paul, MN 55108, Minnesota, USA*

<sup>2</sup>*University of Minnesota-Twin Cities Campus, St Paul, Minnesota, USA*

<sup>3</sup>*Oregon Social Learning Center, Eugene, Oregon, USA*

Emotion regulation (ER) is crucial for effective parenting, but it may be disrupted by post-traumatic stress disorder/PTSD. In contrast to the extensive research showing the contribution of parenting practices to child

adjustment, little research has focused on longitudinal relationships among parents' emotion regulation, parenting and children's adjustment. This presentation reports data from a randomized controlled trial of a parenting program with 320 military families in which a parent had been deployed to the wars in Iraq or Afghanistan. Using multiple method (self-report and observational) and multiple informant data from parents, and children, we examined relationships over three time points (baseline, six months, one year) between parents' reports of emotion regulation, observations of parenting, and child reports of internalizing problems. We used hierarchical linear modeling to plot change over time between variables, as well as change within each variable as a function of intervention. Findings suggest improvements in parenting as a function of the intervention were mediated by changes in ER and followed by changes in child adjustment. Implications for research on parenting in populations affected by traumatic stress are discussed.

## **Symposium**

**Friday, November 7**

**10:30 AM to 11:45 AM**

**Trade**

### **Marital Satisfaction and Parenting Satisfaction and PTSD: The Mediating Effect of Depression**

(Practice, Fam/Int, Adult, M, N/A)

**Freedman, Sara, PhD;** Hershkowitz, Michal, BSW, MA; Dekel, Rachel, PhD  
*Bar-Ilan University, Ramat Gan, Israel*

Background: Studies have highlighted the importance of different family sub-systems and their interactions, and marital adjustment has been shown to be related to parental adjustment, such that problems within a couple adversely impact parenting (e.g. Kwok et al, 2013): the spillover hypothesis. Although psychopathology in general has been shown to be linked to poorer marital and parental satisfaction, few studies have examined this in parents suffering from PTSD, and not in civilian populations. Methods: The study population includes 192 parents of children aged 2-18, with and without PTSD. Subjects are Israeli civilians, exposed to mixed traumatic events. Questionnaires included: PTSD symptoms (PDS; Foa et al), Dyadic Adjustment Scale – DAS7 (Hunsley et al, 2001), Parenting Satisfaction Questionnaire (Kurdek & Fine, 1991), Depression (BDI-II, Beck et al, 1996), and a demographic questionnaire. Results: PTSD is related to poorer marital and parental satisfaction. In both, depression partially mediates this relationship. Regression analyses indicate that marital satisfaction predicts the level of parental satisfaction, but the converse is also found. Conclusions: PTSD has a negative impact on parenting and marital satisfaction, expanding the effects of this disorder from the suffering individual to the family. Interventions may need to address these issues.

## **Panel Presentation**

**Friday, November 7**

**10:30 AM to 11:45 AM**

### **Bayfront B - CHILD TRACK TWO**

#### **Effectiveness and Dissemination of Child Maltreatment Interventions: Universal, Selective, and Indicated Levels of Care**

(Clin Res, CPA-Commun-Prevent, Child/Adol, M, Industrialized)

**Murphy, Robert, PhD<sup>1</sup>; O'Donnell, Karen, PhD<sup>2</sup>; Goldman Fraser, Jenifer, PhD<sup>3</sup>**

<sup>1</sup>*Duke University School of Medicine, Durham, North Carolina, USA*

<sup>2</sup>*Duke University & Durham VA Medical Centers, Durham, North Carolina, USA*

<sup>3</sup>*Boston University Medical Center, Boston, Massachusetts, USA*

In this panel, we review universal, selective, and indicated interventions for young child maltreatment (Peacock, Konrad, Watson, Nickel, & Muhajarine, 2013). Interventions representing each level of care have shared goals to provide emotional support for parents and improve parenting and family stability (Daro, Barringer, & English, 2009; Pynoos et al., 2008) and supported through community based RCTs. A brief, nurse, home-visiting program during the perinatal period demonstrated improvements in parenting and reduced healthcare costs at 6, 12, and 24 months of child age (Dodge, Goodman, Murphy, O'Donnell, & Sato, 2013; Dodge, 2013). In selective interventions (DuMont et al., 2008; Olds, 2003), efficacy has not always translated to effectiveness. An RCT of a long-term home visiting program did not reveal greater benefit between the usual and an abbreviated program dosage (O'Donnell, Murphy, Goodman, Williams, & Dodge, In preparation). Indicated interventions for already maltreated children demonstrate strong results for child, parent, and child welfare outcomes (Goldman Fraser et al., 2013). Implementation methods to improve engagement, retention, and outcomes are discussed, including a statewide dissemination model (Ebert, Amaya-Jackson, Markiewicz, & Fairbank, 2012; Fixsen, Naoom, Blase, Friedman, & Wallace, 2005).

## **Workshop Presentation**

**Friday, November 7**

**10:30 AM to 11:45 AM**

### **Gusman/Tuttle**

#### **Creating a Trauma-Informed Organization: Ready, Set, Go**

(Commun, Commun-Comm/Int-Train/Ed/Dis, Child/Adol, I, Industrialized)

**Halladay Goldman, Jane, PhD MSW<sup>1</sup>; Conradi, Lisa, PsyD<sup>2</sup>; Ko, Susan, PhD<sup>1</sup>; Decker, Kelly, PhD<sup>1</sup>**

<sup>1</sup>*National Center for Child Traumatic Stress at UCLA, Los Angeles, California, USA*

<sup>2</sup>*Chadwick Center for Children and Families, Rady Children's Hospital – San Diego, San Diego, California, USA*

Presenters (psychologists, social workers, program administrators) will (1) review research and consensus guidelines on components of trauma-informed child- and family- serving organizations, developed by the National Child Traumatic Stress Network; and (2) describe nationwide initiatives to assess, implement, evaluate and sustain trauma-informed practices in diverse settings. Recommendations and strategies for assessing organizational readiness and implementing trauma-informed practices that reflect important components such as screening children and families for trauma symptoms and exposure, implementing culturally appropriate assessments and interventions, making resources available to children and families who have been impacted by trauma, strengthening resiliency and protective factors, addressing parent and caregiver trauma, emphasizing collaboration across systems, and maintaining an environment of care for staff that addresses, minimizes and treats secondary traumatic stress will be described. Examples of strategies, tools and outcome data from work with community mental health centers, child welfare and juvenile justice agencies, and state and county systems to assess, implement and maintain trauma-

informed practices will be provided. Discussion will address how to adapt assessment and implementation strategies utilizing a community-centered approach.

## **Oral Paper Presentation**

**Friday, November 7**

**10:30 AM to 11:45 AM**

**Flagler**

## **Pediatric Medical Traumatic Stress and Primary Care**

### **Screening for Childhood Exposure to Violence in Pediatric Primary Care: Provider Practices and Perspectives**

(Practice, Prevent, Other: Primary Care Providers, M, N/A)

**Angove, Rebekah, Doctoral Student**; Melzer-Lange, Marlene, MD; deRoos-Cassini, Terri, PhD  
*Medical College of Wisconsin, Milwaukee, Wisconsin, USA*

Childhood exposure to violence is linked to numerous adverse health outcomes. Professional organizations have created policy statements, resources designed to increase clinician involvement in the identification and prevention of children exposed to violence. Despite this, little literature exists that specifically documents the screening practices of providers. **OBJECTIVES:** To document the violence-related screening practices, barriers, and beliefs of pediatric primary care providers. **METHODS:** 169 Pediatric primary care providers were sampled via online survey. Questions included their screening practices, frequency, barriers, challenges, attitudes, use of formal tools and knowledge of resources and recommendations. **RESULTS:** The majority of providers had favorable attitudes related to the importance of screening, yet less than 50% were engaging in screening for the most frequent types of violence children encounter throughout childhood. Time and issues related to referral after a positive screen were the most frequently cited challenges and barriers. **CONCLUSION:** The percentage of pediatric primary care providers routinely screening for exposure to violence is low despite professional recommendations and resources designed to promote violence screening by providers, suggesting a need to intervene with providers about implementing violence screening in clinical practice.

## **Oral Paper Presentation**

**Friday, November 7**

**10:30 AM to 11:45 AM**

**Flagler**

### **Premorbid, Peri-Trauma and Cognitive/Affective Associates of Acute Post-Traumatic Stress Following Pediatric Intensive Care Unit Admission**

(Clin Res, Acc/Inj-Clin Res, Child/Adol, M, Industrialized)

**Dow, Belinda, PhD<sup>1</sup>**; Kenardy, Justin, PhD<sup>1</sup>; Le Brocq, Robyne, PhD, MSc<sup>2</sup>; Long, Deborah, PhD<sup>3</sup>

<sup>1</sup>*The University of Queensland, Herston, QLD, Australia*

<sup>2</sup>*University of Queensland, Brisbane, Queensland, Australia*

<sup>3</sup>*Royal Children's Hospital, Herston, QLD, Australia*

Advances in medical knowledge and technology have greatly improved children's physical health outcomes following Paediatric Intensive Care Unit (PICU) admission, although a significant proportion will experience psychological distress and disorders. Elevated post-traumatic stress symptoms (PTSS) have been reported in up to

one third of children following PICU admission, yet risk factors for such distress are not well understood. This study aimed to explore and identify the premorbid, peri-trauma and cognitive/affective factors associated with children's acute PTSS. Participants were 61 children aged 6-16 years and their parents. Children completed questionnaires and an interview assessing PTSS, peri-trauma affect, and trauma memory 2-4 weeks following discharge. Medical data were extracted from patient charts. Premorbid and demographic data were provided by parent questionnaire. Younger age, traumatic injury, confusion, peri-trauma panic, and sensory memory quality were associated with acute PTSS. Age and traumatic injury accounted for 22% of the variance in PTSS ( $p<.001$ ). The addition of cognitive/affective factors increased the explained variance to 41% ( $p<.01$ ). Implications for identifying and intervening with at-risk children will be discussed.

## **Oral Paper Presentation**

**Friday, November 7**

**10:30 AM to 11:45 AM**

**Flagler**

### **PTSD Perpetuates Pain in Children with Traumatic Brain Injury**

(Clin Res, Acc/Inj-Health, Child/Adol, I, Industrialized)

**Brown, Erin, BSc Hons Psychology; Kenardy, Justin, PhD; Dow, Belinda, PhD**

*The University of Queensland, Herston, QLD, Australia*

**Objective.** This study tested theoretical models of the relationship between pain and Post-Traumatic Stress Disorder (PTSD) in children with traumatic brain injury (TBI). **Methods.** Participants consisted of 195 children aged 6 to 15 years presenting to one of three Australian hospitals following a mild-severe TBI. Children were assessed at 3 months, 6 months, and 18 months post-accident for PTSD (via CAPS-CA clinical interview) as well as physical pain (via CHQ-PF50 parent report questionnaire). Trained clinicians administered the CAPS-CA at home visits, and the CHQ-PF50 was collected through questionnaires. **Results.** Structural equation modelling found the data supported the mutual maintenance model and also the nested perpetual avoidance model. **Conclusions.** Both models indicate PTSD is driving the presence of pain, and not vice versa. A fourth model stating this was proposed. Therefore, it may be useful to address PTSD symptoms in treating child pain for expediting recovery.

## **Oral Paper Presentation**

**Friday, November 7**

**10:30 AM to 11:45 AM**

**Flagler**

### **Psychosocial Care for Injured Children: The Views of 2000 Emergency Department Physicians and Nurses from around the World**

(Train/Ed/Dis, Global-Prevent, Lifespan, I, Global)

**Alicis, Eva, PhD<sup>1</sup>; Kassam-Adams, Nancy, PhD<sup>2</sup>; Landolt, Markus, PhD<sup>3</sup>; Hoysted, Claire, BSc Hons Psychology<sup>4</sup>; Babl, Franz, MD MPH<sup>5</sup>**

<sup>1</sup>*Monash University, Melbourne, Australia, Australia*

<sup>2</sup>*University of Pennsylvania School of Medicine, Philadelphia, Pennsylvania, USA*

<sup>3</sup>*Zurich University, Zurich, Switzerland, Switzerland*

<sup>4</sup>*Monash University, Melbourne, VIC, Australia*

<sup>5</sup>*Royal Children's Hospital, Melbourne, Australia, Australia*

Hospital Emergency Department staff are key providers of psychosocial care for children and families. Our goals were to examine a) the knowledge and confidence of ED staff in providing psychosocial care to injured children, b)

differences according to demographic and professional characteristics, and c) training preferences. Based on the Psychological First Aid framework (PFA; The National Child Traumatic Stress Network and the National Center for PTSD, 2006) and international literature, we developed an online survey in 12 world languages. ED staff were primarily targeted via the Pediatric Emergency Research Network but staff from any hospital worldwide were eligible. Over 2000 professionals from over 60 countries have participated. While participants' knowledge of traumatic stress was moderate to good, we identified several areas for improvement (e.g. stress reactions in young children). There was variation in confidence scores across the eight elements of PFA and participants differed according to their demographic and professional characteristics. The respondents identified a number of barriers, including time constraints and cultural issues. Over 85% of the respondents had not received formal training in psychosocial care and would like to participate in future training. The findings indicate a range of focal areas for ED staff education.



# CONCURRENT SESSION 6

**Master Clinician**

**Friday, November 7**

**01:30 PM to 02:45 PM**

**Versailles**

## **Helping Families at Risk for Physical Abuse using Alternatives for Families: A Cognitive Behavioral Therapy (AF-CBT)**

(Practice, Aggress-CPA-Clinical Practice-Prevent, Lifespan, M, Industrialized)

**Kolko, David, PhD, ABPP**

*University of Pittsburgh School of Medicine, Pittsburgh, Pennsylvania, USA*

Delivering effective clinical services to emotionally or physically maltreating/aggressive caregivers and their children is a personal and clinical challenge. This workshop will discuss how Alternatives for Families - A Cognitive Behavioral Therapy (AF-CBT; [www.afcbt.org](http://www.afcbt.org)) works with caregivers and children whose interactions include the use coercion and force. Participants will first receive background information about this model, including its focus, scope, underpinnings, and level of empirical support. Participants will then be given an overview of eligibility criteria, sample assessment tools, fundamental skills, engagement methods, and key topical content in the three treatment phases of AF-CBT. A case example will be presented to illustrate the application of these procedures and to highlight some of the therapeutic issues that may occur during treatment, such as concerns about family safety. Some recommendations for maintaining communication with the child welfare system and for monitoring family progress will be presented. Participants will be invited to raise questions and be provided with information about upcoming training opportunities.

## **Invited Panel**

**Friday, November 7**

**01:30 PM to 02:45 PM**

**Merrick**

## **The Ethics of Disaster Research - Lessons from the Field**

(Ethics, Res Meth-Terror, Lifespan, M, Global)

**Newman, Elana, PhD<sup>1</sup>; Brewin, Chris, PhD<sup>2</sup>; Creamer, Mark, PhD<sup>3</sup>; North, Carol, MD MPH<sup>4</sup>; Refsdal, Nils Olav, MA<sup>5</sup>**

<sup>1</sup>*University of Tulsa, Tulsa, Oklahoma, USA*

<sup>2</sup>*University College London, London, United Kingdom*

<sup>3</sup>*Australian Centre for Post-Traumatic Mental Health, University of Melbourne, Carlton, Victoria, Australia*

<sup>4</sup>*Veterans Affairs North Texas Health Care System, Dallas, Texas, USA*

<sup>5</sup>*Norwegian National Committees for Research Ethics, Oslo, Norway*

Disasters and terrorist attacks are public events, and generate interest from researchers across academic disciplines. The research community is faced with a variety of ethical challenges when conducting research that involves survivors and the bereaved after disasters and terrorist attacks. Chris Brewin, Mark Creamer, Carol North, and Nils Olav Refsdal will share their experiences in meeting research challenges when studying such incidents as the 2005 London Bombing, 9/11 World Trade Center, Oklahoma Murray bombing and the 2011 bombing and mass shooting in Norway. The panelists will present and discuss steps taken to attain new knowledge while protecting potentially traumatized individuals from being overwhelmed by the multitudes of researchers wanting to use them as subjects. Topics that will be examined recruitment strategies, informed consent, managing confidentiality issues and weighing the potential risks and benefits of participating in research. Different ways of involving funding agencies, review boards and stakeholders will also be discussed. The panelists will highlight practical measures that have worked well

in different contexts. Through the discussion, we aim to raise awareness of these issues and help researchers solve ethical issues in future disasters across the globe.

## **Symposium**

**Friday, November 7**

**01:30 PM to 02:45 PM**

**Chopin - SPANISH TRACK**

*Presented in Spanish with simultaneous translation to English*

### **Depresión y Trauma Infantil: Integrar la Investigación Actual en el Tratamiento de la Depresión en los Servicios Públicos de Salud Mental en Chile (Depression and Childhood Trauma: An Overview Integrating Current Research and Specific Evidence of Studies in the Treatment of Depression in Public Mental Health Services in Chile)**

(Clin Res, Chronic-Clin Res-Depr, Adult, A, Latin Amer & Carib)

Vitriol, Veronica, MD

*Universidad de Talca, Curico, VII Region, Chile*

In the last two decades ago, different research has demonstrated the high prevalence of childhood trauma, including sexual abuse, among depressive women. These findings are associated with a complex, severe and chronic psychopathology. It suggests the existence of a distinguishable clinical-neurobiological subtype of depression as a function of childhood trauma that requires specific treatments. Among women with depression and early trauma receiving treatment in a public mental health service in Chile, it was demonstrated that a brief outpatient intervention (that screened for and focused on childhood trauma and helped patients to understand current psychosocial difficulties as a repetition of past trauma) was effective in reducing psychiatric symptoms and improving interpersonal relationships. However, in this population, this intervention did not prevent post traumatic stress disorder secondary to the extreme earthquake that occurred in February 2010. Therefore in adults with depression and early trauma, it is necessary to evaluate prolonged multimodal treatments that integrate pharmacotherapy, social support and interpersonal psychotherapies with trauma focus interventions (specific interventions for specific traumas).

## **Symposium**

**Friday, November 7**

**01:30 PM to 02:45 PM**

**Chopin - SPANISH TRACK**

### **The Relation between Early Trauma in Depressive Patients to their History of Domestic Violence and Suicide Attempts**

(Practice, CSA-Clin Res-Depr-DV, Lifespan, A, Latin Amer & Carib)

Leiva, Marcelo, PhD<sup>1</sup>; Salgado, Carolina, MD<sup>2</sup>

<sup>1</sup>*University Talca, Talca, VII Region, Chile*

<sup>2</sup>*Hospital Talca, Talca, VII Region, Chile*

Currently, in the Maule Region of Chile research is being conducted with patients at the primary care level diagnosed with depression attempting to assess which factors could be associated with their response or non-response to treatment for their recuperation. The intent of the research is to see if there is any association in the study between the severity of the depression, early trauma, and domestic violence. (Depression assessment will be evaluated by both the number and the severity of symptoms and also, the number of suicide attempts). With these psycho-social factors it is hypothesized that these patients would be psychologically and neurobiologically more vulnerable which could explain the severity and chronicity of their symptoms and also the difficulties involved in responding to standard conventional treatment for depression. The patients may be applying coping mechanism to their early traumatic events like a repetition of past trauma compulsively and its dissociative symptoms.

## **Symposium**

**Friday, November 7**

**01:30 PM to 02:45 PM**

**Chopin - SPANISH TRACK**

### **COMORBIDITY in Patients with Depression and Early Trauma Consulting in Primary Care in Chile**

(Practice, Anx-CPA-CSA-Depr, Child/Adol, A, Latin Amer & Carib)

**Potthoff, Soledad, MD<sup>1</sup>**; Ormazabal, Marcela, PhD<sup>2</sup>; Orellana, Francisca, PhD<sup>3</sup>

<sup>1</sup>*Hospital Talca, Talca, VII Region, Chile*

<sup>2</sup>*Regional Health Service of Maule Region, Talca, Maule Region, Chile*

<sup>3</sup>*Primary Care Services of Talca City, Talca, Maule Region, Chile*

An investigation is taking place in public primary care mental health Services of Maule Region, Chile, to determine which factors are associated with the response or the no response of 450 depressed patients in treatment. The authors are following this cohort looking for clinical (severe symptoms, recurrent disease, COMORBIDITY, etc...) and psychosocial features (antecedent of EARLY TRAUMA, actual presence of any violence, etc...) and how these features interact with medical attendance and psychotherapy features in order to have an explanation to the prior question.

## **Symposium**

**Friday, November 7**

**01:30 PM to 02:45 PM**

**Chopin - SPANISH TRACK**

### **Prevalence of Childhood Trauma among Patients who Consult for Depression in Chile**

(Clin Res, Assess Dx-CPA-Clinical Practice-Depr, Adult, A, Latin Amer & Carib)

**Cancino, Alfredo, MD<sup>1</sup>**; Asenjo, Maria, ACSW<sup>2</sup>; **Vitriol, Veronica, MD<sup>3</sup>**

<sup>1</sup>*Common Mental Health Curico, Curico, Curico, Chile*

<sup>2</sup>*Hospital Curico, Curico, Curico, Chile*

<sup>3</sup>*Universidad de Talca, Curico, VII Region, Chile*

Depression is a major cause of morbidity worldwide. One of the risk factors that is associated with the development of this illness and its increased clinical severity is the exposure to early traumatic events. Most of the approaches related to trauma have considered Post-Traumatic Stress Disorder (PTSD) as the main diagnosis. However, depression is two times more prevalent than PTSD in general population. In Chile, like in many other countries, there is a legally mandated program to treat depression with economic guaranties at different levels of care.

The objective of this presentation is to summarize the findings of a series of studies developed in patients who consult for depression, showing that around 60% of them have been exposed to some interpersonal traumatic event during childhood and 40% have been a victim of sexual abuse. These records have been associated with greater severity of depressive symptoms, comorbidity with PTSD and vulnerability to PTSD secondary to different kinds of trauma.

## **Symposium**

**Friday, November 7**

**01:30 PM to 02:45 PM**

**Chopin - SPANISH TRACK**

### **A Model to Treat Patients with Depression and Early Trauma Consulting in Mental Health Services in Chile**

(Practice, CSA-Chronic-Clin Res-Clinical Practice, Adult, A, Latin Amer & Carib)

**Vitriol, Veronica, MD<sup>1</sup>**; Cancino, Alfredo, MD<sup>2</sup>; Potthoff, Soledad, MD<sup>3</sup>

<sup>1</sup>*Universidad de Talca, Curico, VII Region, Chile*

<sup>2</sup>*Common Mental Health Curico, Curico, Curico, Chile*

<sup>3</sup>*Hospital Talca, Talca, VII Region, Chile*

This presentation describes a structured, stepped multimodal intervention focused on handling interpersonal difficulties – understood as compulsions to repeat – in patients who present with depression and antecedents of childhood trauma to public mental health services in Chile. Linking the evidence of Interpersonal Psychotherapy in treating depression and the compulsion to repeat the trauma to understand interpersonal difficulties among patients with early trauma, we organized a model of intervention that we call IMT (Interpersonal model to treat patients with depression and childhood trauma history). We demonstrated that the proposed intervention was more effective than the usual treatment in patients with depression and childhood trauma history. However, in this population, this intervention did not prevent post-traumatic stress disorder secondary to the extreme earthquake that occurred in February 2010. Therefore in adults with depression and early trauma, it is necessary to evaluate prolonged multimodal treatments that integrate pharmacotherapy, social support and interpersonal psychotherapies with trauma focused interventions (specific interventions for specific traumas).

**Symposium**  
**Friday, November 7**  
**01:30 PM to 02:45 PM**  
**Biscayne - BIOLOGY TRACK**

## **From Genes to Geography: A Multi-level Approach to Understanding the Lifelong Impact of Childhood Adversity**

(Social, CPA-Comm/Int-Dev/Int-Bio/Int, Lifespan, M, Industrialized)

Bradley, Bekh, PhD  
*Atlanta VAMC/Emory University, Decatur, Georgia, USA*

This symposium examines the impact of childhood adversity across multiple levels. It addresses neurobiological, developmental, social and intergenerational processes through which childhood adversity leads to increased lifespan risk for negative outcomes across domains of functioning. First, we present data showing that genotype variation and child abuse history are associated with DNA methylation in an oxytocin receptor gene. Next, we present data showing that child maltreatment corresponds with poorer performance on neuropsychological assessment tasks that require sustained attention as well as concept formation and mental flexibility. Third, we present data examining inter-generational impact of childhood adversity. This data shows that maternal history of childhood maltreatment impacts both parenting behavior and child behavior. Lastly, we will present data suggesting that adverse social context (e.g., neighborhood factors) magnifies the effect of individual childhood trauma to produce negative mental health consequences in adults. All of the data presented is from a low-income, primarily African American sample recruited in an urban, public hospital. This population is at increased risk for trauma exposure and for many of the negative outcomes associated with early life adversity. Research conducted with this population is of high public health importance.

**Symposium**  
**Friday, November 7**  
**01:30 PM to 02:45 PM**  
**Biscayne - BIOLOGY TRACK**

## **Interactions between Child Abuse History and Neighborhood-Level Crime in Predicting Post-Traumatic Stress and Depression among Adults in the Grady Trauma Project**

(Social, CPA-CSA-Comm/Vio-Pub Health, Adult, M, Industrialized)

**Lowe, Sarah, PhD<sup>1</sup>**; Pothen, John, BS<sup>2</sup>; Richards, Catherine, MPH<sup>3</sup>; Galea, Sandro, MD PhD<sup>1</sup>; Ressler, Kerry, MD PhD<sup>2</sup>; Koenen, Karestan, PhD<sup>3</sup>; Bradley, Bekh, PhD<sup>4</sup>

<sup>1</sup>*Columbia University, Mailman School of Public Health, New York, New York, USA*

<sup>2</sup>*Emory University School of Medicine, Atlanta, Georgia, USA*

<sup>3</sup>*Columbia University School of Public Health, New York, New York, USA*

<sup>4</sup>*Atlanta VAMC/Emory University, Decatur, Georgia, USA*

Individual and group-level experiences influence mental health. For example, childhood trauma and neighborhood-level crime are associated with higher post-traumatic stress and depression. We examined how these variables operate together in shaping mental health outcomes through analysis of trauma-exposed adult civilians from the Grady Trauma Project in Atlanta (N = 3,827). Participants completed the Childhood Trauma Questionnaire (CTQ), Post-Traumatic Stress Scale (PSS), and Beck Depression Inventory (BDI). Participants' addresses were mapped onto 433 Census tracts and linked to tract-level data on total, personal (e.g., rape) and property crime (e.g.,

burglary). CTQ scores were aggregated by tract as a proxy for neighborhood-level child abuse. We tested main effects of individual-level CTQ and neighborhood-level crime indices and CTQ and cross-level interactions between them, on PSS and BDI. Participants with higher CTQ scores had higher PSS and BDI ( $p < .001$ ), whereas main effects of neighborhood-level variables were non-significant. All cross-level interactions were significant predictors of BDI ( $p = .02-.03$ ). Participants with higher CTQ scores living in neighborhoods with higher total, personal, and property crime, and child abuse, reported the highest BDI scores. These data suggest that adverse social contexts magnify the effect of childhood trauma on adult mental health.

## **Symposium**

**Friday, November 7**

**01:30 PM to 02:45 PM**

**Biscayne - BIOLOGY TRACK**

### **Genetic, Epigenetic, and Expression Differences in the Oxytocin Receptor (OXTR): Implications for Childhood Abuse on OXTR Regulation**

(Bio Med, CPA-Gen/Int, Adult, M, Industrialized)

**Smearman, Erica, Doctoral Student<sup>1</sup>**; Conneely, Karen, PhD<sup>1</sup>; Brody, Gene, PhD<sup>2</sup>; Bradley, Bekh, PhD<sup>3</sup>; Sales, Jessica, PhD<sup>2</sup>; Ressler, Kerry, MD PhD<sup>1</sup>; Smith, Alicia, PhD<sup>1</sup>

<sup>1</sup>*Emory University School of Medicine, Atlanta, Georgia, USA*

<sup>2</sup>*Emory University, Atlanta, Georgia, USA*

<sup>3</sup>*Atlanta VAMC/Emory University, Decatur, Georgia, USA*

Oxytocin promotes a wide variety of social behaviors through binding with the oxytocin receptor (OXTR). Expression changes in OXTR can result from early life experiences and influence social behavior, but regulation of OXTR expression is complex, involving both single nucleotide polymorphisms and DNA methylation. The interaction between these mechanisms may provide insight into gene-environment interactions that link early adversity to adult behavioral outcomes. DNA and RNA from blood was used from 337 participants in the Grady Trauma Project in Atlanta, GA, in which a history of child abuse was assessed by the Childhood Trauma Questionnaire. We characterized the relationship between genetic polymorphisms, DNA methylation, and expression of OXTR and the influence of childhood abuse on methylation. We identified associations between OXTR polymorphisms and both CpG site methylation ( $p = 1.23 \times 10^{-7}$ ) and OXTR expression ( $p = .025$ ). We also identified associations between childhood abuse and methylation at multiple OXTR CpG sites ( $p < .005$ ). For example, rs237897 associates with methylation of 3 OXTR CpG sites ( $1.23 \times 10^{-7} < p < .012$ ) and OXTR expression ( $p = .025$ ); interestingly, one of the 3 CpG sites also associates with a history of child abuse ( $p = .019$ ). This study provides insight into OXTR regulation and the potential biological influences of childhood abuse.

## **Symposium**

**Friday, November 7**

**01:30 PM to 02:45 PM**

**Biscayne - BIOLOGY TRACK**

### **Attention and Executive Functioning in Adult Survivors of Childhood Maltreatment**

(Assess Dx, CPA-CSA-Cog/Int, Adult, M, Industrialized)

**Fani, Negar, PhD<sup>1</sup>**; Ressler, Kerry, MD PhD<sup>1</sup>; Bradley, Bekh, PhD<sup>2</sup>

<sup>1</sup>*Emory University School of Medicine, Atlanta, Georgia, USA*

<sup>2</sup>*Atlanta VAMC/Emory University, Decatur, Georgia, USA*



Although a number of studies have identified abnormalities in attention and executive functioning in children/adolescents who experienced significant abuse, few studies have examined the presence and specificity of these abnormalities in adults with maltreatment histories. This was the goal of the present study. A battery of neuropsychological tests (Penn Computerized Neuropsychological Battery) was administered to 37 African-American women aged 21-62 years with variable maltreatment histories; participants were recruited from an ongoing study of risk for anxious psychopathology. Childhood maltreatment history was measured using the Childhood Trauma Questionnaire. Analyses controlled for current post-traumatic stress disorder symptoms using the PTSD Symptom Scale. Partial correlations revealed significant associations between performance on an n-back task (1-back condition, false positives:  $r=.38$ ,  $p<.05$ ) and frequency of childhood sexual abuse; correct responses on a continuous processing task ( $r=-.44$ ,  $p<.01$ ) and on an abstraction and category switching task ( $r=-.44$ ,  $p=.01$ ) inversely correlated with total childhood abuse. Childhood maltreatment corresponded with poorer performance on measures of sustained attention, abstraction and mental flexibility. We will discuss the implications of these findings for maltreated populations, specifically, impact on occupational functioning.

## **Symposium**

**Friday, November 7**

**01:30 PM to 02:45 PM**

**Biscayne - BIOLOGY TRACK**

### **Maternal Childhood Trauma Impacts Daughters and Sons Differently in the Next Generation**

(Prevent, CPA-CSA-Dev/Int-Fam/Int, Lifespan, M, Industrialized)

**Cross, Dorthie, PhD<sup>1</sup>**; Gamwell, Kaitlyn, BS<sup>1</sup>; Dharani, Amreen, BA<sup>1</sup>; Pallos, Andrew, BA<sup>1</sup>; Bradley, Bekh, PhD<sup>2</sup>

<sup>1</sup>*Emory University School of Medicine, Atlanta, Georgia, USA*

<sup>2</sup>*Atlanta VAMC/Emory University, Decatur, Georgia, USA*

**OBJECTIVE:** The impact of trauma and PTSD on parenting behavior is well-supported by extant research. Less is known, however, about how the impact may vary by child gender. We examined the impact of childhood physical and sexual abuse on parental warmth for mothers of boys and girls. **METHOD:** Participants were recruited from public hospital waiting rooms and completed measures related to trauma exposure and PTSD. Eligible mothers (N=223) participated in additional visits and completed measures of parenting style. Mothers of children age 8-12 years (N=68) participated with one child and completed a mother-child interaction task. **RESULTS:** Mothers with a history of sexual abuse reported less warmth toward their daughters compared to their sons. This effect was not observed with childhood physical abuse. In the interaction task, warmth was unrelated to maternal behavior for boys' mothers and was associated with more positive affect in boys. For girls' mothers, warmth was associated with less overcontrol and more doubting of child competence. For girls, warm was associated with more positive affect, more self-efficacy, less anxious behavior, and better quality of relationship with parent. **CONCLUSION:** Childhood sexual abuse may hinder maternal warmth toward daughters, which is associated with several negative behaviors in both daughters and their mothers.

**Symposium**  
**Friday, November 7**  
**01:30 PM to 02:45 PM**  
**Windsor/Sandringham**

## **PTSD Prevention across the Translational Spectrum**

(Prevent, Acc/Inj-Health-Prevent, Lifespan, M, Industrialized)

Zatzick, Douglas, MD  
*University of Washington/Harborview Medical Center, Seattle, Washington, USA*

PTSD prevention efforts are occurring across the translational spectrum. Basic investigation is exploring biomarkers and other potential clinical and demographic risk factors for the development of PTSD. Early preventive intervention development in the efficacy-effectiveness spectrum is looking to define early intervention paradigms that target the core PTSD symptom clusters. Finally, effectiveness-implementation spectrum trials aim to target PTSD and related comorbidities in order to broaden the reach of early PTSD prevention efforts in “real world” treatment settings. This symposium will address studies across this full translational spectrum. The first presentation by Dr. Ressler will discuss early biomarker and other potential predictors in acutely traumatized populations. The second presenter, Dr. Rothbaum, will discuss the development of brief intervention trials using Cognitive Behavioral Therapy/exposure based paradigms to target PTSD. Finally, Dr. Zatzick will discuss the development and implementation of collaborative care intervention trials that target PTSD and related comorbidities in populations of acutely exposed youth and adult physically injured trauma survivors. Chair-led audience discussion will be encouraged.

**Symposium**  
**Friday, November 7**  
**01:30 PM to 02:45 PM**  
**Windsor/Sandringham**

## **Predictive Biomarkers and Novel Approaches to Memory Consolidation Blockade for the Prevention of PTSD**

(Bio Med, Acute-Bio Med-Bio/Int-Prevent, Adult, M, N/A)

**Ressler, Kerry, MD PhD<sup>1</sup>**; Rothbaum, Barbara, PhD, ABPP<sup>1</sup>; Rothbaum, Alex, BS<sup>1</sup>; Jovanovic, Tanja, PhD<sup>1</sup>; Bradley, Bekh, PhD<sup>2</sup>; Stevens, Jennifer, PhD<sup>1</sup>; Andero, Raul, PhD<sup>3</sup>

<sup>1</sup>*Emory University School of Medicine, Atlanta, Georgia, USA*

<sup>2</sup>*Atlanta VAMC/Emory University, Decatur, Georgia, USA*

<sup>3</sup>*Academic Medical Center, Atlanta, Georgia, USA*

One approach to PTSD is prevention of over-consolidation of memories in the first hours after trauma exposure. We will describe studies focused on understanding the biomarkers and mechanisms of memory consolidation in mice and its translation to humans in the aftermath of trauma. Using a mouse model of dysregulated fear, we found altered amygdala expression of the Oprl1 gene (Opioid receptor-like 1, encoding the amygdala NOP receptor). Systemic and central amygdala infusion of SR-8993, a novel and highly selective NOP receptor agonist, impaired fear memory consolidation. In humans, a genetic polymorphism within OPRL1 predicts PTSD symptoms (n=1,793, p<0.001), associates with physiological measures of fear discrimination and fMRI-based amygdala-insula functional connectivity. Together, these data suggest that OPRL1 is associated with amygdala function, fear processing, and PTSD symptoms and that activation of the OPRL1 receptor interferes with fear consolidation. Recent data has also suggested that opioid pathways activated by morphine in the early aftermath of trauma may prevent PTSD. Recent data will be presented from a civilian, emergency department study, replicating these findings

prospectively. Together these studies suggest that understanding molecular pathways involved in fear memory formation will lead to novel methods to prevent PTSD.

## **Symposium**

**Friday, November 7**

**01:30 PM to 02:45 PM**

**Windsor/Sandringham**

### **Optimal Dose of Early Intervention to Prevent PTSD**

(Prevent, Gen/Int-Prevent, Adult, M, Industrialized)

**Rothbaum, Barbara, PhD, ABPP<sup>1</sup>**; Ressler, Kerry, MD PhD<sup>1</sup>; Houry, Debra, MD MPH<sup>1</sup>; Rothbaum, Alex, BS<sup>1</sup>; Post, Loren, PhD<sup>1</sup>; Odenat, Lydia, PhD<sup>1</sup>; Price, Matthew, PhD<sup>2</sup>

<sup>1</sup>*Emory University School of Medicine, Atlanta, Georgia, USA*

<sup>2</sup>*University of Vermont, Burlington, Vermont, USA*

The precipitant for adult PTSD is a known event, allowing for immediate intervention, presenting the potential to prevent the occurrence of this serious condition. There currently are no accepted early interventions. In our recently completed pilot work, an early exposure-based intervention begun within hours of trauma exposure significantly decreased PTSD and depression 1 and 3 months post-trauma compared to those who did not receive the intervention and seemed to mitigate a genetic risk for PTSD. If a 1-session intervention is as effective as a 3-session intervention in preventing the development of PTSD, this would have much more reach from a public health perspective and would be able to be transported to the field more easily. We will present data from an ongoing study testing the dose (1 session vs 3 sessions) of very early intervention following exposure to trauma in humans in the ED (emergency department). We randomly assigned 40 patients presenting at the ED to the 3-session exposure intervention (EX) delivered commencing in the ED when they present following the traumatic injury (n=15); or 2) to a 1-session EX in the ED (n=15); and compared to a third group, 3) assessment only (n=10), to provide a base rate of PTSD following trauma in this population.

## **Symposium**

**Friday, November 7**

**01:30 PM to 02:45 PM**

**Windsor/Sandringham**

### **Hybrid Effectiveness-Implementation Spectrum Collaborative Care Intervention Trials Targeting PTSD and Comorbidity among Acutely Injured Youth and Adults**

(Prevent, Acc/Inj-Prevent-Pub Health, Lifespan, M, Industrialized)

**Zatzick, Douglas, MD<sup>1</sup>**; Jurkovich, Gregory, MD<sup>2</sup>; Rivara, Frederick, MD MPH<sup>3</sup>; Russo, Joan, PhD<sup>4</sup>; O'Connor, Stephen, PhD<sup>5</sup>; Van Eaton, Erik, MD<sup>4</sup>; Wang, Jin, PhD<sup>1</sup>; Wagner, Amy, PhD<sup>3</sup>; Dunn, Christopher, PhD<sup>1</sup>; Katon, Wayne, MD<sup>3</sup>

<sup>1</sup>*University of Washington/Harborview Medical Center, Seattle, Washington, USA*

<sup>2</sup>*Denver Health, Denver, Colorado, USA*

<sup>3</sup>*University of Washington, Seattle, Washington, USA*

<sup>4</sup>*University of Washington School of Medicine, Seattle, Washington, USA*

<sup>5</sup>*Western Kentucky University, Bowling Green, Kentucky, USA*

This presentation will describe the development and implementation of hybrid effectiveness-implementation, clinical trials of collaborative care (CC) interventions targeting the prevention of PTSD and related comorbidities. The presentation will start by describing early intervention development efforts that simultaneously successfully

targeted PTSD ( $P=0.01$ ) and alcohol use ( $P=0.48$ ) with a CC model (Arch Gen Psych 2004). Next a refined CC effectiveness-implementation spectrum trial will be described that successfully target PTSD ( $F(4, 185)=5.45$ ,  $P<0.001$ ) and associated physical functional impairments ( $F(1, 172)=9.87$ ,  $P<0.01$ ) (Annals of Surgery 2013). A third collaborative care effectiveness implementation hybrid trial will be described that extended findings to successfully target violence risk behaviors ( $RR=0.31$ , 95%  $CI=0.11-0.90$ ) in adolescent injury survivors (JAMA Pediatrics, In Press). The presentation will end by describing a recently completed technology enhanced CC trial in which only 2.2 hours of care management time were required over the course of 6 months post-injury to significantly reduce PTSD. This presentation will also discuss ongoing policy-investigative dialogues targeting PTSD clinical best practice guideline recommendations and mandates for screening, intervention, and referral from the American College of Surgeon Committee on Trauma.

## **Symposium**

**Friday, November 7**

**01:30 PM to 02:45 PM**

**Bayfront A - CHILD TRACK ONE**

## **Quick and Dirty or Cheap and Cheerful? Four Randomised Controlled Trials Looking at Early and Brief Interventions for PTSD in Children and Adolescents**

(Prevent, Acc/Inj-Acute-Clin Res-Prevent, Child/Adol, M, Global)

Meiser-Stedman, Richard, PhD

*Cambridge, Cambridge, United Kingdom*

Many hundreds of thousands of youth around the world will be exposed to single event traumas each year, with a number of prospective longitudinal studies suggesting that a significant proportion will go on to experience chronic PTSD. Given the long-term harm caused by PTSD, there is a very clear case for intervening early to treat PTSD, or even prevent the development of this disorder in the first place. Can this be done in an efficacious way? And can this be done *cheaply*? Four randomised controlled trials will be presented that speak to the issue of early and cost-effective intervention for youth with PTSD. These trials address a variety of intervention strategies - internet-based treatment, one-to-one therapeutic intervention, stepped care, abbreviated protocols, pharmacology and family-oriented approaches – to meet this widespread clinical need, and will have major repercussions for “real world” clinical management of trauma-exposed youth.

## **Symposium**

**Friday, November 7**

**01:30 PM to 02:45 PM**

**Bayfront A - CHILD TRACK ONE**

## **Cognitive therapy (CT) as an Early Intervention for PTSD in Youth**

(Clin Res, Acute-Clin Res-Prevent, Child/Adol, M, Industrialized)

Meiser-Stedman, Richard, PhD

*Cambridge, Cambridge, United Kingdom*

Intervening early to prevent the development of chronic PTSD in youth holds out the hope of averting significant disruption to a young person’s developmental trajectory. However, the evidence to date is not encouraging, with no treatments delivered in the first month post-trauma showing any evidence of reducing the rates of PTSD. The

present study looks at an alternative to universal, brief intervention, i.e. a course of therapy, namely cognitive therapy (CT), for youth who continue to have PTSD at 3-6 months post-trauma. This randomised controlled trial compared CT to a wait list (WL) arm, in 8-17 year olds (n=29) with recent exposure to one-off traumatic stressors (e.g. road traffic collisions and assaults). Groups were compared at 11 weeks, while the CT arm were followed up at six and 12 months post-treatment to see if treatment gains were maintained. Data concerning the efficacy of CT will be presented, as well as data pertaining to the cognitive mechanisms underpinning treatment response.

## **Symposium**

**Friday, November 7**

**01:30 PM to 02:45 PM**

**Bayfront A - CHILD TRACK ONE**

### **Is 'Early Intervention' too Early for Childhood PTSD Following Accidental Injury?**

(Prevent, Acc/Inj-Acute-Anx-Clin Res, Child/Adol, M, Industrialized)

**March, Sonja, PhD<sup>1</sup>**; Kenardy, Justin, PhD<sup>2</sup>; Cobham, Vanessa, PhD<sup>3</sup>; Nixon, Reginald, PhD<sup>4</sup>; McDermott, Brett, MD<sup>5</sup>

<sup>1</sup>*University of Southern Queensland, Springfield, QLD, Australia*

<sup>2</sup>*The University of Queensland, Herston, QLD, Australia*

<sup>3</sup>*University of Queensland, St Lucia, QLD, Australia*

<sup>4</sup>*Flinders University, School of Psychology, Adelaide, South Australia, Australia*

<sup>5</sup>*Mater Misericordiae University Hospital, Brisbane, Queensland, Australia*

Accidental injury often results in hospital admission and potentially traumatic medical procedures, which increase the risk of developing PTSD. Despite the ability of screening tools to identify those at-risk early, we do not know whether early, trauma-focused cognitive-behavioural therapy (TF-CBT) is able to disrupt the deleterious trajectories of childhood PTSD following injury. This study reports the preliminary findings of a small, multi-site, randomised controlled trial for injured children with PTSD. Twenty-two children were allocated to a TF-CBT or waitlist condition, commencing treatment 6 weeks post-injury. Pre- to post-treatment results showed that all children demonstrated reductions in PTSD symptoms and rates of diagnosis at the 10-week assessment point, with no significant differences between groups. Interestingly, children receiving TF-CBT showed greater improvements in general anxiety and depression compared to the waitlist. This paper highlights the possibility that trauma symptoms following injury may be somewhat transient and not require early intervention (at least in the short-term), but that early intervention may be beneficial in reducing accompanying internalising symptoms. The benefits and difficulties associated with early intervention will be discussed and recommendations for screen-and-treat programs for PTSD following accidental injury provided.

## **Symposium**

**Friday, November 7**

**01:30 PM to 02:45 PM**

**Bayfront A - CHILD TRACK ONE**

### **Initial Evaluation of a Web-Based Game ("Coping Coach") for Secondary Prevention of Post-Traumatic Stress Following Acute Medical Events**

(Prevent, Acc/Inj-Acute-Illness-Tech, Child/Adol, M, Industrialized)

**Marsac, Meghan, PhD<sup>1</sup>**; Kohser, Kristen, MSW<sup>2</sup>; Kenardy, Justin, PhD<sup>3</sup>; March, Sonja, PhD<sup>4</sup>; Winston, Flaura, MD, PhD<sup>5</sup>; Kassam-Adams, Nancy, PhD<sup>1</sup>

<sup>1</sup>*University of Pennsylvania School of Medicine, Philadelphia, Pennsylvania, USA*

<sup>2</sup>*The Children's Hospital of Philadelphia, Philadelphia, Pennsylvania, USA*

<sup>3</sup>*The University of Queensland, Herston, QLD, Australia*

<sup>4</sup>*University of Southern Queensland, Springfield, QLD, Australia*

<sup>5</sup>*Children's Hospital of Philadelphia, Philadelphia, Pennsylvania, USA*

Millions of children experience acute medical events, placing them at-risk for developing post-traumatic stress symptoms (PTSS). Grounded in evidence regarding etiology of PTSS, we developed a web-based early intervention ("Coping Coach") to help prevent symptoms. This presentation will review intervention acceptability, feasibility, and preliminary randomized controlled trial (RCT) outcomes (cognitive appraisals, coping, PTSS). Participants completed baseline assessments and were randomized to the intervention or waitlist-control condition. Follow-up assessments were 6, 12, and 18 weeks later. Intervention completion was tracked online. Initial intervention acceptability and feasibility were examined via expert review and pilot testing as well as a randomized controlled trial (n = 72). Intervention effects were also assessed via the RCT. Expert review results indicated ratings of good to excellent for the relevance, likely effectiveness, and age-appropriateness of content. Pilot-testing and RCT results showed high acceptability and engagement with intervention activities. RCT feasibility indicated that while most children in the intervention group logged on to the Coping Coach website, only 40% completed all activities. Preliminary RCT outcomes are forthcoming (pending the completion of the 18-week assessment) and will be discussed.

## **Symposium**

**Friday, November 7**

**01:30 PM to 02:45 PM**

**Bayfront A - CHILD TRACK ONE**

### **Predictors of Early Treatment Response in Youth Receiving Treatment for PTSD**

(Clin Res, Clinical Practice-Prevent, Child/Adol, M, Industrialized)

**Wamser-Nanney, Rachel, PhD<sup>1</sup>**; Weems, Carl, PhD<sup>2</sup>; Scheeringa, Michael, MD MPH<sup>3</sup>

<sup>1</sup>*University of Michigan, Dept of Psychiatry, Ann Arbor, Michigan, USA*

<sup>2</sup>*University of New Orleans, New Orleans, Louisiana, USA*

<sup>3</sup>*Tulane University Health Sciences Center, New Orleans, Louisiana, USA*

Identifying youth who may demonstrate an early treatment response to trauma-informed treatments is a clinically and theoretically important task. The aim of this investigation was to explore the incidence and correlates of early treatment response among youth receiving cognitive behavioral therapy (CBT) for post-traumatic stress disorder (PTSD). Fifty-six youth (ages 7-18; 57.1% females; 42.9% Caucasian) who completed four or more sessions of CBT for PTSD in a randomized controlled trial (RCT) of CBT and D-cycloserine for PTSD were included. Youth with PTSD symptoms below a clinical cutoff after session 4 of a 12-session protocol were classified as early treatment responders (32% of parent reports, 44.6% of child reports). Lower levels of children's pretreatment PTSD, depression, and anxiety symptoms, and fewer trauma types experiences were related to both child- and parent-reported responder status (child-report  $d = .57$ ; parent-report  $d = .52$ ). Non-minority status, younger age, and lower levels of rumination were also associated with child-reported early treatment response. Early treatment response was maintained at post-treatment and 3-month follow-up. Results will be discussed in terms of the need to further understand predictors of early treatment response and how they may provide avenues for identifying youth who could benefit from abbreviated protocols.



**Symposium**  
**Friday, November 7**  
**01:30 PM to 02:45 PM**  
**Brickell - MILITARY TRACK**

## **Risk and Resilience in Military Families Coping with Deployment**

(Clin Res, Fam/Int-Mil/Vets, Lifespan, M, N/A)

Mooney, Tessa, BA<sup>1</sup>; Figley, Charles, PhD<sup>2</sup>

<sup>1</sup>*Boston University, Boston, Massachusetts, USA*

<sup>2</sup>*Tulane University, New Orleans, Louisiana, USA*

Four family and child psychology researchers present findings from treatment development and clinical trials research examining the impact of parental deployment on the family system. Two presentations provide insight into the nuanced patterns of risk that military children and wives face following combat deployment. The other two introduce community-based interventions targeted at helping military families cope with the stress of deployment and reintegration and bolstering their resilience. Family and trauma research expert, Charles Figley, frames these presentations on the risk and resilience of military families in the broader context of the family system. Future directions and clinical implications for working with military families will be discussed.

**Symposium**  
**Friday, November 7**  
**01:30 PM to 02:45 PM**  
**Brickell - MILITARY TRACK**

## **Adapting Strengthening Family Coping Resources (SFCR): Helping Military Families Thrive**

(Practice, Fam/Int-Mil/Vets, Lifespan, M, Industrialized)

**Kiser, Laurel, PhD MBA**

*University of Maryland School of Medicine, Baltimore, Maryland, USA*

Families with a parent deployed to current war zones are experiencing combat stress and re-integration issues that negatively impact re-establishing routines, renegotiating parental roles, and reconnecting emotionally. If the service member is experiencing psychological distress family difficulties during re-integration are often exasperated. These struggling families often need support to adapt successfully. SFCR is an empirically-supported, clinic and community-based intervention. This manualized 15-week multi-family group delivers a strength-based, trauma-focused, skill-development treatment designed to improve the family's ability to cope with on-going stress and threats of re-exposure. Results from field trials suggest SFCR is a feasible intervention with positive effects on children's symptoms of trauma-related distress and behavior problems, parenting stress, and family functioning. SFCR was developed using a community-based participatory methodology to assure acceptability with low-income, minority populations. A similar context-specific, interactive model is being used to make appropriate cultural modifications to SFCR's manual and materials for implementation with military families. A case example will illustrate how SFCR addresses the fundamental concerns of military families and encourages development of the skills and resources necessary for them to thrive.



**Symposium**  
**Friday, November 7**  
**01:30 PM to 02:45 PM**  
**Brickell - MILITARY TRACK**

**Engaging Military Families with Young Children in Intervention Research: Process and Efficacy Outcomes**

(Clin Res, Clin Res-Fam/Int-Mil/Vets, Child/Adol, M, N/A)

**DeVoe, Ellen, PhD MSW**; Ross, Abigail, Doctoral Student; Bryant, Samanda, MSW; Maynard, Ellen, MSW  
*Boston University School of Social Work, Boston, Massachusetts, USA*

Over 2 million children will have experienced parental deployment by the end of the long wars in Afghanistan (OEF) and Iraq (OIF/OND). Over 40% of the Total Forces are parents of dependent children, of whom very young children (age birth to 5 years) are disproportionately represented. In this presentation, we discuss the process of engaging military families in all phases of a mixed-methods intervention development project, including an efficacy trial of a home-based reflective parenting program designed for returning service members and their families. This series of three studies applied a community-based participatory (CBP) approach to conduct a qualitative needs assessment with 70 military parents, a feasibility study (N=9 families), and a randomized clinical trial (N=115 families). Nearly ninety percent (89.5%) of families enrolled in the treatment arm completed all (8) program modules and post-test assessments. Findings from the clinical trial reveal significant improvements in the treatment group relative to comparison families on measures of service member mental health, including PTSD and anxiety symptoms, and on parenting variable including parenting stress and parental reflective function. Critical CBP process outcomes included the development of military-civilian partnerships, flexibility in research design, and ecological validity of the intervention context.

**Symposium**  
**Friday, November 7**  
**01:30 PM to 02:45 PM**  
**Brickell - MILITARY TRACK**

**Child Anxiety and Sleep Disturbances in Relation to Parental Military Deployment during OIF/OEF**

(Clin Res, Clin Res-Fam/Int-Mil/Vets, Child/Adol, M, N/A)

Balderas, Jessica, BS; Lau, Simon, BS; Patriquin, Michelle, PhD; **Alfano, Candice, PhD**  
*University of Houston, Houston, Texas, USA*

Parental military deployment is routinely associated with elevated emotional and sleep-related problems in children. Previous research has relied almost exclusively on broad indices of anxiety and sleep symptoms however, providing limited direction for clinical research and practice efforts. Among a sample of 30 school-aged children (aged 6 to 17 years) from military families we examined rates of specific types of anxiety and sleep problems in relation to parental deployment. Children completed the Revised Children's Anxiety and Depression Scale (Chorpita & Yim, 2000) and Sleep Self Report (Owens et al., 2000). All parents deployed as part of OIF/OEF. Clinically significant separation anxiety symptoms were present in 14% of the sample while 9% reported clinically significant social anxiety symptoms. Although months since most recent deployment was unrelated to either anxiety or sleep problems, greater total deployments correlated with increased separation anxiety [ $r = .38$ ], greater bedtime resistance [ $r = .57$ ] and increased sleep onset delay [ $r = .43$ ] in children. Our findings provide insight into more nuanced relationships between parental military deployment and elevated symptoms of anxiety and sleep problems in

children. Future directions and clinical implications will be discussed.

## **Symposium**

**Friday, November 7**

**01:30 PM to 02:45 PM**

**Brickell - MILITARY TRACK**

### **Interactive Effect of Early Childhood Adversities and Mental Health Symptoms on Family Function in Military Wives Following Combat Deployment**

(Clin Res, CPA-CSA-Depr-Mil/Vets, Adult, M, N/A)

**La Flair, Lareina, MPH, PhD;** Holmes, Allison, PhD; Sullivan, Jamie, BA; Beech, Erin, MA; Kansky, Jessica, BA; Fullerton, Carol, PhD; Ursano, Robert, MD; Cozza, Stephen, MD

*Center for the Study of Traumatic Stress, Uniformed Services University of the Health Sciences, Bethesda, Maryland, USA*

Combat deployment has been linked to elevated mental distress in military wives, yet less is known about early adversity in the association between spouse post-deployment psychological morbidity and family functioning. Study aims were to: 1) assess individual associations between PTSD and depressive symptoms and 2 domains of family functioning, communication and problem-solving, 2) evaluate childhood adversity as an effect modifier in these relationships. The sample included 106 wives of recently deployed service members (combat-injured and non-) in families with children. Nearly 40% of military wives reported high deployment-related PTSD symptoms. Almost one-third (30.9%) of spouses reported an adverse childhood event (ACE) score ≥ 4 with parental divorce (52.7%), emotional abuse (34.6%), and sexual abuse (30.9%) most frequently endorsed. PTSD and depressive symptoms (but not combat injury) were independently associated with lower problem-solving capacity. Depressive symptoms were associated with decreased family communication. ACE modified the depressive symptoms-communication relationship, such that the association strengthened with increasing ACE score. No direct effect of combat injury on family functioning was observed. This study demonstrates that deployment-related psychological morbidity can be modified by preexisting adversities, adding challenges to families.

**Symposium**  
**Friday, November 7**  
**01:30 PM to 02:45 PM**  
**Trade**

## **Improving Methods for Unpacking the Ecologies of Trauma and Loss: Implications for Two New DSM-5 Disorders**

(Res Meth, Assess Dx-Clin Res-Death-Grief, Lifespan, M, Global)

Layne, Christopher, PhD; Pynoos, Robert, MD MPH  
*UCLA - National Center for Child Traumatic Stress, Los Angeles, California, USA*

The trauma field's evolution from a psychopathology-centric perspective to one that includes "ecopathology" and "ecoresilience" perspectives has not been met with commensurate advances in research methodology. The need for rigorous tools for "unpacking" complex ecologies surrounding traumatic stress- and bereavement-related disorders is underscored by the fact that the causal origins of both lie outside the individual and transmit their effects through complex pathways. DSM-5's introduction of Persistent Complex Bereavement Disorder (PCBD) with a "Traumatic Bereavement Specifier" creates a rare opportunity for the bereavement and traumatic stress fields to cross-pollinate in developing contextualized methods for conceptualizing and measuring both PTSD and PCBD. We present innovative test construction and validation methods that facilitate contextualized assessment and study of the origins, clinical course, empirical distinctiveness, and treatment of PTSD and PCBD. We emphasize the need for correct measurement model specification, capturing all relevant facets, and theory in hypothesizing mediators, moderators and consequences. We introduce the concepts *differential validity* and *risk factor caravan* and illustrate their use in unpacking precursors, dimensions and consequences of constructs. We conclude by discussing implications for theory building, assessment, and intervention.

**Symposium**  
**Friday, November 7**  
**01:30 PM to 02:45 PM**  
**Trade**

## **Mapping Differential Relations between Trauma Reminders, Loss Reminders, and Mental Health Outcomes in Bereaved Youth**

(Assess Dx, Cog/Int-Death-Res Meth, Child/Adol, M, Industrialized)

Kaplow, Julie, PhD, ABPP<sup>1</sup>; Wamser-Nanney, Rachel, PhD<sup>2</sup>; Layne, Christopher, PhD<sup>3</sup>; Pynoos, Robert, MD MPH<sup>3</sup>

<sup>1</sup>*University of Michigan Medical School, Ann Arbor, Michigan, USA*

<sup>2</sup>*University of Michigan, Dept of Psychiatry, Ann Arbor, Michigan, USA*

<sup>3</sup>*UCLA - National Center for Child Traumatic Stress, Los Angeles, California, USA*

Although trauma and loss reminders are theorized to act as influential mediators of bereaved youth's psychological functioning, no studies to date explore ways in which trauma reminders and loss reminders may differentially relate to various mental health outcomes in bereaved youth. We used the Bereavement Risk and Resilience Index (Layne & Kaplow, 2011) to examine exposure to trauma reminders and loss reminders in relation to depression, post-traumatic stress symptoms (PTSS), and six grief domains proposed by multidimensional grief theory (Layne, Kaplow, & Pynoos, 2011) in a community sample of parentally bereaved youth. Participants included 61 bereaved youth (62% female; aged 6-18, M = 11.51) interviewed <6 months after the death. Analyses revealed that trauma reminders are more strongly associated with PTSS and Circumstance-Related Distress than loss reminders;

conversely, loss reminders are more strongly associated with Separation Distress and Existential Distress than trauma reminders. We also found differential relations between specific types of loss reminders (e.g., family gatherings), affective responses to those reminders (comfort vs. distress), and mental health outcomes (adaptive versus maladaptive grief, depression). We conclude by discussing theoretical, methodological, and clinical implications for “unpacking” the post-death ecologies of bereaved youth.

## Symposium

**Friday, November 7**

**01:30 PM to 02:45 PM**

**Trade**

### **The Differential Validity Matrix: An Innovative Tool for “Contextualized” Test Construction and Theory Building**

(Res Meth, Assess Dx-Death-Social-Grief, Lifespan, M, Global)

**Layne, Christopher, PhD<sup>1</sup>**; Kaplow, Julie, PhD, ABPP<sup>2</sup>; Netland, Marit, PhD<sup>3</sup>; Steinberg, Alan, PhD<sup>1</sup>; Pynoos, Robert, MD MPH<sup>1</sup>

<sup>1</sup>*UCLA - National Center for Child Traumatic Stress, Los Angeles, California, USA*

<sup>2</sup>*University of Michigan Medical School, Ann Arbor, Michigan, USA*

<sup>3</sup>*Bergen University College, Bergen, Norway*

The proposed diagnosis of Persistent Complex Bereavement Disorder (PCBD) was included in DSM-5 as an invitation for further research regarding its essential features, stability across contexts, and uniqueness in relation to other diagnoses. DSM-5 also reformulated PTSD by revising its symptom structure. These consequential developments raise the question: *How do we know whether (and how) diagnostic disorders (or dimensions of the same disorder) are distinct from one another in ways that matter?* For example, do they relate in similar or different ways to causal precursors (etiologic agents, mediators, treatment components)? Do they lead to the same or different consequences? In this paper, we question the heavy reliance on factor analysis (due to its inherently decontextualized and de-contextualizing nature) to arbitrate questions regarding constructs’ origins, dimensionality, and distinctiveness. We define *differential validity* and describe ways in which it complements traditional test construction tools. We present the *Differential Validity Matrix*, a tool that draws on (and tests) core assumptions of the common factor (reflective indicator) model. Using Bosnian field data, we illustrate its use in constructing “ecologically contextualized” tests and theory, and discuss its promise for “unpacking” resource and risk factor caravans, enhancing interventions, and guiding policy.

**Symposium**  
**Friday, November 7**  
**01:30 PM to 02:45 PM**  
**Flagler**

## **Addressing the Effects of Childhood Trauma with Diverse Refugee and Immigrant Children and Youth**

(Commun, Cul Div, Child/Adol, M, Industrialized)

Birman, Dina, PhD  
*University of Illinois Chicago, Chicago, Illinois, USA*

This symposium will bring together members of three Centers funded by the National Child Traumatic Stress Network that provide mental health services to traumatized immigrants and refugees, including the Urban Youth Trauma Center, Institute for Juvenile Research at the University of Illinois at Chicago; The Boston Children's Hospital's Treatment and Services Adaptation Center; and the International Family, Adult, and Child Enhancement Services at the Heartland Alliance for Human Needs and Human Rights in Chicago. Each of the presentations will provide a detailed description of the service model used by the site, present data on intervention effectiveness, and discuss challenges in doing this work, as well as strategies for overcoming them. Following the presentations, the audience will be invited to participate in a general discussion about interventions with culturally, linguistically, religiously, ethnically, and racially diverse children and youth, ranging in age from younger children to older adolescents.

**Symposium**  
**Friday, November 7**  
**01:30 PM to 02:45 PM**  
**Flagler**

## **Integrated Trauma and Substance Use Treatment for Ethnic Minority Youth**

(Clin Res, Comm/Vio-Cul Div-Ethnic-Sub/Abuse, Child/Adol, M, N/A)

**Salo, Corrina, MA PhD Student<sup>1</sup>**; Suarez, Liza, PhD<sup>1</sup>; Cruz, Rick, PhD<sup>1</sup>; Lopez-Tamayo, Roberto, MA PhD Student<sup>2</sup>

<sup>1</sup>*University of Illinois Chicago, Chicago, Illinois, USA*

<sup>2</sup>*DePaul University, Chicago, Illinois, USA*

Trauma exposure and victimization are common problems for adolescents (Costello, Erkanli, Fairbank, & Angold, 2002). Traumatic stress and substance abuse are positively correlated among adolescents (Stevens, Murphy, & McKnight, 2003), and youth with both problems show greater clinical severity, functional impairment, and service utilization compared to those with only one of these conditions (Suarez, Belcher, Briggs, & Titus, 2012). Given these factors, empirical studies of integrated treatments are needed. Integrated PTSD and SUD treatment is especially important for ethnic minority youth who are more likely to experience a trauma (e.g., Breslau et al., 2004) and who evidence similar rates of substance use compared to European-American youth, but are over-represented in juvenile justice for drug offenses (e.g., NSDUH, 2001; Snyder et al., 2006). Ethnic minority youth receive treatments that are less appropriate to their needs and of lesser quality (Chow et al., 2003; Le Fauve et al., 2003). We will report on a single-case design study with a Latino adolescent. We will provide evidence for an intervention based on Trauma Systems Therapy (Saxe, Ellis, Kaplow, 2007) that combines several components reflecting promising practices for PTSD and SUD in adolescents (Suarez, Ellis & Saxe, 2013), including trauma narratives and tracking substance cravings.

**Symposium**  
**Friday, November 7**  
**01:30 PM to 02:45 PM**  
**Flagler**

**Lessons Learned in the Adaptation and Implementation of Trauma Systems  
Therapy for Refugees with Different Cultural Groups**  
(CulDiv, Refugee, Child/Adol, M, Industrialized)

**Ellis, Heidi, PhD**  
*Children's Hospital Boston, Boston, Massachusetts, USA*

Refugee and immigrant youth are grossly underserved by the mental health service system. Through our NCTSN Center for Refugee Trauma and Resilience we have developed and disseminated a model of mental health care that shows promise in both engaging and treating refugee children. Our treatment model, Trauma Systems Therapy for refugees (TST-R) (Ellis et al, 2011; Ellis, Miller, Abdi, Barrett, Blood, & Betancourt, 2012), is a multi-level school- and community-based mental health intervention for refugee youth and families. Originally developed in response to the specific challenges Somali refugees experienced as they resettled in our communities, it has since been adapted for and disseminated to several communities including the Bhutanese refugee community. The overall model, as well as considerations and lessons learned in adapting the model for different cultural groups, will be described. We will also present evaluation data from our programs with Somali youth and Bhutanese youth. Results show that TST-R is effective in both engaging refugee children in mental health services and in diminishing trauma-related mental health symptoms. Results from our Somali program showed significant reduction in PTSD and depression symptoms and an increase in school belonging. Results from our Bhutanese program show a significant reduction in PTSD symptoms.

**Symposium**  
**Friday, November 7**  
**01:30 PM to 02:45 PM**  
**Flagler**

**Improving Quality of Life in Refugee Youth: A Collaborative Study of the  
International Family, Adult, and Child Enhancement Services (IFACES) Program**  
(Commun, QoL-Refugee, Child/Adol, M, Industrialized)

**Bray, Emily, MA PhD Student<sup>1</sup>; Birman, Dina, PhD<sup>2</sup>**  
<sup>1</sup>*U. Illinois at Chicago, Chicago, Illinois, USA*  
<sup>2</sup>*University of Miami, Coral Gables, Florida, USA*

In the year 2012 alone 58,236 refugees were resettled across the United States (ORR). Many of these refugees are youth who have experienced severe trauma and demonstrate a high prevalence of symptoms of depression, anxiety, and PTSD (Birman et al., 2005, Lustig et al., 2004). Mental health interventions can be crucial for refugee youth, yet there are many barriers to accessing these services such as family unfamiliarity and stigma, the salience of more urgent resettlement needs, and a lack of linguistically and culturally congruent services. The present study examines the International Family, Adult, and Child Enhancement Services (IFACES) Program, which is a National Child Traumatic Stress Network (NCTSN) funded comprehensive mental health services model designed to help overcome these potential barriers to mental health treatment (Birman et al., 2008). This presentation provides data on multi-level modeling, specifically longitudinal growth models with time varying predictors used to evaluate whether the number and type of services received by 71 refugee youth resettled in Chicago, Illinois predicts an increase in functioning, as evaluated by parents, and the youth over time. The data was collected from 2009-2011.

Results indicate that as time and recent number of services received increased together, youth's self-assessed impairment decreased.

## **Symposium**

**Friday, November 7**

**01:30 PM to 02:45 PM**

**Gusman/Tuttle**

## **Health Risk Behaviors and Help Seeking among Victims and Perpetrators of Sexual Violence**

(Social, Rape-Sub/Abuse, Adult, M, Industrialized)

Littleton, Heather, PhD

*East Carolina University, Greenville, North Carolina, USA*

Sexual violence remains a significant public health problem, associated with a plethora of negative mental health outcomes including depression, anxiety, and post-traumatic stress disorder. Despite this, many victims do not seek formal help. In addition, unlike mental health outcomes, the association of sexual violence with risky health behaviors such as hazardous drinking, substance use, and risky sexual behaviors is unclear, including with regards to the extent to which these behaviors are causally implicated in sexual assault perpetration and victimization. Similarly, findings are conflicting regarding the extent to which increases in health risk behaviors are a consequence of sexual victimization. Three of the presentations in the current symposia address these issues using longitudinal data to examine the relationships among health risk behaviors, including substance use and risky sexual behavior, and sexual victimization and perpetration. The final presentation is one of only a few to examine barriers and facilitators of formal help seeking among victims of sexual violence, including attitudinal, individual, and social factors. Implications of the findings of these presentations for understanding the impact of sexual violence, as well as for the development of sexual violence prevention and intervention programs are also discussed.

## **Symposium**

**Friday, November 7**

**01:30 PM to 02:45 PM**

**Gusman/Tuttle**

## **Response to a Sex-Related Vignette Predicts Future Risky Behavior: Examining Vulnerability for Prospective Sexual Revictimization**

(Prevent, CSA-Rape, Adult, M, Industrialized)

Miron, Lynsey, MA PhD Student; **Hannan, Susan, MA**; Orcutt, Holly, PhD

*Northern Illinois University, DeKalb, Illinois, USA*

Research suggests that sexual victimization is associated with sexual risk behavior. Yet to be examined is whether individuals' estimates of sexual behavior predict their future behavior, and how a combination of these factors may increase vulnerability for victimization. The present study examined whether women's forecasting of likely behavior in a sex-related vignette reliably predicts subsequent risky sex practices, and whether these factors increase risk for prospective sexual assault (P-ASA). Participants were undergraduate women (N = 574) enrolled in a longitudinal study examining childhood and adolescent victimization, forecasted sexual behavior, risky sexual practices (number of partners, frequency of one-night stands, and frequency of sex with a stranger), and P-ASA. Results from a path model indicated that prior victimization was associated with greater likelihood of sexual intercourse in the sex-



related vignette ( $\beta = .12, p < .01$ ), which predicted risky sexual behavior approximately one year later ( $\beta = .22, p < .01$ ). In turn, risky sexual behavior was significantly associated with the occurrence of P-ASA over the course of the following year ( $\beta = .29, p < .05$ ). Results suggest that women's forecasting of hypothetical sexual behavior is associated with future risky sex practices, which may increase vulnerability for P-ASA.

## **Symposium**

**Friday, November 7**

**01:30 PM to 02:45 PM**

**Gusman/Tuttle**

### **Barriers and Facilitators of Mental Health Treatment-Seeking among Sexual Assault Victims in the Military**

(Clin Res, Clin Res-Prevent-Rape-Mil/Vets, Adult, M, Industrialized)

**Zinzow, Heidi, PhD**; Britt, Thomas, PhD; Pury, Cindy, PhD; Raymond, Mary Anne, PhD  
*Clemson University, Clemson, South Carolina, USA*

Despite significant mental health needs among sexual assault victims, only a minority seek treatment. Sexual assault (SA) victims in the military contend with unique barriers to care, and little research has examined mental health treatment-seeking in this population. We surveyed 1725 Army soldiers and included items assessing prior SA, mental health symptoms, barriers and facilitators of mental health treatment-seeking, and treatment-seeking behavior. Analyses were limited to 138 soldiers who endorsed a history of forcible or incapacitated SA. Only 49% of SA victims had sought treatment in the past 12 months. Univariate logistic regression analyses revealed the following correlates of treatment-seeking: a) positive views of treatment, b) support from others, c) medication concerns, d) negative views of treatment, e) self-reliance, f) perceived stigma, g) use of alternatives to treatment, h) lack of information, and i) public stigma. In a final multivariate model, support from others was positively associated ( $OR = 1.90, p < .05$ ) and self-reliance was negatively associated ( $OR = 0.34, p < .05$ ) with treatment-seeking. These findings highlight the need for treatment-facilitating interventions that focus on improving attitudes towards treatment, challenging beliefs related to self-reliance, and increasing social support for treatment-seeking.

## **Symposium**

**Friday, November 7**

**01:30 PM to 02:45 PM**

**Gusman/Tuttle**

### **Effects of College Sexual Victimization on Alcohol-Related Sexual Behavior**

(Social, Rape-Sub/Abuse, Child/Adol, M, Industrialized)

**Testa, Maria, PhD**; Livingston, Jennifer, PhD  
*University at Buffalo, Buffalo, New York, USA*

Sexual victimization is associated with negative psychological consequences such as depression and PTSD. Some studies also suggest that victimization may lead to increased alcohol use or sexual activity, as a means of coping with the psychological distress. The objective of the study was to examine in a sample of college women ( $N = 439$ ) the impact of first semester sexual victimization on second semester outcomes in three domains: psychological, alcohol, and sexual. Because behavioral risk factors may precede victimization, we controlled for first semester levels of dependent variables in all analyses. Sexual victimization was not associated with increased depression, stress, heavy episodic drinking, or alcohol problems in the second semester. However, victimization in the first semester resulted in more hookups, greater use of alcohol during sexual activity, and increased alcohol problems specific to sex (e.g., regretted sex resulting from drinking). These sexual behavioral outcomes were not associated

with depression or with trauma associated with the victimization experience, thus findings do not support a coping or self-medication perspective. Nonetheless, the direct association between victimization and increased alcohol-related sexual behaviors suggests a potential pathway to revictimization.

## **Symposium**

**Friday, November 7**

**01:30 PM to 02:45 PM**

**Gusman/Tuttle**

### **Risky Behaviors and Sexual Violence Perpetration among Male College Students**

(Prevent, Aggress-Rape, Lifespan, M, Industrialized)

**Thompson, Martie, PhD; Kingree, Kip, PhD; Zinzow, Heidi, PhD**

*Clemson University, Clemson, South Carolina, USA*

The epidemiology of sexual violence (SV) perpetration has been understudied relative to SV victimization. Efforts to reduce the negative impact of SV on victims need to be informed by research on perpetrators of SV, as ultimately, perpetrators are responsible for this significant public health problem. This presentation will use data from a 4-wave longitudinal study with 795 college males to illustrate different trajectories of college males' SV behaviors and how time-varying risk behaviors differentiate men who follow these different paths. The sample was surveyed at the end of each of their 4 years at a university on SV and its various risk behaviors. Using latent growth mixture modeling, we found four distinct trajectories: consistently high levels of SV (8.6%), decreasing SV (12.4%), increasing SV (8.1%), and consistently low levels of SV (70.9%). Using general linear models, we found that changes in certain risk behaviors corresponded with SV trajectories, specifically number of sexual partners, impulsivity, sexual compulsivity, drug use, and pornography. The finding that changes over time in risk behaviors corresponded with SV perpetration informs prevention programming by illuminating that these risk factors are not static and that changes in them could lead to changes in sexual violence risk.

## **Panel Presentation**

**Friday, November 7**

**01:30 PM to 02:45 PM**

### **Sevilla - LONG-TERM EFFECTS OF CHILD TRAUMA TRACK**

#### **Towards an Integrated Theory of Dissociation**

(Clin Res, Assess Dx-Bio Med-Complex-Bio/Int, N/A, I, N/A)

**Kudler, Harold, MD<sup>1</sup>; Lanius, Ruth, MD, PhD<sup>2</sup>; D'Andrea, Wendy, PhD<sup>3</sup>; Rasmusson, Ann, MD<sup>4</sup>**

<sup>1</sup>*VISN 6 MIRECC and Duke University Medical Center, Chapel Hill, North Carolina, USA*

<sup>2</sup>*University of Western Ontario, London, Ontario, Canada*

<sup>3</sup>*New School for Social Research, New York, New York, USA*

<sup>4</sup>*National Center for PTSD, VA Boston Healthcare System, Boston University School of Medicine, Boston, Massachusetts, USA*

Dissociation has long been associated with psychological trauma. It may occur at the time of traumatization, has been identified as a key factor in Acute Stress Disorder and may be associated with the long term sequelae of traumatic stress as alluded to by the recent addition of the DSM V PTSD subtype, "With Dissociative Symptoms." Treatments of post-traumatic disorders sometimes employ dissociative states therapeutically as in the abreactive treatment of Combat Fatigue with hypnosis or sodium amytal. Dissociative symptoms may be more common among survivors of childhood trauma and other complex forms of PTSD. Yet, despite dissociation's long-recognized connection with psychological trauma and its many interactions both with trauma and its treatment, there has been little agreement in the field as to what exactly dissociation might be and what it could teach us about the nature of trauma. This panel will engage researchers and clinicians who have approached dissociation from diverse perspectives including neuroimaging, neuroendocrinology, genetics, psychophysiology and psychodynamic psychotherapy in order to collaborate on a new, integrative theory of dissociation for application in ongoing research and clinical efforts.

## **Oral Paper Presentation**

**Friday, November 7**

**01:30 PM to 02:45 PM**

### **Bayfront B - CHILD TRACK TWO**

## **Child Sexual Abuse: Consequences and Interventions**

### **Safe Touches: a Rigorous Evaluation of a Sexual Abuse Prevention Program for Children**

(Prevent, CSA-Commun-Prevent-Pub Health, Child/Adol, M, Industrialized)

**Pulido, Mary, PhD MSW**

*New York Society for the Prevention of Cruelty to Children, New York, New York, USA*

This study utilized a cluster randomized design to evaluate Safe Touches, a school-based sexual abuse prevention workshop, developed for a multicultural classroom, and conducted in the second and third grades in the New York City public schools. Participating schools had 75% participation in the free lunch program and less than 25% White students. Classrooms were randomly assigned to the Intervention or Control Groups. The primary outcome was change in the Inappropriate Touch Scale of the Children's Knowledge of Abuse Questionnaire (CKAQ), a standardized measure assessing children's knowledge of unsafe situations and people. The CKAQ was administered to both groups at baseline, one week later (after the Intervention group saw Safe Touches), and four weeks later (after both groups had seen Safe Touches). Preliminary analyses from Year 1 (N=232) are promising, indicating an approximate 18% increase in knowledge of inappropriate touch for the Intervention group compared to a 3%

increase for the Controls. Final analysis on the full sample (N=320) will be completed in July 2014. Findings will advance current knowledge on the impact of school-based sexual abuse prevention programs to include low-income, minority children. Implications for the future of sexual abuse prevention programming will be discussed.

## **Oral Paper Presentation**

**Friday, November 7**

**01:30 PM to 02:45 PM**

**Bayfront B - CHILD TRACK TWO**

### **“How Will I Ever Feel Clean Again?”: Exploring the Efficacy of Imaginal Exposure in Reducing Disgust Associated with Memories of Sexual Trauma**

(Clin Res, Affect/Int-Rape, Adult, M, Industrialized)

**Badour, Christal, MA PhD Student<sup>1</sup>**; Feldner, Matthew, PhD<sup>2</sup>

<sup>1</sup>*Medical University of South Carolina and the Ralph H. Johnson VA Medical Center, Charleston, South Carolina, USA*

<sup>2</sup>*University of Arkansas, Fayetteville, Arkansas, USA*

Emerging evidence identifies disgust as a common and persistent reaction following sexual victimization that is linked to post-traumatic stress disorder (PTSD). Importantly, evidence suggests compared to fear, disgust may be resistant to extinction, which may have important implications for the treatment of PTSD. The current study sought to fill a gap in the existing literature by examining patterns of extinction in sexual trauma-related disgust as compared to anxiety. Specifically, 72 women (Mage = 31.15; SD = 13.17) with a history of sexual victimization completed a single laboratory-based session of imaginal exposure that involved repeated exposure to idiographic disgust- and fear-focused sexual trauma scripts. Results from longitudinal multilevel linear models demonstrated that ratings of anxiety declined significantly across the course of exposure trials ( $\beta = -2.45$ ,  $t = -2.21$ ,  $p = .03$ ) while disgust did not ( $\beta = -2.19$ ,  $t = -1.46$ ,  $p = .15$ ). Importantly though, rate of decline in disgust uniquely predicted decline in PTSD symptoms elicited by the imaginal exposure ( $\beta = .02$ ,  $t = 2.21$ ,  $p = .03$ ) even when accounting for significant change in anxiety ( $\beta = .03$ ,  $t = 2.82$ ,  $p = .01$ ). These results add to a growing literature documenting the importance of disgust in sexual trauma and PTSD. Implications for the treatment of disgust responses in PTSD will be presented.

## **Oral Paper Presentation**

**Friday, November 7**

**01:30 PM to 02:45 PM**

**Bayfront B - CHILD TRACK TWO**

### **Relationships between Childhood Trauma and Sexual Victimization and Self-Efficacy in Teenage Girls**

(Clin Res, CPA-CSA, Child/Adol, I, Industrialized)

**Cale, Elizabeth, MA PhD Student<sup>1</sup>**; Keller, Jennifer, PhD<sup>2</sup>

<sup>1</sup>*Palo Alto University, Palo Alto, California, USA*

<sup>2</sup>*Stanford University School of Medicine, Stanford, California, USA*

Research demonstrates widespread detrimental impact of childhood trauma on adolescent development (Cisler et al., 2012; Fletcher, 2009). Increasing attention has focused on the effect of trauma on the development of self-efficacy, an important construct in building positive behaviors in adolescents, such as academic performance, safe sexual practices, and reduced psychopathology and distress (Rostosky et al., 2008; Schunk & Miller, 2002; Chesney et al., 2006). In the current study, eighty females (13-18 years old) completed assessments of general and coping self-

efficacy, history of childhood emotional, physical or sexual abuse, and/or emotional or physical neglect, and history of unwanted sexual experiences in adolescence. Pearson correlations indicated significant negative associations between self-efficacy and total childhood trauma, childhood emotional abuse and neglect, and physical abuse and neglect. In addition, unwanted adolescent sexual experiences positively correlated with childhood trauma. The results suggest that childhood trauma has important implications on both self-efficacy and victimization in adolescence. Self-efficacy is associated with positive behaviors, therefore this may be a potential area for intervention for female adolescents. Results support the notion that those with childhood trauma are more likely to experience victimization in adolescence.

## **Oral Paper Presentation**

**Friday, November 7**

**01:30 PM to 02:45 PM**

**Bayfront B - CHILD TRACK TWO**

### **Does Exposure to Childhood Sexual Abuse Have an Enduring Impact on Psychiatric Resilience in Adulthood?**

(Clin Res, CSA-Dev/Int-Fam/Int, Adult, I, Industrialized)

**Brown, Ruth, PhD;** York, Timothy, PhD; Myers, John, MS; Kendler, Kenneth, MD; Amstadter, Ananda, PhD  
*Virginia Institute for Psychiatric and Behavioral Genetics, VCU, Richmond, Virginia, USA*

Exposure to traumatic events in childhood (e.g., childhood sexual abuse; CSA) is associated with a host of short and long-term negative physical and mental health outcomes, including increased vulnerability to the effects of exposure to later stressful life events (SLEs) (Maniglio, 2009; Spataro, Mullen, Burgess, Wells, & Moss, 2004). This study sought to determine if two childhood factors (CSA, parental warmth) were related to psychiatric resilience in adulthood. A sample of 1163 adult females with complete data on age, income, CSA, parental warmth, and SLEs was drawn from the Virginia Adult Twin Study of Psychiatric and Substance Use Disorders. The dependent variable, psychiatric resilience, was defined as the residual between the participants' score on a measure of broad psychiatric symptoms (the Symptom Checklist-90) and their predicted score based on their cumulative exposure to SLEs. Results indicated that CSA ( $\beta = -.12$ ,  $t = -4.03$ ,  $p < .001$ ) was negatively associated with resilience in adulthood, and parental warmth was positively associated with resilience in adulthood ( $\beta = .14$ ,  $t = 4.87$ ,  $p < .001$ ). No other predictors were significant. These results suggest childhood environmental factors, both positive and negative, can have a lasting impact on reactions to SLEs in adulthood.

# CONCURRENT SESSION 7

## Invited Speakers

Friday, November 7

03:00 PM to 04:15 PM

## Chopin - SPANISH TRACK

*Presented in Spanish with simultaneous translation to English*

### **Buenas Prácticas en Casos de Maltrato Infantil: La Importancia de Incluir el Enfoque del Trauma en el Marco de Intervención (Best Practices in Child Abuse Cases: The Importance of Including a Trauma Focus in the Intervention Framework)**

(Social, CPA-CSA-Chronic-Comm/Int, Lifespan, M, Global)

**Intebi, Irene, MD**

*Private Practice, Buenos Aires, Argentina*

El maltrato infantil constituye un problema sanitario y una vulneración de derechos que requiere intervenciones interdisciplinarias, multimodales e intersectoriales. En la mayoría de los países latinoamericanos las políticas públicas enfocan el problema priorizando la vulneración de derechos, dejando en un segundo plano los programas de intervención y tratamiento para la reparación de los efectos del trauma crónico. Se describirán los beneficios de considerar los efectos traumáticos en las víctimas de malos tratos a niños/as y adolescentes a la hora de diseñar e implementar estrategias eficaces de intervención que incluyan tanto desde la perspectiva de vulneración de los Derechos del Niño/a y Adolescente como de los tres niveles de prevención de la Salud Pública. Se considerarán las intervenciones psicoterapéuticas específicas dirigidas a reparar las consecuencias traumáticas así como otras prácticas socioeducativas implementadas por todos/as los/as profesionales que trabajan con niños/as y adolescentes tendientes a fomentar la resiliencia. La presente ponencia será de interés para aquellos/as que realizan una práctica psicoterapéutica clínica y también para educadores/as, trabajadores/as sociales, personal del sistema judicial, personal de las fuerzas públicas, planificadores/as y/o ejecutores/as de políticas públicas y profesionales de los medios de comunicación.

(Child abuse is both a public health concern and a right violation issue that needs to be addressed by an interdisciplinary, multimodal and intersectoral approach. Most Latin American countries governments prioritize the right violation perspective in their public policies, paying less (or even little) attention to the need to create intervention and treatment programs to address the effects of chronic trauma. This presentation describes the advantage of focusing on the effects of trauma on abused children and adolescents when planning and implementing efficient intervention strategies considering the problem both as a violation of the Convention on the Rights of the Child (CRC) and a public health issue that merits a 3-level prevention approach. Specific psychotherapeutic interventions aimed at healing traumatic effects of abuse and other socio-educative interventions used by different disciplines working with children and adolescents aimed at strengthening resilience will be discussed. This presentation is of interest for psychotherapists, educational psychologists, doctors, social workers, teachers, lawyers, legal system and law enforcement personnel, policy decision makers and designers, and media professionals.)

**Symposium**  
**Friday, November 7**  
**03:00 PM to 04:15 PM**  
**Versailles**

## **Translating Basic Science findings to Improve PTSD Therapy and Early Intervention**

(Clin Res, Acute-Affect/Int-Clin Res-Sleep, Adult, M, Global)

Kleim, Birgit, PhD  
*University of Zurich, Zürich, Switzerland*

Trauma-focused therapy for post-traumatic stress disorder (PTSD) is an effective PTSD treatment. Nevertheless, not all patients benefit equally from this type of therapy. There is thus significant room for improvement. This symposium brings together fresh research on how basic science findings may help improve PTSD therapy and early intervention efforts. The first presentation (K. Felmingham) will present new data on functional brain correlates as predictors of response to cognitive behavioural therapy in PTSD. The second presentation, (R. Yehuda) will present data from a study on glucocorticoid augmentation of prolonged exposure therapy showing that glucocorticoids prevent drop outs. The third presentation (B. Kleim) will highlight how sleep may benefit emotional memory formation early post-trauma, as well as during therapy, by its offline memory consolidating properties. The final presentation (S. Koch) presents results from an fMRI study investigating the effects of intranasal oxytocin administration on emotional neural processing in PTSD and discusses these findings in the context of medication-enhanced psychotherapy for PTSD. Together, these findings contribute to the development of novel therapeutic strategies to treat PTSD and make existing therapeutic strategies more effective through the translation of basic research to clinical treatments.

**Symposium**  
**Friday, November 7**  
**03:00 PM to 04:15 PM**  
**Versailles**

## **Increased Frontal Inhibitory Activity is Associated with Improved Response to Cognitive Behavioural Therapy in PTSD**

(Bio Med, Clin Res-Cog/Int-Bio/Int, Adult, M, Industrialized)

**Felmingham, Kim, PhD<sup>1</sup>**; Falconer, Erin, PhD<sup>2</sup>; Bryant, Richard, PhD<sup>2</sup>  
<sup>1</sup>*University of Tasmania, Hobart, TAS, Australia*  
<sup>2</sup>*University of New South Wales, Sydney, New South Wales, Australia*

This study employed a GoNoGo task to examine inhibitory function and functional brain correlates as predictors of response to cognitive behaviour therapy in Post-Traumatic Stress Disorder (PTSD). 13 patients with PTSD completed a GoNoGo task whilst undergoing functional magnetic resonance imaging. Following this baseline session, participants completed eight weekly sessions of cognitive behaviour therapy comprising exposure therapy and cognitive restructuring. Results revealed that after controlling for initial PTSD symptom severity and depression, greater activity in left frontal and dorsal striatal regions during inhibitory control was associated with lower PTSD severity scores (indexed by the Clinician Administered PTSD Scale) following treatment. Findings suggest that the capacity for frontal inhibitory control is associated with better response to cognitive behavioural treatment in PTSD.



**Symposium**  
**Friday, November 7**  
**03:00 PM to 04:15 PM**  
**Versailles**

## **The Effects of Glucocorticoid Augmentation of Prolonged Exposure Therapy in PTSD**

(Clin Res, Bio Med-Clin Res-Bio/Int-Mil/Vets, Adult, M, Industrialized)

**Yehuda, Rachel, PhD**; Bierer, Linda, MD  
*J. J. Peters Veterans Affairs Medical Center; Mount Sinai School of Medicine, Bronx, New York, USA*

**BACKGROUND:** Prolonged exposure (PE) has established efficacy for PTSD, but is associated with high dropout rates. We hypothesized that cortisol augmentation would diminish the traumatizing effects of fearful memories retrieved during therapy, promote extinction learning, and result in fewer drop-outs. **METHOD:** 53 veterans enrolled and 24 veterans were randomized to receive oral Hcort 30mg vs. placebo prior to PE sessions 3-10, in a double-blind protocol. Psychobiological assessment, was completed pre- and post-treatment (tx), and at 6 week follow-up. Intent-to-treat analysis was performed using latent growth curve modeling of tx effects on change in PTSD severity over time. Responders were defined at post-tx as not meeting criteria for PTSD. **RESULTS:** Hcort augmentation was associated with greater reduction in total PTSD symptoms compared to placebo explained by greater patient retention in the Hcort condition. Responders were more likely to demonstrate increased glucocorticoid sensitivity at pre-tx, indicated by greater cortisol suppression on the DST, but to diminish responsivity in association with clinical improvement demonstrated by the lysozyme inhibition test. **CONCLUSIONS:** Hcort is associated with improved patient retention and consequently symptom improvement. Among responders, those receiving Hcort had greater improvements in several markers of HPA dysregulation.

**Symposium**  
**Friday, November 7**  
**03:00 PM to 04:15 PM**  
**Versailles**

## **Intranasal Oxytocin as Augmentation Strategy for Psychotherapy in PTSD: Behavioral and fMRI Findings**

(Bio Med, Bio/Int, Adult, M, Industrialized)

**Koch, Saskia, MSc<sup>1</sup>**; van Zuiden, Mirjam, PhD<sup>2</sup>; Nawijn, Laura, MSc<sup>2</sup>; Frijling, Jessie, MSc<sup>2</sup>; Veltman, Dick, MD PhD<sup>3</sup>; Olff, Miranda, PhD<sup>4</sup>

<sup>1</sup>*Academic Medical Center, University of Amsterdam, Amsterdam, Noord Holland, Netherlands*

<sup>2</sup>*Academic Medical Center, Amsterdam, Noord Holland, Netherlands*

<sup>3</sup>*VU University, Amsterdam, Noord Holland, Netherlands*

<sup>4</sup>*Academic Medical Center at the University of Amsterdam and Arq Psychotrauma Expert Group, Amsterdam, Noord-Holland, Netherlands*

Post-traumatic stress disorder (PTSD) is characterized by an excessive fear response, which is neurobiologically associated with amygdala hyperactivity and diminished prefrontal control. This excessive fear is an important target for medication-enhanced psychotherapy (MEP) in PTSD. Since the neuropeptide oxytocin (OT) influences fear processing, we conducted a randomized double-blind placebo-controlled fMRI study to investigate the effects of intranasal OT administration on emotional neural processing in male and female police officers with (N=37) and without PTSD (N=40). We will discuss our results of an emotional face matching task and passive viewing of neutral and negative pictures. Preliminary results in the male participants show that OT positively increased the

emotional rating of pictures in PTSD patients, whereas the reverse effect was found in healthy controls. This effect was dependent on task condition and medication-order. Furthermore, preliminary neuroimaging results indicate that OT administration dampened amygdala reactivity to angry and fearful faces but trend-significantly enhanced reactivity to neutral and happy faces in PTSD patients only. These preliminary results on the effects of a single-administration of OT in PTSD, suggest that OT indeed influences fear processing in these patients and may therefore be a promising agent for MEP in PTSD.

## **Symposium**

**Friday, November 7**

**03:00 PM to 04:15 PM**

**Versailles**

### **Beneficial Effects of Sleep on Remembering Trauma and Emotional Processing during Exposure Therapy**

(Clin Res, Acute-Affect/Int-Bio/Int-Sleep, Adult, M, Industrialized)

**Kleim, Birgit, PhD<sup>1</sup>**; Wysokowsky, Julia, MSc<sup>2</sup>; Schmid, Nuria, MSc<sup>1</sup>; Rasch, Björn, PhD<sup>3</sup>

<sup>1</sup>*University of Zurich, Zürich, Switzerland*

<sup>2</sup>*Uni du Quebec a Montreal, Zürich, ZH, Switzerland*

<sup>3</sup>*U C Davis School of Medicine, Fribourg, FR, Switzerland*

Basic neuroscience research has shown that sleep benefits learning, memory and emotional processing via an offline consolidation process. We aimed to translate this finding to clinical science and test the beneficial effect of sleep (i) in the early aftermath of experiencing trauma and (ii) in the context of exposure therapy. Sleep was recorded using a portable EEG machine. First, we found that individuals who slept compared to those who remained awake after trauma exposure in the laboratory experience fewer and less distressing intrusive memories later. Second, sleep-compared to remaining awake- following an exposure therapy session led to increased reductions in anxiety and negative cognitions, hence improving therapeutic effectiveness. These results suggest that sleep may have a beneficial role, by (i) depotentiation of the affective tone initially associated with a traumatic memory, and (ii) strengthening new memory traces established during therapy. Further clinical implications for early post-trauma intervention and psychotherapy for PTSD will be discussed.

**Symposium**  
**Friday, November 7**  
**03:00 PM to 04:15 PM**  
**Biscayne - BIOLOGY TRACK**

## **Interactions between Childhood Trauma and Genetic Variants in Predicting Adolescent and Adult Psychopathology**

(Bio Med, CPA-CSA-Gen/Int-Res Meth, Lifespan, M, Industrialized)

Lowe, Sarah, PhD<sup>1</sup>; Koenen, Karestan, PhD<sup>2</sup>

<sup>1</sup>*Columbia University, Mailman School of Public Health, New York, New York, USA*

<sup>2</sup>*Columbia University School of Public Health, New York, New York, USA*

Exposure to traumatic events in childhood increases risk for psychopathology in adolescence and adulthood. However, the majority of childhood trauma survivors do not exhibit adverse psychological outcomes. It is therefore important to understand factors that modify risk. An emerging body of research has shown significant gene-by-environment interactions (GxEs) between childhood trauma and genetic variants in predicting PTSD and depression. This panel will extend this research by documenting GxEs with childhood trauma as predictors of related phenotypes, among human and animal samples, and using novel statistical methodologies. Dr. Kate Walsh will present significant GxEs with child abuse history in predicting a measure of autonomic nervous system reactivity among adolescents exposed to a social stressor. In the same sample, Dr. Jennifer Sumner will show significant GxEs with child abuse history in predicting cortisol reactivity. Dr. Jackie Meyers will document consistent GxEs with early trauma exposure in predicting alcohol consumption in both rodent and human samples. Lastly, Dr. Lynn Almli will demonstrate a novel statistical method of exploring GxEs that addresses common violated assumptions in genome-wide association studies. Dr. Karestan Koenen will serve as the Discussant, integrating the four presentations and providing suggestions for future research.

**Symposium**  
**Friday, November 7**  
**03:00 PM to 04:15 PM**  
**Biscayne - BIOLOGY TRACK**

## **FKBP5 Interacts with Childhood Maltreatment to Predict Reduced Cardiac Output among Adolescents Exposed to the Trier Social Stress Test**

(Bio Med, Bio Med-CPA, Child/Adol, M, Industrialized)

**Walsh, Kate, PhD<sup>1</sup>**; McLaughlin, Katie, PhD<sup>2</sup>; Sumner, Jennifer, PhD<sup>3</sup>; Sheridan, Margaret, PhD<sup>4</sup>; Koenen, Karestan, PhD<sup>5</sup>

<sup>1</sup>*Columbia University, New York, New York, USA*

<sup>2</sup>*University of Washington, Seattle, Washington, USA*

<sup>3</sup>*Columbia University, Mailman School of Public Health, New York, New York, USA*

<sup>4</sup>*Harvard Medical School/Children's Hospital Boston, Boston, Massachusetts, USA*

<sup>5</sup>*Columbia University School of Public Health, New York, New York, USA*

Although FKBP5 interacts with childhood maltreatment to predict disorders characterized by alterations in stress responsivity, it has yet to be studied in relation to physiologic systems including the autonomic nervous system (ANS). Examining whether FKBP5 variants are associated with ANS reactivity is critical to understanding how genetic factors may shape physiological markers that predict chronic and impairing psychopathology. The current study examined whether four SNPs on FKBP5 (rs9296158, rs3800373, rs1360780, rs9470080) interact with child

abuse to predict a measure of ANS reactivity, reduced cardiac output (RCO), among adolescents exposed to a social stressor, the Trier Social Stress Test (TSST). Participants were 168 racially diverse adolescents aged 13-17 (56.0% female) who completed a childhood abuse self-report and interview. Saliva samples for FKBP5 genotyping were collected, and continuous cardiac and hemodynamic measures were recorded noninvasively during the TSST. Repeated measures ANCOVAs controlling for age, gender, and race/ethnicity revealed that all four FKBP5 SNPs were associated with RCO ( $p < .05$ ), and child abuse significantly interacted with two FKBP5 SNPs to significantly predict RCO ( $p < .05$ ) during the TSST. Findings suggest that FKBP5 may be associated with autonomic markers of stress reactivity. Clinical implications will be discussed.

## **Symposium**

**Friday, November 7**

**03:00 PM to 04:15 PM**

**Biscayne - BIOLOGY TRACK**

### **Trauma Exacerbates the Effect of GRM1 on Frequency of Alcohol Use in Rodents and Humans**

(Bio Med, Gen/Int-Health-Sub/Abuse, Adult, M, Industrialized)

**Meyers, Jacquelyn, PhD<sup>1</sup>**; Uddin, Monica, PhD<sup>2</sup>; Galea, Sandro, MD PhD<sup>3</sup>; Wildman, Derek, PhD<sup>2</sup>; Aiello, Allison, PhD<sup>4</sup>; Bradley, Bekh, PhD<sup>5</sup>; Ressler, Kerry, MD PhD<sup>6</sup>; Koenen, Karestan, PhD<sup>7</sup>

<sup>1</sup>*Columbia University, New York, New York, USA*

<sup>2</sup>*Wayne State University, Detroit, Michigan, USA*

<sup>3</sup>*Columbia University, Mailman School of Public Health, New York, New York, USA*

<sup>4</sup>*University of Michigan, Ann Arbor, Michigan, USA*

<sup>5</sup>*Atlanta VAMC/Emory University, Decatur, Georgia, USA*

<sup>6</sup>*Emory University School of Medicine, Atlanta, Georgia, USA*

<sup>7</sup>*Columbia University School of Public Health, New York, New York, USA*

Heavy alcohol consumption significantly impacts public health by increasing physical and mental health problems. The evidence for gene-environment interactions (GxE) in alcohol use is growing, with several GxE studies indicating that the effects of specific genetic variants are exacerbated by traumatic experiences. There is strong evidence from both rodent models and human studies that the protein product of GRM1, a gene predominantly expressed in the brain (hippocampus, hypothalamus, and amygdala) which modulates  $\gamma$ -aminobutyric acid (GABA) receptor activity, influences behavioral outcomes. However, no study to date has examined the association of GRM1 with alcohol phenotypes in either rodents or humans. In this study, we provide evidence of association between genetic variants in GRM1 and frequency of alcohol consumption in a rodent model, using an alcohol preference task, as well as in two independent population based samples of humans (Detroit Neighborhood Health Study; Grady Trauma Project). However, the effect sizes are modest ( $r^2 = 0.23-89$ ,  $p < 0.001-0.03$ ). Importantly, we also found that the experience of trauma in both rodents and humans exacerbated the influence of GRM1 on alcohol consumption. Consilience of the association between GRM1 and its interaction with trauma across species provides compelling evidence for the role of these risk factors in alcohol phenotypes.

## **Symposium**

**Friday, November 7**

**03:00 PM to 04:15 PM**

**Biscayne - BIOLOGY TRACK**

### **CRHR1 Genotype and History of Maltreatment Predict Cortisol Reactivity to Stress in Adolescents**

(Bio Med, Bio Med-CPA-CSA, Child/Adol, M, Industrialized)

**Sumner, Jennifer, PhD<sup>1</sup>**; McLaughlin, Katie, PhD<sup>2</sup>; Walsh, Kate, PhD<sup>3</sup>; Sheridan, Margaret, PhD<sup>4</sup>; Koenen, Karestan, PhD<sup>5</sup>

<sup>1</sup>*Columbia University, Mailman School of Public Health, New York, New York, USA*

<sup>2</sup>*University of Washington, Seattle, Washington, USA*

<sup>3</sup>*Columbia University, New York, New York, USA*

<sup>4</sup>*Harvard Medical School/Children's Hospital Boston, Boston, Massachusetts, USA*

<sup>5</sup>*Columbia University School of Public Health, New York, New York, USA*

This study examined the contributions of a polymorphism of the corticotropin-releasing hormone receptor type I (CRHR1) gene (rs110402) and a history of child maltreatment—alone and in interaction—to patterns of cortisol reactivity in adolescents. Adolescents between the age of 13 and 17 years with (n = 61) and without (n = 97) a history of child maltreatment were exposed to the Trier Social Stress Test (TSST). Salivary cortisol was assessed at baseline, and 15 and 30 minutes after the start of the speech portion of the TSST. Saliva samples for genotyping rs110402 also were collected. Adolescents with one or more G alleles of rs110402, relative to A allele homozygotes, and those exposed to maltreatment, relative to non-exposed adolescents, exhibited blunted cortisol reactivity to the TSST. There was also a trend for a stronger child maltreatment association with cortisol hypo-reactivity among G allele carriers, but this association was not statistically significant. Findings suggest that CRHR1 variation may moderate the downstream effects of child maltreatment on HPA axis function, and implications for understanding mechanisms of risk associated with early adversity are discussed.

## **Symposium**

**Friday, November 7**

**03:00 PM to 04:15 PM**

**Biscayne - BIOLOGY TRACK**

## **Gene by Environment Interactions in a Large, Highly Traumatized Civilian African American Population: Method and Update**

(Bio Med, Chronic-Gen/Int, Adult, M, Industrialized)

**Almli, Lynn, PhD**; Ressler, Kerry, MD PhD; Duncan, Richard, PhD; Conneely, Karen, PhD; Epstein, Michael, PhD  
*Emory University School of Medicine, Atlanta, Georgia, USA*

Post-traumatic stress disorder (PTSD) arises from the complex interplay of genetics and environment. PTSD is ideal for studying the effects of genetic variants in the presence of environmental interactions because it is the only psychiatric disorder that requires exposure to an environmental trigger, in the form of a trauma, as a prerequisite for its diagnosis. Such interactions can resolve replication failures of marginal genetic findings and may explain missing heritability, a well-known problem in which genetic associations with common SNPs are not sufficient to account for total trait heritability. Traditional tests of gene by environment interactions (G×E) in genome-wide association studies (GWAS), however, can result in invalid findings when model assumptions are violated, such as when the variance of the outcome differs by the value of the environmental exposure. Using trauma exposure as the environmental variable, we will discuss genome-wide analyses for G×E interactions for PTSD phenotypes in our large cohort of traumatized civilians (the Grady Trauma Project) using new methodology, which is robust to such violation. Such powerful new approaches may lead to enhanced methods of discovery of gene pathways underlying PTSD.

**Symposium**  
**Friday, November 7**  
**03:00 PM to 04:15 PM**  
**Windsor/Sandringham**

## **A Comprehensive Data Driven Approach to Information Technologies Innovation Targeting PTSD Screening, Treatment Process, and Intervention**

(Tech, Tech, N/A, M, Industrialized)

Ruzek, Josef, PhD

*National Center for PTSD – Dissemination and Training Division, VA Palo Alto Health Care System, Menlo Park, California, USA*

Information technology innovation is now a hallmark of American healthcare systems. This data-driven symposium will present cutting edge studies of PTSD screening, treatment process and fidelity tracking, and interventions targeting improvement in PTSD outcomes that incorporate information technology innovation across civilian and veteran trauma-exposed patient populations. Dr. Zatzick will begin the presentation with a discussion of a population-based automated PTSD screening procedures that efficiently harness information within electronic medical records to screen injured trauma survivors for PTSD. Dr. Ruzek will present a novel PTSD dashboard designed to enhance evidence-based decision-making by PTSD treatment providers and improve treatment outcomes for veteran patients with PTSD. Dr. Price will present a novel information technology-based text message intervention for post-traumatic stress disorder in civilian acute care medical patients. Dr. Kuhn will present data-driven models and results of the use of post-traumatic stress disorder mobile health Apps. Chair-led audience discussion will be encouraged.

**Symposium**  
**Friday, November 7**  
**03:00 PM to 04:15 PM**  
**Windsor/Sandringham**

## **Population-based Automated PTSD Screening for Injured Trauma Survivors Treated in Acute Care Medical Settings**

(Prevent, Acc/Inj-Prevent-Tech, Lifespan, M, Industrialized)

**Zatzick, Douglas, MD<sup>1</sup>**; Russo, Joan, PhD<sup>2</sup>; Ingraham, Leah, BS<sup>3</sup>; Love, Jeff, BA<sup>3</sup>; Peterson, Roselyn, BA<sup>1</sup>; Kelly, Cory, Undergraduate<sup>3</sup>; Neam, Victoria, Undergraduate<sup>3</sup>; Guiney, Roxanne, Undergraduate<sup>3</sup>; Yao, Patty, Undergraduate<sup>3</sup>; Darnell, Doyanne, PhD<sup>1</sup>; Wang, Jin, PhD<sup>1</sup>; Whiteside, Lauren, MD, MS<sup>1</sup>

<sup>1</sup>*University of Washington/Harborview Medical Center, Seattle, Washington, USA*

<sup>2</sup>*University of Washington School of Medicine, Seattle, Washington, USA*

<sup>3</sup>*University of Washington, Seattle, Washington, USA*

The population impact of PTSD screening and intervention is a function of both treatment effects and the intervention breadth of applicability. Population-based automated PTSD screening and intervention procedures in the acute care medical settings have tremendous potential to enhance the overall impact of PTSD treatment as they do not require time intensive assessment procedures. We developed an automated PTSD screening procedure using data from 878 randomly selected injured hospital inpatients. In order to simultaneously optimize screening efficiency and PTSD risk prediction, we developed an automated method of aggregating readily available hospital data. Hospital information included in the automated screen was electronic medical record, clinical laboratory and

trauma registry data. All 878 inpatients were also screened with the PTSD Checklist. Automated aggregation of inpatient data yielded excellent PTSD risk prediction in logistic models (e.g., with a PTSD Checklist cutoff 35 and predicted probability 0.20, the area under ROC curve = 0.72, Sensitivity = 0.71, Specificity = 0.66). Subsequent intervention efficiency was enhanced utilizing the combination of automated screening and computerized decision support tool implementation. Future applications of novel technologies for acute care medical screening and intervention will be discussed.

## **Symposium**

**Friday, November 7**

**03:00 PM to 04:15 PM**

**Windsor/Sandringham**

### **Implementation of Text Messages to Monitor Post-Traumatic Symptoms after a Traumatic Injury**

(Prevent, Acc/Inj-Acute-Tech, Adult, M, Industrialized)

**Price, Matthew, PhD<sup>1</sup>**; Ruggiero, Kenneth, PhD<sup>2</sup>; Ferguson, Pamela, PhD<sup>2</sup>; Patel, Sachin, MSc<sup>2</sup>; Treiber, Frank, PhD<sup>2</sup>; Fakhry, Samir, MD<sup>2</sup>

<sup>1</sup>*University of Vermont, Burlington, Vermont, USA*

<sup>2</sup>*Medical University of South Carolina, Charleston, South Carolina, USA*

Recent work has highlighted the benefit of “screen-and-treat” strategies for post-traumatic stress symptoms after a trauma. Such strategies use repeated assessments to identify those at risk and connect them to treatment. A key challenge of this approach is the considerable burden it places on patients and providers. Technology solutions can address this barrier through asynchronous communication, increased privacy, and automated communication. However, there is no evidence to suggest that these strategies will be used by patients and will reduce provider burden. The present study piloted a repeated assessment strategy via text messages to determine patient response rates and assess provider burden. N=29 participants received 15 days of texts to assess PTSD symptoms after a traumatic injury. N=24 (82.8%) replied at least once and the average response rate was 9.45 messages (63.1%; SD=29.2%). Staff spent approximately 35 minutes per patient, including daily monitoring, follow up assessments, and attempted phone calls. Response rates were positively correlated with PTSD symptoms at baseline,  $r = 0.67$ ,  $p < 0.01$ . There was no significant difference in the rate of use between those with and those without PTSD at 3 months,  $F(1, 14) = 1.31$ ,  $p = 0.21$ . Participant feedback was positive and suggestions were given for improvements. Future directions and challenges will be discussed.

## **Symposium**

**Friday, November 7**

**03:00 PM to 04:15 PM**

**Windsor/Sandringham**

### **Using Traditional and Novel Data Sources to Assess Reach, Reception, Use, and Impact of the PTSD Coach Mobile App**

(Tech, Clin Res, Adult, M, Industrialized)

**Kuhn, Eric, PhD<sup>1</sup>**; Owen, Jason, PhD, MPH<sup>2</sup>; Hoffman, Julia, PsyD<sup>1</sup>; Jaworski, Beth, PhD<sup>2</sup>; Ramsey, Kelly, BA<sup>1</sup>; Ruzek, Josef, PhD<sup>1</sup>

<sup>1</sup>*National Center for PTSD – Dissemination and Training Division, VA Palo Alto Health Care System, Menlo Park, California, USA*

<sup>2</sup>*VA - National Center for PTSD, Menlo Park, California, USA*



PTSD is highly prevalent, yet undertreated. To help address this, in 2011 we released the PTSD Coach app, which provides information about PTSD, treatment options, and self-management tools. Since then, we have built a research program utilizing traditional and novel data sources evaluating its reach, reception, use, and impact. Traditional data stem from formative evaluation, uncontrolled, and controlled studies. Novel data derive from app marketplaces, including number and region of downloads, user ratings, and reviews. It also includes anonymous, aggregate usage data collected from a built-in transparent tool. Lastly, individual app user data is being collected through a mobile system that securely transmits and stores it. Results suggest that PTSD Coach has wide reach with 153,000 downloads in 78 countries and has favorable reception based on user ratings (4.3/5 stars) and findings from qualitative analysis of user reviews. Usage data show that 61% continue using it after download and 29% continue after 3 months. Impact also is promising with distress ratings decreasing ( $p < .0001$ ) after use of self-management tools and outcomes research showing significant reductions in PTSD symptom. These disparate data sources will be presented and their implications for public health and clinical interventions for affected trauma survivors will be discussed.

## **Symposium**

**Friday, November 7**

**03:00 PM to 04:15 PM**

**Windsor/Sandringham**

### **Development of a Clinician “Dashboard” to Enhance Evidence-Based Decision-Making**

(Tech, Assess Dx-Clinical Practice, Prof, M, Industrialized)

**Ruzek, Josef, PhD<sup>1</sup>**; Landes, Sara, PhD<sup>2</sup>; Carlson, Eve, PhD<sup>1</sup>; Wang, Dan, PhD<sup>3</sup>; Lindley, Steve, MD<sup>4</sup>

<sup>1</sup>*National Center for PTSD – Dissemination and Training Division, VA Palo Alto Health Care System, Menlo Park, California, USA*

<sup>2</sup>*National Center for PTSD, VA Palo Alto Health Care System, Menlo Park, California, USA*

<sup>3</sup>*VA Palo Alto Health Care System, Menlo Park, California, USA*

<sup>4</sup>*VA Palo Alto Health Care System/Stanford University School of Medicine, Menlo Park, California, USA*

To improve treatment of trauma-related problems, it is important that mental health treatment providers base clinical decision-making on evidence about treatment outcomes and processes. In addition to simply having access to such data and evidence, clinicians will need to be able to rapidly access the results of their data-gathering. One way to make information about the processes and effects of treatment useful to clinicians and clients is to develop visual “dashboards” that present key information in ways that are easy to understand and can be easily incorporated into care processes. The COMMEND dashboard (Collaborative Mental health Management ENhanced Dashboard), developed by Dr. Steve Lindley and team at the VA Palo Alto Healthcare System, provides a single, integrated system for documenting, recording, and analyzing intervention and assessment data. Within a single window, providers can review and enter data, and write progress notes. COMMEND minimizes additional data entry by automatically bringing together data from multiple sources (e.g., data warehouses in VA) into a single interface for providers and administrators. Data include appointment data, assessment scores, prescriptions, lab results, diagnoses, and patient demographics. Issues in the implementation of COMMEND and future challenges to incorporating dashboard technology into care are discussed.

**Symposium**  
**Friday, November 7**  
**03:00 PM to 04:15 PM**  
**Brickell - MILITARY TRACK**

## **Service Connection among OEF/OIF Veterans: An Examination of Diagnostic Accuracy and Impact on Treatment**

(Practice, Assess Dx-Clin Res-Social-Mil/Vets, Adult, M, Industrialized)

Keane, Terence, PhD  
*VA, Boston, Massachusetts, USA*

Three researchers will present findings from two studies with OEF/OIF Veterans: 1) a longitudinal cohort study and 2) a randomized clinical trial. The first study explored concordance between PTSD diagnosis and service connection for PTSD. Results showed high rates of misclassification and significant differences in race, PTSD symptom severity, combat exposure, TBI, anger, and compensation and pension assessor degree type (PhD vs. PsyD vs. MD) between classification categories (e.g., concordant vs. discordant). Regression analyses identified veterans' race as a unique predictor of misclassification. The second study examined the effects of disability status (which included service connection for PTSD) on PTSD treatment outcomes. Results showed that disabled participants were more likely to discontinue treatment. In conclusion, these studies highlight a variety of problems associated with compensation and pension evaluations, service connection status and provide suggestions for future research.

**Symposium**  
**Friday, November 7**  
**03:00 PM to 04:15 PM**  
**Brickell - MILITARY TRACK**

## **Concordance and Discordance between PTSD Diagnosis and Service Connection for PTSD: Rates and Differences**

(Practice, Assess Dx-Ethnic-Social-Mil/Vets, Adult, M, Industrialized)

**Szafranski, Derek, MA PhD Student<sup>1</sup>**; Engel-Rebitzer, Eden, BA<sup>2</sup>; Gallagher, Matthew, PhD<sup>3</sup>; Holowka, Darren, PhD<sup>4</sup>; Keane, Terence, PhD<sup>4</sup>; Marx, Brian, PhD<sup>3</sup>

<sup>1</sup>*University of Houston, Houston, Texas, USA*

<sup>2</sup>*Boston VA Healthcare System, Boston, Massachusetts, USA*

<sup>3</sup>*National Center for PTSD at VA Boston Healthcare System and Boston University, Boston, Massachusetts, USA*

<sup>4</sup>*National Center for PTSD, VA Boston Healthcare System, Boston University School of Medicine, Boston, Massachusetts, USA*

Service connection for PTSD is the third most common disability type among Veterans (VA Veterans Benefits Administration, 2012). However, prior research has suggested that most VA PTSD disability examiners do not use standardized assessment methods in their examinations (Jackson et al., 2011). Thus, the degree to which these exams accurately determine PTSD diagnostic status and associated disability is uncertain. The present study examined the extent to which PTSD service connection status was concordant with results of an independent PTSD diagnostic interview. A total of 756 participants completed the Structured Clinical Interview for DSM-IV-TR and had a prior VA PTSD disability evaluation. All participants included in the analyses reported a military-related stressor event during their diagnostic interview. Results showed that, although the majority of participants were concordant for PTSD diagnostic and service connection status, a significant number of veterans appeared to be misclassified. For example, 17.3% of the sample did not meet criteria for current PTSD on the SCID but were

service connected (false positives) while 13.8% met current PTSD criteria on the SCID but were denied service connection (false negatives). Demographic and clinical differences between concordant and discordant groups will be discussed.

## **Symposium**

**Friday, November 7**

**03:00 PM to 04:15 PM**

**Brickell - MILITARY TRACK**

### **Predictors of Concordance and Discordance between PTSD Diagnosis and Service Connection for PTSD**

(Assess Dx, Assess Dx-Social-Mil/Vets, Adult, M, N/A)

**Engel-Rebitzer, Eden, BA<sup>1</sup>**; Szafranski, Derek, MA PhD Student<sup>2</sup>; Gallagher, Matthew, PhD<sup>3</sup>; Holowka, Darren, PhD<sup>4</sup>; Keane, Terence, PhD<sup>5</sup>; Marx, Brian, PhD<sup>3</sup>

<sup>1</sup>*Boston VA Healthcare System, Boston, Massachusetts, USA*

<sup>2</sup>*University of Houston, Houston, Texas, USA*

<sup>3</sup>*National Center for PTSD at VA Boston Healthcare System and Boston University, Boston, Massachusetts, USA*

<sup>4</sup>*National Center for PTSD, VA Boston Healthcare System, Boston University School of Medicine, Boston, Massachusetts, USA*

<sup>5</sup>*VA, Boston, Massachusetts, USA*

Previous research has shown that Black veterans are less likely to be service connected for PTSD, even after controlling for PTSD symptom severity and level of functional impairment (Rosen et al., 2013; Murdoch et al, 2003). No prior study has examined the role of race in concordance between PTSD service connection status and current PTSD diagnostic status as determined by an independent structured diagnostic interview. The present study examined this relationship. In addition, we examined veterans' PTSD symptom severity and combat exposure, and the training of the VA physician administering the exam (e.g., PhD, PsyD, or MD) as potential predictors of diagnostic concordance. Results indicated that Black veterans who met criteria on the SCID were less likely than White veterans who met criteria on the SCID to receive a PTSD diagnosis from their disability examination (OR=.48, p=.008, CI=.28-.83). Examiners with a PsyD were more likely than examiners with Ph.D. to grant a PTSD diagnosis that was inconsistent with the PTSD diagnosis obtained during the independent interview (OR=1.63, p=.032, CI=1.04-2.56). Higher levels of PTSD symptoms and combat exposure were both associated with concordance between diagnostic interview and disability exam results (OR=1.26, p=.000 and OR=1.02, p=.020 respectively).

## **Symposium**

**Friday, November 7**

**03:00 PM to 04:15 PM**

**Brickell - MILITARY TRACK**

### **Disability Status as a Predictor of Exposure Therapy Completion in OEF/OIF Veterans with Post-Traumatic Stress Disorder**

(Clin Res, Clin Res-Mil/Vets, Adult, M, Industrialized)

**Badour, Christal, MA PhD Student<sup>1</sup>**; Gros, Daniel, PhD<sup>1</sup>; Price, Matthew, PhD<sup>2</sup>; Yuen, Erica, PhD<sup>3</sup>; Acierno, Ron, PhD<sup>4</sup>

<sup>1</sup>*Medical University of South Carolina and the Ralph H. Johnson VA Medical Center, Charleston, South Carolina, USA*

<sup>2</sup>*University of Vermont, Burlington, Vermont, USA*

<sup>3</sup>Tampa University, Tampa, Florida, USA

<sup>4</sup>Ralph H. Johnson VA Medical Center, Charleston, South Carolina, USA

There is a dearth of research examining predictors of successful completion of evidence-based psychotherapies among OEF/OIF veterans with PTSD. This gap is critical as OEF/OIF veterans attend fewer sessions and are less likely to complete treatment as compared to Vietnam veterans. The current study sought to identify specific predictors of premature treatment discontinuation among a sample of 92 OEF/OIF combat veterans (Mage = 33.2; SD = 9.0) who enrolled in an eight-week program of Behavioral Activation and Therapeutic Exposure (BA-TE), a transdiagnostic exposure-based treatment designed to target comorbid symptoms of PTSD and depression. Predictors examined in this study included disability status, other demographic variables (ethnicity, marital status, employment, age), treatment modality (in person vs. telehealth), deployment factors (combat exposure, perceived threat), postdeployment factors (social support, current stressors) and symptomatology (severity of PTSD and depression symptoms). Results from a hierarchical logistic regression demonstrated that disability status (OR = 3.38, 95% CI: 1.05-10.81,  $p = .04$ ) was associated with increased risk of treatment discontinuation, while social support predicted decreased risk of treatment discontinuation (OR = 0.89, 95% CI: 0.82-0.97,  $p = .01$ ). Implications for assessment and treatment within this population will be discussed.

## **Symposium**

**Friday, November 7**

**03:00 PM to 04:15 PM**

**Sevilla - LONG-TERM EFFECTS OF CHILD TRAUMA TRACK**

## **The Impact of Childhood Trauma Exposure on Violence and Aggression Across the Lifespan**

(Clin Res, Aggress-CPA-CSA-Clin Res, Lifespan, M, Industrialized)

Nanney, John, PhD<sup>1</sup>; Galovski, Tara, PhD<sup>2</sup>

<sup>1</sup>Department of Psychiatry, Louisiana State University Health Sciences Center, New Orleans, Louisiana, USA

<sup>2</sup>University of Missouri St. Louis, St. Louis, Missouri, USA

The general link between childhood trauma exposure and subsequent violence and aggression has been long-established (e.g., Ford, 2002; Widom, 1989). Relatively little is known, however, regarding paths between specific forms of trauma and violence and the psychological mechanisms that underlie these relations across the lifespan. Moreover, only minimal research has addressed possible interventions to reduce violence in populations exposed to childhood trauma. This symposium addresses these research gaps by describing specific pathways to violence among those exposed to childhood trauma, both as children and as adults, as well as the efficacy of interventions that may help mitigate these effects. Clinical and research implications will be discussed.

## **Symposium**

**Friday, November 7**

**03:00 PM to 04:15 PM**

**Sevilla - LONG-TERM EFFECTS OF CHILD TRAUMA TRACK**

## **Childhood Violence Exposure and Adult Violence Perpetration: Distinct Pathways to Gun Violence and Fighting**

(Prevent, Aggress-Chronic-Dev/Int-Prevent, Adult, M, Industrialized)

**Constans, Joseph, PhD<sup>1</sup>**; Nanney, John, PhD<sup>1</sup>; Conrad, Erich, MD<sup>2</sup>; Reuther, Erin, PhD<sup>3</sup>; Rochefort, Catherine, BS<sup>4</sup>

<sup>1</sup>*Southeast Louisiana Veterans Health Care System, New Orleans, Louisiana, USA*

<sup>2</sup>*Department of Psychiatry, Louisiana State University Health Sciences Center, New Orleans, Louisiana, USA*

<sup>3</sup>*LSU Health Sciences Center, New Orleans, Louisiana, USA*

<sup>4</sup>*Tulane University, New Orleans, Louisiana, USA*

Gun violence and physical fighting perpetrated by adults in our communities may have separate etiological pathways. Different childhood experiences and distinct psychological mechanisms may contribute separately to fighting and gun violence risk. Namely, we suggest that adult gun violence may be more associated with childhood exposure to community as opposed to family-based interpersonal violence and that this relationship would be mediated more by expectations regarding gun victimization than by problems with emotion regulation. In contrast, we argue that fighting is more related to childhood exposure to family-based rather than community violence and that this relationship is mediated by emotion dysregulation rather than expectancies regarding victimization. To test the validity of these path models, we surveyed adult patients hospitalized for injuries sustained in a violent attack who are thus at elevated risk of violence. Interview items included measures of childhood violence exposure as well as current emotion dysregulation, expectancies regarding violence, fighting, and gun use. Analysis of preliminary data (N = 58) using Poisson and logistic regression and bootstrapped estimates of indirect effects supports the hypothesized mediation models. We will report findings from a larger dataset (expected N = 100). Implications and limitations will be discussed.

## **Symposium**

**Friday, November 7**

**03:00 PM to 04:15 PM**

**Sevilla - LONG-TERM EFFECTS OF CHILD TRAUMA TRACK**

### **The Impact of Childhood Abuse Chronicity on PTSD Treatment Outcome: Experiences of Anger and Aggression Before and After a Course of Cognitive Processing Therapy**

(Clin Res, CPA-CSA-Chronic-Cog/Int, Adult, M, Industrialized)

**Mott, Juliette, PhD<sup>1</sup>**; Gloth, Chelsea, Doctoral Student<sup>2</sup>; Galovski, Tara, PhD<sup>2</sup>

<sup>1</sup>*National Center for PTSD, Executive Division, White River Junction, Vermont, USA*

<sup>2</sup>*University of Missouri St. Louis, St. Louis, Missouri, USA*

This study examined the relationship between childhood abuse chronicity and changes in anger, aggression, and post-traumatic stress disorder (PTSD) symptoms over a course of Cognitive Processing Therapy (CPT). Participants were 69 male and female interpersonal assault survivors recruited to a larger trial evaluating the effectiveness of CPT. Participants were randomized to receive CPT immediately or after 12 weeks of symptom monitoring; thus, all participants received CPT. The CPT protocol was modified so that the number of treatment sessions received (4-18 sessions) was determined by the patient's treatment response. Participants completed the Clinician Administered PTSD Scale and self-report measures assessing anger and aggression (State-Trait Anger Expression Inventory; Trauma Symptom Inventory), and PTSD symptoms (PTSD Diagnostic Scale) at pre and posttreatment. Participants identified whether their index (worst) trauma occurred in childhood or adulthood; chronicity was determined by the self-reported number of abusive incidents. Using repeated-measures ANCOVA, we will assess whether pre-posttreatment change in anger, aggression, and PTSD symptoms is moderated by the chronicity of childhood abuse. Preliminary analyses reveal that participants with a chronic childhood abuse history show remarkably similar trajectories of recovery as those without chronic abuse.

## Symposium

Friday, November 7

03:00 PM to 04:15 PM

### Sevilla - LONG-TERM EFFECTS OF CHILD TRAUMA TRACK

#### Complex Trauma and Aggressive Behavior in Youth

(Clin Res, Aggress-CPA-CSA-Complex, Child/Adol, M, Industrialized)

Wamser-Nanney, Rachel, PhD<sup>1</sup>; Nanney, John, PhD<sup>2</sup>

<sup>1</sup>*University of Michigan, Dept of Psychiatry, Ann Arbor, Michigan, USA*

<sup>2</sup>*Southeast Louisiana Veterans Health Care System, New Orleans, Louisiana, USA*

Trauma exposure places youth at increased risk for a cascade of deleterious outcomes, including aggression (Ackerman, Newton, McPherson, Jones, & Dykman, 1998). Not all trauma-exposed youth present with these symptoms, however, and predictors of aggressive behavior are not well-understood. The purpose of this study was to investigate the relationships between candidate trauma-related predictors and aggression, disruptive behavior, and anger. It was hypothesized that exposure to complex trauma events, or chronic, interpersonal trauma beginning early in life, would be associated with greater levels of caregiver-reported aggressive and disruptive behavior and self-reported anger. Two-hundred and eighteen youth (ages 8-18,  $M = 11.94$ ;  $SD = 2.87$ ) were included in the study. As expected, children exposed to a complex trauma event exhibited higher levels of aggression, disruptive behavior, and anger compared to those who experienced less severe trauma ecologies. Further, results indicated aspects of the complex trauma definition (i.e., interpersonal, chronicity) as well as the youth placement outside the home were uniquely predictive of these outcomes. In contrast, individual trauma types (e.g., sexual abuse, exposure to community violence) were largely unrelated to aggression or anger, with the exception of physical assault. Theoretical and clinical implications will be discussed.

**Symposium**  
**Friday, November 7**  
**03:00 PM to 04:15 PM**  
**Merrick**

## **In Their Own Words: The Impact of Trauma at the Beginning and End of CPT**

(Clin Res, Clin Res-Cog/Int-Rape-Mil/Vets, Adult, M, Industrialized)

Wachen, Jennifer, PhD<sup>1</sup>; Monson, Candice, PhD<sup>2</sup>

<sup>1</sup>*National Center for PTSD / Boston University, Boston, Massachusetts, USA*

<sup>2</sup>*Ryerson University, Toronto, Ontario, Canada*

Cognitive Processing Therapy (CPT) is an evidence-based treatment for PTSD that focuses on challenging inaccurate trauma-related cognitions and unrealistic beliefs. One component is a written impact statement completed at the beginning and end of treatment in which the patient describes why the traumatic event occurred and how it affected his/her views of self, others, and the world. These statements provide unique qualitative data of the cognitive changes occurring during therapy that may be related to treatment outcomes. This symposium examines cognitions coded from impact statements from CPT in several samples. Coding identified assimilation (distorting the event), over-accommodation (overgeneralizing beliefs), and accommodation (balanced beliefs). First, Abby Blankenship will examine differences in qualitative and quantitative baseline cognitions between individuals who experienced childhood abuse and those who have not, in a sample of active-duty military. Katherine Dondanville will explore changes in cognitions from pre-post treatment in an active-duty sample. Finally, Patricia Resick will examine whether cognitions from impact statements written up to a decade following CPT predicted maintenance or decline in treatment gains 5-10 years posttreatment among female rape survivors. Candice Monson, a leading researcher in PTSD and CPT, will serve as discussant.

**Symposium**  
**Friday, November 7**  
**03:00 PM to 04:15 PM**  
**Merrick**

## **Baseline Cognitive Characteristics of Individuals with and without Childhood Abuse Experiences**

(Clin Res, Anx-CPA-Mil/Vets, Adult, M, N/A)

**Blankenship, Abby, PhD<sup>1</sup>**; Dondanville, Katherine, PsyD<sup>1</sup>; Molino, Alma, PhD<sup>1</sup>; Resick, Patricia, PhD<sup>2</sup>; Wachen, Jennifer, PhD<sup>3</sup>; Hasselle, Amanda, BA<sup>4</sup>; Mintz, Jim, PhD<sup>1</sup>; Peterson, Alan, PhD<sup>1</sup>

<sup>1</sup>*University of Texas Health Science Center at San Antonio, San Antonio, Texas, USA*

<sup>2</sup>*Duke University Medical Center, Durham, North Carolina, USA*

<sup>3</sup>*National Center for PTSD / Boston University, Boston, Massachusetts, USA*

<sup>4</sup>*University of Texas Health Science Center at San Antonio, Fort Hood, Texas, USA*

Early life experiences impact how a person perceives the world. Childhood abuse (CA) can result in over-generalized beliefs that may be reinforced through later traumatic experiences creating negative core schemas. The current study investigated baseline cognitive characteristics of individuals with and without CA by examining impact statements of cognitions and cognitive self-report measures (n=151) in a sample of active duty Army Personnel participating in a randomized control trial investigating the efficacy of Cognitive Processing Therapy. It was hypothesized that individuals with CA would exhibit higher levels of maladaptive cognitions (i.e., assimilated



and overaccommodated) and lower levels of balanced cognitions (i.e., accommodated); higher levels of trauma related guilt and negative post-traumatic cognitions; and lower levels of cognitive emotion regulation. One-way ANOVAs were conducted. Preliminary findings (n=82) indicated no differences between those with and without CA at baseline for assimilation  $F(1, 80) = 0.1, p = .81$ , overaccommodation  $F(1, 80) = 2.3, p = .14$ , and accommodation  $F(1, 80) = 0.2, p = .67$ , and measures of trauma-related guilt, negative post-traumatic cognitions, or cognitive emotion regulation. These findings suggest that CA did not worsen cognitions expressed post-deployment in a sample of Army Personnel. Clinical implications will be discussed.

## **Symposium**

**Friday, November 7**

**03:00 PM to 04:15 PM**

**Merrick**

### **Change in Military Personnel's Trauma Narratives across the Course of Treatment**

(Clin Res, Anx-Cog/Int-Depr-Mil/Vets, Adult, M, Industrialized)

**Dondanville, Katherine, PsyD<sup>1</sup>**; Blankenship, Abby, PhD<sup>1</sup>; Molino, Alma, PhD<sup>1</sup>; Resick, Patricia, PhD<sup>2</sup>; Wachen, Jennifer, PhD<sup>3</sup>; Mintz, Jim, PhD<sup>1</sup>; Peterson, Alan, PhD<sup>1</sup>; Borah, Adam, MD<sup>4</sup>

<sup>1</sup>*University of Texas Health Science Center at San Antonio, San Antonio, Texas, USA*

<sup>2</sup>*Duke University Medical Center, Durham, North Carolina, USA*

<sup>3</sup>*National Center for PTSD / Boston University, Boston, Massachusetts, USA*

<sup>4</sup>*Carl R. Darnall Army Medical Center, Fort Hood, Texas, USA*

Childhood abuse (CA) experiences have been found to be a significant predictor of PTSD and depression, above and beyond the role of combat exposure in a sample of deployed Army Troops (Cabrera et. al, 2007). The current study investigated the relationship between CA and physical and mental health symptoms among active duty Army personnel enrolled in an RCT evaluating the efficacy of CPT for Combat-related PTSD (N=290, Pilot N=99). It was hypothesized that individuals with CA would endorse severer mental health and physical health symptoms at baseline in comparison to individuals without CA. Approximately 45% reported experiencing CA. In our pilot sample, there were no differences between individuals with and without CA experiences on PTSD as measured by the PCL ( $t = 0.55, p = 0.58$ ) and depression as measured by the BDI-II ( $t = -0.05, p = 0.96$ ). Number of deployments, a proxy measure of combat exposure, was not related to baseline PTSD or depression symptoms ( $p$ -range .12-.77). Further analyses will be conducted on alcohol use, suicidal behaviors, and health symptoms with our total sample. Our pilot results conclude CA did not contribute to more severe symptoms among service members and are consistent with previous literature that has found that childhood physical abuse did not predict adult PTSD symptoms (Nishish, Mechanic, & Resick, 2000; Seifert, Polusny, & Murdoch, 2011).

## **Symposium**

**Friday, November 7**

**03:00 PM to 04:15 PM**

**Merrick**

### **Long Term Follow-up of Impact Statement Coding Among Women with PTSD Treated with Cognitive Processing Therapy**

(Clin Res, Assess Dx-Cog/Int-Rape, Adult, M, Industrialized)

**Resick, Patricia, PhD<sup>1</sup>**; Iverson, Katherine, PhD<sup>2</sup>; King, Matthew, PhD<sup>3</sup>; Cunningham, Katherine, MA<sup>4</sup>

<sup>1</sup>*Duke University Medical Center, Durham, North Carolina, USA*

<sup>2</sup>*National Center for PTSD, Women's Health Sciences Division, VA Boston Healthcare System and Boston University School of Medicine, Jamaica Plain, Massachusetts, USA*

<sup>3</sup>VA Boston Healthcare System, Boston, Massachusetts, USA

<sup>4</sup>The University of Tulsa, Tulsa, Oklahoma, USA

This study examined whether cognitive distortions (i.e., assimilated and overaccommodated) and realistic (i.e., accommodated) thoughts assessed from impact statements written five to ten years after completing cognitive processing therapy (CPT) accurately predict posttreatment maintenance or decline in treatment gains during the same period. The sample included 50 women diagnosed with post-traumatic stress disorder (PTSD) secondary to rape who were participating in a randomized clinical trial of CPT for PTSD. Cognitions were assessed via coding and analyses of participants' written impact statements at three time points: beginning of treatment, end of treatment, and at the 5-10 year follow-up. The primary mental health outcomes of interest were symptoms of PTSD (as measured by the Clinician-Administered PTSD Scale) and depression (as measured by the Beck Depression Inventory). As predicted, declines in accommodated thinking and increases in overaccommodation between the end of treatment and long-term follow-up were associated with concomitant elevations in PTSD and depression symptoms, independent of status at the posttreatment assessment. Overall findings provide support for the putative causal role of accommodation and overaccommodation in the maintenance and reduction of PTSD and depression symptoms, and may help explain the long-term efficacy of CPT treatment.

## **Symposium**

**Friday, November 7**

**03:00 PM to 04:15 PM**

**Trade**

## **New Frontiers on the Borderline between Childhood Trauma and Delinquency: Implications for Understanding Traumatized Youth in the Juvenile Justice System**

(Social, Aggress-Assess Dx-CPA-CSA, Child/Adol, M, Industrialized)

Kerig, Patricia, PhD

*University of Utah, Salt Lake City, Utah, USA*

Although existing research substantiates that childhood trauma is predictive of adolescent delinquency, new thinking is beginning to explore the edges of this field of knowledge. In particular, new ideas are emerging that expand our understanding of what constitutes trauma in this population and how post-traumatic reactions are expressed and best assessed among adolescents involved in the juvenile justice system. This symposium brings together papers from investigators hailing from four independent, geographically diverse laboratories in the US who are concerned with these issues. The first paper presents an incisive critique of the literature on childhood commercial sexual exploitation, a form of trauma that hitherto has been misunderstood as a form of delinquent behavior rather than as child abuse. The second paper describes new research on the phenomenon of juvenile arrest as a form of trauma exposure among inner-city youth. The third paper breaks new ground in investigating the new DSM-5 dissociative subtype in a detained population and examines its associations with betrayal trauma and gender. The fourth paper provides evidence regarding the effectiveness of an innovative assessment device designed to uncover dynamic vulnerabilities and strengths among traumatized youth in the juvenile justice system.

**Symposium**  
**Friday, November 7**  
**03:00 PM to 04:15 PM**  
**Trade**

### **Domestic Child Sex Trafficking: A Systematic Review of the Literature**

(Prevent, CSA-Complex-Rights-Rape, Child/Adol, M, Industrialized)

**Branson, Christopher, PhD**

*Mount Sinai School of Medicine, Dept of Psychiatry, New York, New York, USA*

The commercial sexual exploitation of children (CSEC) or child sex trafficking, is a particularly pernicious form of child maltreatment that has received increased attention from law enforcement and mental health professionals in recent years. Efforts to prevent child sex trafficking are hampered by a lack of reliable data on the prevalence of the problem, associated risk factors, and the service needs of CSEC survivors. The current study involves a systematic review of the literature focused on three questions: (1) What is the estimated prevalence of CSEC among the general population and justice-involved youth? (2) What are risk/protective factors for CSEC? and (3) What are the clinical needs of CSEC survivors? We limited our search to: (a) peer-reviewed journal articles, book chapters, and government reports, (b) published in 1990-2014, (c) in English, (d) that present original data. Preliminary findings reveal significant variation in estimated prevalence of CSEC and related risk factors across geographic region, gender, and ethnic group. Shortcomings of the literature include inconsistent definitions of CSEC, small samples, and a lack of prospective research. Identified risk factors include childhood sexual abuse, lower educational achievement, early initiation of substance use, and homelessness. An agenda for advancing the knowledge base on CSEC will be discussed.

**Symposium**  
**Friday, November 7**  
**03:00 PM to 04:15 PM**  
**Trade**

### **The Effects of Arrests: Should an Arrest be Considered a Potentially Traumatic Event?**

(Social, Comm/Vio-Dev/Int-Social, Child/Adol, M, Industrialized)

**Allwood, Maureen, PhD; Dewey, Lauren, MA**

*John Jay College, CUNY, New York, New York, USA*

PTSD symptoms and diagnosis have been examined among juvenile justice detained youth with the supposition that trauma exposure and PTSD might increase the risk of engagement in delinquent behaviors, thereby increasing the risk of arrest and detainment. One alternate explanation of the association between PTSD and youth arrest is that arrest itself might be a potentially traumatic experience resulting in trauma symptoms or exacerbating pre-existing symptoms. Two studies examined the effects of witnessing arrests or being arrested among samples of racially and ethnically diverse community youth. Participants in Study 1 were 80 community youth ages 12 to 17 and participants in Study 2 were over 500 college students. Because each sample were non-referred and non-court involved, the study controls for the possible confounding effects of histories of arrest and detainment and provides a conservative approach to understanding the effects of arrests. Preliminary findings indicate that among the college sample, more than half were exposed to arrests. Being arrested and/or witnessing police arrests were significantly related to symptoms of PTSD, depression, and anxiety. Findings of the direct and indirect effects of police arrests will be discussed with regards to race, ethnicity, and gender differences. These findings have important implications for both interventions and policy.

**Symposium**  
**Friday, November 7**  
**03:00 PM to 04:15 PM**  
**Trade**

**Betrayal Trauma, Emotion Regulation, Gender, & Dissociation in Traumatized Delinquent Adolescents**

(Clin Res, Chronic-Clin Res-Complex-Cul Div, Child/Adol, M, Industrialized)

**Modrowski, Crosby, BA**; Bennett, Diana, MS PhD Student; Kerig, Patricia, PhD  
*University of Utah, Salt Lake City, Utah, USA*

The recent inclusion of a dissociative subtype in the DSM-5 PTSD diagnosis is relevant to delinquent youth, who have been found to evidence high rates of dissociation. Investigating factors that influence dissociation will likely enhance our understanding of the link between trauma and delinquency. Specifically, emotion dysregulation (Cole, 1996) and traumas experienced in the context of betrayal (Freyd, 1997) may increase the likelihood of dissociation. This study investigated the associations among emotion regulation, betrayal trauma, and dissociation and whether these differed by gender. Self-reports of betrayal trauma exposure, emotion dysregulation, and dissociation were collected from 613 detained youth aged 12-18 years ( $M=16.2$ ,  $SD=1.3$ ). Moderated mediation analysis (Hayes, 2013) was used to test if the association between betrayal trauma and dissociation was explained by emotion regulation and if this association differed by gender. Results indicated that the association between betrayal trauma and dissociation was mediated by emotion regulation ( $CI .0092-.119$ ). Furthermore, tests for moderation by gender showed that the model was stronger for boys than girls. These results reiterate the value of investigating gender differences in trauma exposure and PTSD symptoms in delinquent youth.

**Symposium**  
**Friday, November 7**  
**03:00 PM to 04:15 PM**  
**Trade**

**Trauma-informed Case Planning for Justice-Involved Youth Using the Short-Term Assessment of Risk and Treatability: Adolescent Version (START:AV)**

(Practice, Aggress-Assess Dx-Clinical Practice-Train/Ed/Dis, Child/Adol, M, N/A)

**Cruise, Keith, PhD**  
*Fordham University, New York, New York, USA*

Advances have been made in the use of risk assessment tools to inform case management with justice-involved youth. Implementing a reliable and valid risk assessment tool resulted in reduced placements, reduced overuse of maximum supervision levels, and better linkage of community-based services for high risk youth (Vincent et al., 2012). However, risk tools often provide limited coverage of prior trauma exposures, reactions, and symptoms (Cruise, 2013). This is problematic given high rates of polyvictimization (Ford et al., 2010), PTSD (Abram et al., 2004) and research linking both to aggression, substance use, and delinquent behaviors (Ford et al., 2012). This presentation highlights structural characteristics of the Short-Term Assessment of Risk and Treatability: Adolescent Version (START:AV; Viljoen et al., 2014), a new structured professional judgment risk/needs tool with demonstrated reliability and validity in juvenile justice settings (Viljoen et al., 2012). Using a case study approach, this presentation highlights how a risk/need assessment informed by the START:AV incorporates dynamic vulnerabilities and strengths, case-specific items, and multiple outcomes (e.g., violence, substance use, victimization) and illustrate a process of trauma-informed case formulation. Future clinical applications and research directions will also be highlighted.

**Symposium**  
**Friday, November 7**  
**03:00 PM to 04:15 PM**  
**Flagler**

## **Emotion Regulation and Mental Health in Traumatized Refugees**

(Assess Dx, Cul Div-Global-Refugee-Torture, Adult, M, Global)

Schnyder, Ulrich, MD<sup>1</sup>; Turner, Stuart, MD MA FRCP FRCPsych<sup>2</sup>

<sup>1</sup>Zurich University, Zurich, Switzerland

<sup>2</sup>Trauma Clinic, London, London, United Kingdom

Refugees often suffer from complex trauma-related disorders. Four clinician researchers present unpublished results from studies of emotion dysregulation, postmigration living difficulties, PTSD (DSM-IV versus DSM-5), intermittent explosive disorder, and an “anticipatory traumatic stress syndrome” in traumatized refugees in Switzerland and Australia. A discussant reflects on the findings from a global perspective.

**Symposium**  
**Friday, November 7**  
**03:00 PM to 04:15 PM**  
**Flagler**

## **Symptom Structure of DSM-5 and DSM-IV Diagnostic Criteria for PTSD in Traumatized Refugees**

(Assess Dx, Complex-Cul Div-Refugee-Torture, Adult, M, Global)

Schnyder, Ulrich, MD<sup>1</sup>; Müller, Julia, PhD<sup>2</sup>; Morina, Naser, MA<sup>2</sup>; Schick, Matthias, MD<sup>2</sup>; Bryant, Richard, PhD<sup>3</sup>; Nickerson, Angela, PhD<sup>3</sup>

<sup>1</sup>Zurich University, Zurich, Switzerland, Switzerland

<sup>2</sup>University Hospital Zurich, Zurich, ZH, Switzerland

<sup>3</sup>University of New South Wales, Sydney, NSW, Australia

Background: Refugees are at high risk of developing mental health problems including PTSD. With the release of the DSM-5, the diagnostic criteria for PTSD have changed substantially. The aim of this study was to examine the prevalence rate and factor structure of PTSD based on the diagnostic criteria of DSM-5 as compared to the DSM-IV, in traumatized refugees in Switzerland. Methods: A sample of 134 adult treatment-seeking traumatized patients from various refugee backgrounds participated in the study. They were assessed in their respective mother tongue with the help of a computerized questionnaire set consisting of a trauma list and the Post-Traumatic Diagnostic Scale (Foa 1996). Furthermore, the new PTSD items as suggested by the DSM-5 Task Force of the American Psychiatric Association were included. Results: While according to DSM-IV 60.4% of participants were diagnosed with PTSD, according to DSM-5, only 49.3% fulfilled all criteria. Confirmatory factor analysis of DSM-IV and DSM-5 items showed good and comparable model fits. Furthermore, classification functions in DSM-5 were satisfactory. Conclusions: The DSM-5 symptom structure appears to work well with traumatized refugees. Culture specific factors might account for the surprisingly low PTSD rate found when comparing DSM-5 with DSM-IV criteria.

**Symposium**  
**Friday, November 7**  
**03:00 PM to 04:15 PM**  
**Flagler**

### **Emotion Dysregulation and Psychological Outcomes in Tortured Refugees**

(CulDiv, Chronic-Global-Refugee-Torture, Adult, M, Industrialized)

**Nickerson, Angela, PhD<sup>1</sup>**; Bryant, Richard, PhD<sup>1</sup>; Schnyder, Ulrich, MD<sup>2</sup>; Schick, Matthis, MD<sup>3</sup>; Müller, Julia, PhD<sup>3</sup>; Morina, Naser, MA<sup>3</sup>

<sup>1</sup>*University of New South Wales, Sydney, NSW, Australia*

<sup>2</sup>*Zurich University, Zurich, Switzerland, Switzerland*

<sup>3</sup>*University Hospital Zurich, Zurich, ZH, Switzerland*

Emotion dysregulation is a key process contributing to psychological symptoms in trauma survivors (Goldsmith et al., 2013; Walsh et al., 2011). While research indicates that refugees experience elevated rates of psychological disorders (Fazel et al., 2005; Steel et al., 2009), few studies have investigated emotion dysregulation following refugee trauma and torture. This study investigated the mediating role of emotion regulation difficulties in the relationship between trauma exposure, living difficulties, and psychological outcomes in a sample of treatment-seeking tortured refugees. Bootstrapped mediation analyses (Preacher & Hayes, 2004; 2008) revealed that difficulties in emotion regulation mediated the association between trauma exposure and PTSD and depression; and the association between post-migration living difficulties and PTSD, depression, and explosive anger. Each of these psychological disorders evidenced different mediational patterns with emotion dysregulation, suggesting that there are differential pathways from refugee experiences to psychopathology. Further, a key finding of this study was that post-migration living difficulties predicted difficulties in emotion regulation over and above the relationship between trauma exposure and emotion dysregulation. The potential implications of these findings for policy and clinical practice will be discussed.

**Symposium**  
**Friday, November 7**  
**03:00 PM to 04:15 PM**  
**Flagler**

### **Challenging Future, Challenging Past: The Relationship of Social Integration and Psychological Impairment in Traumatized Refugees in Switzerland**

(Practice, Comm/Int-Cul Div-Torture, Prof, M, Industrialized)

**Morina, Naser, MA<sup>1</sup>**; Schick, Matthis, MD<sup>1</sup>; Bryant, Richard, PhD<sup>2</sup>; Schnyder, Ulrich, MD<sup>3</sup>; Nickerson, Angela, PhD<sup>2</sup>; Zumwald, André, MD<sup>4</sup>

<sup>1</sup>*University Hospital Zurich, Zurich, Switzerland*

<sup>2</sup>*University of New South Wales, Sydney, NSW, Australia*

<sup>3</sup>*Zurich University, Zurich, Switzerland*

<sup>4</sup>*Swiss Red Cross, Bern, Switzerland*

Refugees have been shown to present with high prevalence rates of potentially traumatic experiences (PTE) and mental disorders, namely PTSD, depression and anxiety. In contrast to their psychological impairment and often challenging living conditions, the host country expects refugees to meet high functional requirements in terms of social integration and financial independence. This study examined the relationship between psychopathology, post migration living difficulties (PMLD) and social integration in a clinical sample of 104 traumatized refugees. Participants were assessed in terms of PTE, symptoms of PTSD, depression, anxiety, somatization, health-related

quality of life, PMLD and social integration based on indicators provided by the Swiss Federal Government. Preliminary analysis shows that successful integration is negatively associated with psychopathology, but not with socio-demographics or visa status. Low adapters (high PMLD's) were significantly more affected with high symptom scores of anxiety, PTSD and somatization, compared to high adapters (low PMLD's) who showed better health-related quality of life. There is a significant relationship between psychopathology and PMLD in traumatized refugees. Implications for medical and immigration policies will be discussed: Improvements in mental health service provision might positively impact on refugees' social integration.

## **Symposium**

**Friday, November 7**

**03:00 PM to 04:15 PM**

**Flagler**

### **Identifying an Intrusive Anticipatory Traumatic Stress Syndrome amongst Refugees awaiting Forced Repatriation**

(Global, Global-Rights-Refugee-Civil/War, Adult, M, Global)

**Steel, Zachary, PhD, Cpsych<sup>1</sup>**; Nickerson, Angela, PhD<sup>2</sup>; Momartin, Shaken, PhD, Cpsych<sup>3</sup>; Silove, Derrick, MD PhD<sup>2</sup>

<sup>1</sup>*University of New South Wales, Liverpool, NSW, Australia*

<sup>2</sup>*University of New South Wales, Sydney, NSW, Australia*

<sup>3</sup>*Service for the Treatment and Rehabilitation of Torture and Trauma Survivors, Carramar, NSW, Australia*

DSM 5 highlights the centrality of intrusive traumatic memories in the development of PTSD. The experience of asylum seekers and refugees who face possible forced repatriation appears to differ from this standard clinical pattern. Clinical interviewing suggests that anticipatory fears of possible future exposure to trauma dominates the clinical picture with vivid intrusions about imagined future events. This paper reports findings from two community prospective surveys undertaken with Iraqi Mandaean (n=241) and Farsi/Dari-speaking (n= 116) refugees in Australia. We assessed symptoms of PTSD and symptoms of intrusive anticipatory traumatic stress using a scale developed by the authors. Exploratory and confirmatory factor analysis suggests that intrusive future directed symptoms formed a chronic anticipatory stress response that was distinct from the items used to assess PTSD. Both PTSD and the intrusive stress symptoms were highly responsive to changes in residency status across a two year period, but with anticipatory traumatic fear showing heightened sensitivity to continuing uncertainty. The identification of anticipatory traumatic stress associated with intrusive future oriented fears may help to explain the exceptionally high rates of apparent post-traumatic stress symptoms in post-conflict settings characterised by ongoing security and safety concerns.



**Symposium**  
**Friday, November 7**  
**03:00 PM to 04:15 PM**  
**Gusman/Tuttle**

## **Mental Health, Treatment Needs, and Treatment Outcomes Among Incarcerated Women**

(Clin Res, CSA-Chronic-Rape-Sub/Abuse, Adult, M, Industrialized)

Karlsson, Marie, MA PhD Student<sup>1</sup>; Dutton, Mary Ann, PhD<sup>2</sup>

<sup>1</sup>*University of Arkansas, Fayetteville, Fayetteville, Arkansas, USA*

<sup>2</sup>*Georgetown University School of Medicine, Washington, District of Columbia, USA*

Incarcerated women report high rates of interpersonal victimization, with some studies reporting child sexual abuse rates 2-3 times higher than women in the general population (Cook et al., 2005; Wolff et al., 2009). Incarcerated women also report high rates of mental illness, especially post-traumatic stress disorder (PTSD) and substance use disorders (SUDs; Teplin et al., 1996). Researchers have suggested that interpersonal violence is a pathway to prison for women (Browne et al., 1999). Despite these high rates of victimization and mental health issues, few studies have reported on treatment needs and outcomes among incarcerated women. The current symposium consists of three presenters addressing these topics. The first presenter will compare violent and non-violent female prisoners on trauma exposure, PTSD, and SUDs variables. The second presenter will discuss traumatic exposure and PTSD prevalence rates as well as functional impairment and access to treatment in a multisite study of women in jail. The last presentation will focus on outcomes from an 8-session exposure-based group treatment with incarcerated women targeting issues related to sexual victimization. Results indicate high rates of trauma exposure and trauma related distress among incarcerated women and highlights the importance of trauma-focused assessment and treatment among justice-involved women.

**Symposium**  
**Friday, November 7**  
**03:00 PM to 04:15 PM**  
**Gusman/Tuttle**

## **Treatment Outcomes from a Brief Exposure-Based Group Treatment with Incarcerated Women**

(Clin Res, CSA-Depr-Rape-Sub/Abuse, Adult, M, Industrialized)

**Karlsson, Marie, MA PhD Student;** Zielinski, Melissa, MA PhD Student; Petretic, Patricia, PhD; Bridges, Ana, PhD

*University of Arkansas, Fayetteville, Fayetteville, Arkansas, USA*

Incarcerated women are an underserved population who evidence high rates of sexual victimization and mental health issues. Studies evaluating trauma-informed treatments with incarcerated women have been resource-intensive and lacked an exposure component, despite exposure's efficacy (Foa et al., 2007). This study evaluated outcomes from an 8-session exposure-based group treatment with incarcerated women. Preliminary data from 4 groups (n = 14; Karlsson et al., in press) were encouraging, but the small sample size limited generalizability. The current study extends this work by providing outcome data for 10 groups (N = 66). Analyses included participants who provided pre- and post-treatment data (n = 40). There were no differences between these women and the other treatment completers (n = 12). Participants reported significant reductions in PTSD, depression, and generalized anxiety disorder (GAD) symptoms from pre- to post-treatment (all p values < .001; large effect sizes). Additionally, 35-

45% of women who were above the screening cutoff for possible PTSD (n = 35), depression (n = 30), and GAD (n = 30) at pre-treatment were below at post-treatment (n = 14 for PTSD; n = 18 for depression, and n = 18 for GAD). Considerations when implementing trauma-informed treatments with incarcerated women will be discussed.

## **Symposium**

**Friday, November 7**

**03:00 PM to 04:15 PM**

**Gusman/Tuttle**

### **Post-Traumatic Stress Disorder among Women in Jails: Prevalence, Impairment, and Access to Treatment**

(Assess Dx, Chronic-Social-Sub/Abuse, Adult, M, Industrialized)

Johnson, Kristine, PhD<sup>1</sup>; **Lynch, Shannon, PhD<sup>1</sup>**; DeHart, Dana, PhD<sup>2</sup>; Green, Bonnie, PhD<sup>3</sup>; Belknap, Joanne, PhD<sup>4</sup>

<sup>1</sup>*Idaho State University, Pocatello, Idaho, USA*

<sup>2</sup>*University of South Carolina, Columbia, South Carolina, USA*

<sup>3</sup>*Georgetown University School of Medicine, Washington, District of Columbia, USA*

<sup>4</sup>*University of Colorado at Boulder, Boulder, Colorado, USA*

This multisite study of PTSD and treatment access included 491 randomly selected women in US jails located in Colorado, Idaho, Metro DC, and South Carolina. Using structured diagnostic interviews, 53% of participants met lifetime DSM-IV criteria for post-traumatic stress disorder (PTSD). Women with PTSD endorsed higher rates of childhood and adult victimization and greater current impairment in functioning than did women without PTSD. Logistic regression analyses suggested that women with PTSD also were more likely to meet criteria for an additional serious mental illnesses (major depression, bipolar, schizophrenia spectrum), and were significantly more likely to report drug and alcohol problems than women without PTSD. Next, results of logistic and linear regression analyses indicated women with PTSD were more likely to have been prescribed psychotropic medications and received previous treatment for a greater number of mental health and substance abuse problems. Although greater previous treatment access among the women with PTSD is not surprising given their higher rates of comorbid disorders, the magnitude of their current impairment in the past year, as compared to incarcerated women without PTSD, illustrates continued need for empirically supported, targeted interventions to effectively address these women's complex health concerns.

## **Symposium**

**Friday, November 7**

**03:00 PM to 04:15 PM**

**Gusman/Tuttle**

### **Incarcerated Women and Risk Factors for Violent Crime Convictions: The Role of Trauma Exposure, Post-Traumatic Stress, and Substance Use**

(Clin Res, Aggress-CSA-Rape-Sub/Abuse, Adult, M, N/A)

**Wray, Alisha, PhD<sup>1</sup>**; Magnan, Renee, PhD<sup>2</sup>; Brown, Pam, MPH<sup>3</sup>; Lutter, Yvonne, PsyD<sup>4</sup>; Seibert-Hatalsky, L. Alana, PhD<sup>5</sup>; Feldstein Ewing, Sarah, PhD<sup>6</sup>

<sup>1</sup>*North Florida / South Georgia Veterans Health System, Gainesville, Florida, USA*

<sup>2</sup>*Washington State University, Vancouver, Washington, USA*

<sup>3</sup>*New Mexico Department of Corrections, Santa Fe, New Mexico, USA*

<sup>4</sup>*Zuni Comprehensive Community Health Center, Zuni, New Mexico, USA*

<sup>5</sup>VA Pacific Islands Health Care System, Honolulu, Hawaii, USA

<sup>6</sup>University of New Mexico, Albuquerque, New Mexico, USA

While men commit more violent crime (men: 80.5%; women: 19.5%; FBI, 2011), incarceration of women has increased dramatically (Harrison & Beck, 2006). Trauma exposure, PTSD symptoms, and substance use place women at greater risk for violent crime (Warren et al., 2002). This study investigated the utility of sexual victimization history, PTSD symptoms, age of first alcohol/drug use, and alcohol/drug use disorder (AUDs/DUDs) symptoms to differentiate women incarcerated for violent and non-violent crimes. Using interview and self-report data from 2107, ethnically-diverse, incarcerated women (Hispanic: 55%; Caucasian: 31%; Native American: 7%; African American: 6%; Other: 1%), it was anticipated that substance use, trauma exposure, and PTSD symptoms would increase violent crime risk. Results show women incarcerated for violent crimes (24.7%) reported significantly more sexual victimization, earlier age of first drug use, and greater AUD symptoms; no differences emerged for PTSD symptoms. Logistic regression analysis revealed sexual victimization (OR: 1.602;  $p < .001$ ) and younger age of first drug use (OR: .957;  $p < .001$ ) uniquely predicted violent crime conviction, but age of alcohol use and substance use and sexual victimization interactions did not. Results indicate substance use and trauma prevention/intervention efforts are critical in this understudied, yet growing population.

## **Panel Presentation**

**Friday, November 7**

**03:00 PM to 04:15 PM**

**Bayfront A - CHILD TRACK ONE**

**Implementation of EBTs for Childhood Trauma: Evaluation & Research**

**Challenges of Learning Collaboratives**

(Train/Ed/Dis, Commun, Child/Adol, M, Global)

**Amaya-Jackson, Lisa, MD MPH<sup>1</sup>; Saunders, Benjamin, PhD<sup>2</sup>; Dunn, Jerry, PhD<sup>3</sup>**

<sup>1</sup>Duke University School of Medicine, Durham, North Carolina, USA

<sup>2</sup>Medical University of South Carolina, Charleston, South Carolina, USA

<sup>3</sup>University of Missouri St. Louis, St Louis, Missouri, USA

Learning Collaboratives (LCs) to adopt & implement EBTs are used to address the trifecta necessary for success: 1) key implementation drivers as determined by implementation science to date, 2) solid clinical training in EBTs & 3) use of quality improvement. There is a growing challenge to this approach to answer “What is the evidence behind LCs?” While evidence behind alternative training standards isn’t well delineated specific to EBT dissemination, LCs used in the NCTSN incorporate assessment measures, outcomes, & progress metrics at the agency, clinician, client level. These tools support that the implementation & improvement research behind the individual components hold up when the components are pulled together in NCTSN versions of LCs. Presenters will relay 4 sets of data from a) 2 National LCs on TFEBT using NCTSN Core Data Set; b) S. Carolina’s Community-based LCs on TFEBT; c) Missouri’s regional LCs on TFEBT d) N. Carolina’s roll out of TFEBT & PCIT. Following descriptions & results, panelists will engage in discussion with each other & then with the audience in response to some probes such as 1) What types of evaluation or research would be necessary to provide next level of evidence on effectiveness of LCs for an EBT? 2) What key issues must LCs & implementation science address so we have a workforce delivering EBTs effectively in the community?

## **Workshop Presentation**

**Friday, November 7**

**03:00 PM to 04:15 PM**

### **Bayfront B - CHILD TRACK TWO**

#### **"Nothing Happened": Relational Engagement as Facilitator of Unfolding Narrative in Complex Child and Family Systems**

(Practice, Commun-Complex-Dev/Int-Fam/Int, Child/Adol, M, Industrialized)

**Blaustein, Margaret, PhD<sup>1</sup>; Kagan, Richard, PhD<sup>2</sup>**

<sup>1</sup>*Trauma Center at Justice Resource Institute, Brookline, Massachusetts, USA*

<sup>2</sup>*Parsons Child and Family Center, Albany, New York, USA*

A preponderance of evidence establishes that adversity in childhood leads to a range of behavioral problems, yet trauma-impacted children are rarely referred to mental health and social services due to recognition of historical experiences, but rather because they are “a problem” for parents, schools, or communities. Practitioners may recognize adversity as an underlying driver of many symptoms, but struggle to use trauma-focused treatments in the absence of acknowledgement or validation of traumatic experiences. In this workshop, model developers for two evidence-supported treatments (ARC, Real-Life Heroes) will demonstrate how relational engagement and establishment of a regulated therapeutic environment can create the safety needed for children and caregivers to share, or acknowledge, what happened in complexly impacted family systems referred for behavioral challenges where ‘the trauma story’ is untold. This, in turn, facilitates practitioner application of trauma-experience integration strategies and interventions including development of a resiliency-centered life narrative. Case discussion and presentation of outcome data will be used to highlight the important role of strengthening emotionally supportive relationships and increasing caregiver and child regulation skills as part of multi-level, developmentally-targeted and resiliency-centered trauma treatment.

# CONCURRENT SESSION 8

## Symposium

**Friday, November 7**

**04:30 PM to 05:45 PM**

**Versailles**

## DSM-5 and ICD-11: So Who Really Has PTSD?

(Assess Dx, Assess Dx, Adult, M, Global)

O'Donnell, Meaghan, PhD<sup>1</sup>; Schnurr, Paula, PhD<sup>2</sup>

<sup>1</sup>*Australian Centre for Posttraumatic Mental Health, University of Melbourne, Carlton, Victoria, Australia*

<sup>2</sup>*VA National Center for PTSD, Executive Division, White River Junction, Vermont, USA*

The next few years represents a critical time for the field of traumatic stress. There have been changes to the diagnostic criteria for post-traumatic stress disorder (PTSD) in the Diagnostic and Statistical Manual of Mental Disorders – Fifth Edition (DSM-5) and the International Classification of Diseases 11th Revision (ICD-11). Both diagnostic systems have taken a different approach to the revision of the diagnosis of PTSD with DSM-5 expanding symptom criteria and ICD-11 taking a more focused approach. The aim of this symposium is to present the impact of these changes on prevalence rates of PTSD and to discuss the implications of these changes.

## Symposium

**Friday, November 7**

**04:30 PM to 05:45 PM**

**Versailles**

## The Impact of Changes to the DSM and ICD Criteria for PTSD

(Assess Dx, Clinical Practice-Complex, Adult, M, Industrialized)

**Bisson, Jonathan, MD**

*Cardiff University School of Medicine & Cardiff and Vale University Health Board, Cardiff, Wales, United Kingdom*

The development of ICD11 and DSM5 was seen as an opportunity to harmonize the two major classification systems for mental disorders. The DSM5 and proposed ICD11 diagnostic criteria for post-traumatic stress disorder (PTSD) are markedly different. During this symposium, I shall present results from two different studies conducted to explore the changes. In the first study, we considered the impact of the changes from DSM-IV to DSM5 by undertaking a cross-sectional analysis of population-based data from 4,558 adults. Exposure to different traumatic events was assessed using categorization of free-text descriptions of trauma. 1,971 (47.0%) reported a traumatic event. The prevalence of PTSD using DSM-IV A criteria was 14.3% compared with 8% using the DSM5 A criteria 8.0%, primarily due to exclusion of DSM-IV A1 qualifying events, such as life-threatening illnesses. In the second study, we are exploring the overlap of DSM5 PTSD with the proposed diagnostic criteria for ICD11 PTSD and complex PTSD. Participants are being interviewed with the Clinician Administered PTSD Scale for DSM5 and newly developed instruments to diagnose the proposed ICD11 disorders. Preliminary analyses of the data from this study will be presented and the impact of the divergence of the DSM and ICD criteria discussed.

**Symposium**  
**Friday, November 7**  
**04:30 PM to 05:45 PM**  
**Versailles**

**PTSD Assessment Discrepancies between the PCL Screener and the Gold Standard CAPS IV/V using DSM-5 and ICD-11 Diagnostic Criteria in a Sample of Treatment-Seeking Women in the Public Sector**

(Assess Dx, Chronic-Complex-DV, Adult, M, Industrialized)

**Henn-Haase, Clare, PsyD<sup>1</sup>**; Cloitre, Marylene, PhD<sup>2</sup>; Gavert, Donn, MS<sup>3</sup>; Herman, Judith, MD<sup>4</sup>; Kaslow, Nadine, PhD, ABPP<sup>5</sup>; Mendelsohn, Michaela, PhD<sup>6</sup>

<sup>1</sup>*New York University Langone Medical Center, Department of Psychiatry, New York, New York, USA*

<sup>2</sup>*National Center for PTSD-Dissemination and Training Division, Menlo Park, California, USA*

<sup>3</sup>*National Center for PTSD, VA Palo Alto Health Care System, Menlo Park, California, USA*

<sup>4</sup>*Cambridge Health Alliance | Harvard Medical School, Boston, Massachusetts, USA*

<sup>5</sup>*Emory University School of Medicine, Atlanta, Georgia, USA*

<sup>6</sup>*Cambridge Health Alliance, Boston, Massachusetts, USA*

This presentation reports on prevalence rates of DSM-5 and ICD-11 PTSD in a treatment seeking sample of women (n=162) enrolled in an NIMH funded RCT. Analyses also compares discrepancies between CAPS and PCL ratings for PTSD. PTSD prevalence and symptom endorsement were measured using clinician ratings (CAPS IV/V) and patient self-report (PCL IV/V). Although the CAPS is the gold standard for measuring PTSD, the well-validated PCL is often used as a comparable measure to screen for or diagnose PTSD. While the CAPS and PCL are highly correlated, there are often discrepancies reporting PTSD symptoms on these measures. In this study, of the patients diagnosed with DSM-IV PTSD assessed with the CAPS, 96.3% met criteria for DSM-5 and 87.7% met ICD-11 PTSD. Comparing rates of PTSD based on the PCL versus the CAPS, the rate of DSM-5 PTSD was lower on the PCL than the CAPS (78.4% vs. 96.3%) as was that for ICD-11 PTSD (71.0% vs. 87.7%). As expected, the rate of CAPS-based PTSD was lower in ICD-11 than DSM-5. However there were notable discrepancies between the self-reported and clinician administered measures. Item endorsements indicated that patients self-reported more re-experiencing and fewer symptoms of avoidance of thoughts/feelings, negative emotions, detachment and restricted affect. Implications for measurement development will be discussed.

**Symposium**  
**Friday, November 7**  
**04:30 PM to 05:45 PM**  
**Versailles**

**PTSD in ICD-11 – a Two or Three Factor Model and Implications for Prevalence and Disability**

(Assess Dx, Acc/Inj-Assess Dx-Depr, Adult, M, Global)

**Forbes, David, PhD<sup>1</sup>**; Lockwood, Emma, PhD Candidate<sup>1</sup>; Nickerson, Angela, PhD<sup>2</sup>; Bryant, Richard, PhD<sup>2</sup>; Creamer, Mark, PhD<sup>1</sup>; Silove, Derrick, MD PhD<sup>2</sup>; McFarlane, Alexander, MD<sup>3</sup>; O'Donnell, Meaghan, PhD<sup>1</sup>

<sup>1</sup>*Australian Centre for Posttraumatic Mental Health, University of Melbourne, Carlton, Victoria, Australia*

<sup>2</sup>*University of New South Wales, Sydney, NSW, Australia*

<sup>3</sup>*The University of Adelaide, Adelaide, South Australia, Australia*

This study investigated the latent structure of ICD-11 PTSD symptoms using data from a large multi-site trauma-exposed sample. Randomly selected injury patients were assessed at 6 years post trauma (N=613). Structured

clinical interviews for PTSD (Clinician Administered PTSD Scale) as well as self-report measures of disability (WHODAS 2.0) and quality of life (WHOQOL-bref) were administered. Confirmatory factor analyses were conducted on PTSD symptom data. While the three-factor model implied by the ICD-11 diagnostic criteria provided a good fit to the data, a two-factor model combining re-experiencing and avoidance provided an equivalent level of fit. While diagnostic criteria based on this two-factor model resulted in a slight increase in prevalence (5.1% vs 3.4%;  $z=2.32$ ,  $p<.05$ ), they identified a group of individuals with similar levels of disability ( $p=.933$ ) and poor psychological quality of life ( $p=.591$ ) to the group identified by the proposed tripartite diagnostic criteria. Consistent with theoretical models of PTSD that emphasise the reciprocal relationship between re-experiencing and avoidance, these findings support a two-factor model of latent structure of ICD-11 PTSD symptoms. Such a two-factor model would correspond to diagnostic criteria requiring at least two of any Re-experiencing or Avoidance symptoms and at least one of the Arousal symptoms.

## Symposium

Friday, November 7

04:30 PM to 05:45 PM

Versailles

### The Impact of the Diagnostic Changes to Post-Traumatic Stress Disorder for DSM-5 and the Proposed Changes to ICD-11

(Assess Dx, Assess Dx, Adult, M, Global)

**O'Donnell, Meaghan, PhD<sup>1</sup>**; Nathan, Alkemade, PhD<sup>2</sup>; Nickerson, Angela, PhD<sup>3</sup>; McFarlane, Alexander, MD<sup>4</sup>; Silove, Derrick, MD PhD<sup>3</sup>; Bryant, Richard, PhD<sup>3</sup>; Forbes, David, PhD<sup>1</sup>

<sup>1</sup>*Australian Centre for Posttraumatic Mental Health, University of Melbourne, Carlton, Victoria, Australia*

<sup>2</sup>*ACPMH, University of Melbourne, Melbourne, Victoria, Australia*

<sup>3</sup>*University of New South Wales, Sydney, NSW, Australia*

<sup>4</sup>*The University of Adelaide, Adelaide, South Australia, Australia*

**Aims:** This study aimed to investigate the impact of the changes to post-traumatic stress disorder (PTSD) diagnostic criteria in DSM-5 and the proposed changes in ICD-11 using a large multi-site trauma-exposed sample and structured clinical interviews. **Method:** Randomly selected injury patients admitted to four hospitals around Australia were assessed at 72-months post trauma ( $N=510$ ). Structured clinical interviews for PTSD and major depressive episode, as well as self-report measures of disability and quality of life were administered. **Results:** At 72-months PTSD current prevalence was significantly higher for DSM-5 than ICD-11 (6.7% versus 3.3%,  $z=2.5$ ,  $p=.01$ ). Only 42% of those who met criteria for either diagnosis, met criteria for both DSM-5 and ICD-11. **Conclusions:** The diagnostic systems performed in different ways in terms of current prevalence rates. There was some overlap between those with PTSD diagnosed by ICD-11 and DSM-5 but a substantial portion met one but not the other set of criteria. This represents a challenge for research over the next period of time because the phenotype that is studied may be markedly different according to the diagnostic system used.



**Workshop Presentation**

**Friday, November 7**

**04:30 PM to 05:45 PM**

**Chopin - SPANISH TRACK**

*Presented in Spanish with simultaneous translation to English*

**Identificando las Diferencias y Similitudes en la Implementación de Terapia Cognitiva-Conductual Enfocada en el Trauma Infantil (TF-CBT) Entre El Paso, TX y Los Ángeles, CA: Con Predominación Hispana (Identifying the Differences and Similarities in the Implementation of Cognitive Therapy- Behavioral Focus on Child Trauma (TF-CBT) Between El Paso, TX and Los Angeles, CA in a Predominantly Hispanic Population)**

(Practice, CSA-Complex-Cul Div-Neglect, Child/Adol, M, Global)

**Jimenez, Dante, Masters of Arts in Counseling<sup>1</sup>; Rivas-Hermina, Lisette, M.S. Counseling, LMFT<sup>2</sup>**

<sup>1</sup>*Aliviane, Inc., El Paso, Texas, USA*

<sup>2</sup>*Private Practice, Glendale, California, USA*

Este taller explicare las diferentes maneras que dos diferentes agencias en los Estados Unidos han implementado una terapia con evidencia científica como Terapia Cognitiva-Conducta enfocada en el Trauma Infantil (En Ingles: Trauma-Focused Cognitive Behavior Therapy). El modelo de Terapia Cognitiva Conductual enfocada en el trauma infantil, sus siglas en Ingles-TF-CBT, (Cohen, Mannarino, & Deblinger, 2006) es un modelo terapéutico el cual ha demostrado su efectividad en varios estudios clínicos, para reducir los síntomas de PTSD, depresión, ansiedad y otros problemas de comportamiento comunes en niños/adolescentes que han sido expuestos a situaciones traumatizantes. Se dará una introducción al modelo TF-CBT utilizando ejemplos clínicos de diferentes casos y poblaciones hispanas en El Paso, TX y Los Angeles, CA. Nuestras intervenciones integran los valores culturales de las familias para que la terapia sea aceptada por ellos y a la misma vez mantenga la fidelidad del tratamiento.

**Symposium**  
**Friday, November 7**  
**04:30 PM to 05:45 PM**  
**Windsor/Sandringham**

## **Causation, Prediction, and Discovery: The Applications of Machine Learning to Capture the Irreducible Complexity of Responses to Traumatic Events**

(Res Meth, Acc/Inj-Acute-Bio Med, N/A, I, N/A)

Galatzer-Levy, Isaac, PhD<sup>1</sup>; Koenen, Karestan, PhD<sup>2</sup>

<sup>1</sup>*New York University School of Medicine, New York, New York, USA*

<sup>2</sup>*Columbia University School of Public Health, New York, New York, USA*

Post-traumatic stress disorder PTSD has many underlying, interacting and multi-modal causal factors that vary between trauma-exposed individuals. The inherent complexity cannot be matched by the relatively simple statistical modeling approaches used in the previous 40 years. New approaches that utilize computer algorithms mimicking human learning process are emerging from computer science and their use for forecasting PTSD, identifying subjects at higher risk, and understanding the course of PTSD holds a significant promise. This panel will bring to the attention of ISTSS attendees these ground breaking technologies and their already promising achievement in predicting and understanding PTSD. Presenters in the panel are leading researchers in the area of machine learning implementation in PTSD who will share their most recent data and illustrate the promise of ML for clinicians and researchers alike. Working like the human brain works and learns, ML methods actually simplify the response to pivotal questions about the complex etiology of PTSD. Because these methods emerge from the wider big data revolution, becoming acquainted with their elegance and with the new insights that they already provide about PTSD and its development is both timely and rewarding.

**Symposium**  
**Friday, November 7**  
**04:30 PM to 05:45 PM**  
**Windsor/Sandringham**

## **Integrating Neuroendocrine, Behavioral, and Social Markers Predict and Characterize the Development of Post-Traumatic Stress Responses**

(Res Meth, Acc/Inj-Acute-Bio Med, Adult, I, Industrialized)

Galatzer-Levy, Isaac, PhD<sup>1</sup>; Statnikov, Alexander, PhD<sup>1</sup>; Shalev, Arie, MD<sup>2</sup>

<sup>1</sup>*New York University School of Medicine, New York, New York, USA*

<sup>2</sup>*Hadassah Hospital, Jerusalem, Jerusalem, Israel*

Research on the development of stress pathology has followed two separate paths: a search for etiology and causative mechanisms and the uncovering of reliable clinical risk indicators. Both paths have suffered from the inadequacy of previous computational methods that fail to match the complex multidimensional nature of stress pathology. The current work utilizes two machine learning (ML) approaches to address these limitations: causal graph analysis for identifying complex causal relationships, and ML based forecasting for prediction based on large sets of patient information. We integrate neuroendocrine markers, sociodemographic, and symptom information across all time points in a cohort (n=140) followed from the emergency room immediately following exposure to a traumatic event and again at 1-week, 1-month, and 4-months. Two trajectories including recovery and chronic PTSD were identified. Causal graph analysis revealed complex interdependencies between social, symptom, and

neuroendocrine changes across 4-months that influence the course of PTSD. Forecasting methods demonstrate that, based on integrating these sources of information, PTSD course can be accurately forecasted by 1 week and biomarkers may, in combination with symptom measures and sociodemographic information, significantly contribute to forecasting PTSD (AUC = .82).

## **Symposium**

**Friday, November 7**

**04:30 PM to 05:45 PM**

**Windsor/Sandringham**

### **A Complex Systems Approach to Causal Discovery for Traumatic Stress**

(Res Meth, Assess Dx-Bio/Int, Lifespan, I, Industrialized)

**Saxe, Glenn, MD<sup>1</sup>**; Statnikov, Alexander, PhD<sup>2</sup>; Koenen, Karestan, PhD<sup>3</sup>; Bergman, Nora, BS, BA<sup>4</sup>; Aliferis, Constantin, MD PhD<sup>5</sup>

<sup>1</sup>*New York University Langone Medical Center, New York, New York, USA*

<sup>2</sup>*New York University School of Medicine, New York, New York, USA*

<sup>3</sup>*Columbia University School of Public Health, New York, New York, USA*

<sup>4</sup>*New Orleans Children's Advocacy Center, Children's Hospital, New Orleans, New York, New York, USA*

<sup>5</sup>*Nagasaki University Graduate School of Biomedical Sciences, New York, New York, USA*

**Background:** Traumatic Stress Disorders emerge and are sustained within a complex system of variables that span molecular, cellular, neurologic, developmental, and social levels of organization. Complete understandings of these disorders will therefore require knowledge about the properties of the complex systems in which they are embedded; and knowledge about the causal relations between the variables that constitute the system's components. We detail a novel computational approach, called the Complex Systems-Causal Network (CS-CN) method, to enable both causal and complex systems-level inference in a unified analysis. **Methods:** Our validation study was conducted with a data set on risk factors for PTSD in 163 injured children. Using the framework of local causal graph and Markov Boundary algorithms, the possible causal association between each pair of variables was examined and a Causal Network, produced. The Causal Network was examined for its adaptive properties, and searched for the variables that disproportionally contributed to these properties. **Results:** An adaptive causal network of 110 variables and 166 bivariate relations was identified. The variables that most contributed to its adaptive properties were CRHR1 gene, FKPB5 gene, age, socioeconomic status, and acute anxiety. Modeling the removal of these variables dramatically diminished its adaptive properties.

## **Symposium**

**Friday, November 7**

**04:30 PM to 05:45 PM**

**Windsor/Sandringham**

### **Individual Prediction of Non-Remitting PTSD at the Early Aftermath of Trauma: the Promise of Machine Learning Methods**

(Prevent, Acc/Inj-Clinical Practice, Adult, I, Industrialized)

**Karstoft, Karen-Inge, Doctoral Student<sup>1</sup>**; Galatzer-Levy, Isaac, PhD<sup>2</sup>; Statnikov, Alexander, PhD<sup>2</sup>; Shalev, Arieh, MD<sup>3</sup>

<sup>1</sup>*University of Southern Denmark, Odense, Funnen, Denmark*

<sup>2</sup>*New York University School of Medicine, New York, New York, USA*

<sup>3</sup>*Hadassah Hospital, Jerusalem, Jerusalem, Israel*

Early identification of non-remitting PTSD has significant public health implications, but so far, individual prediction has not been achieved. We present a machine learning (ML) based approach that focus on predicting individual outcome from early responses, and have the potential to become an clinical forecasting tool. In 957 trauma survivors identified in the emergency department (ED) and followed for 15 months, we applied ML feature selection to identify the strongest set of predictors from information collected 10 days after exposure. Next, we applied a support vector machine classification algorithm to identify individuals who will not remit from early symptoms. Finally, we tested ways to flexibly predict non-remitting PTSD from individual risk profiles. We identified a set of robust early risk indicators that accurately predict non-remitting PTSD. These indicators included pre-trauma characteristics, event related and ED admission features, and early symptoms. Next, we found that non-remission can be predicted by a large number of risk indicator combinations ( > 800) thereby making early prediction applicable in practice. These findings lay the foundation for efficient, algorithmic computation of individuals' risk of chronic PTSD. These algorithms can be developed in future studies to integrate behavioral, social and biological risk indicators.

## **Symposium**

**Friday, November 7**

**04:30 PM to 05:45 PM**

**Windsor/Sandringham**

### **Ensembling Machine Learning Methods for Predicting PTSD in the World Mental Health Survey**

(Res Meth, Chronic-Clin Res-Illness-Prevent, Adult, I, Global)

**Rose, Sherri, PhD**

*Harvard Medical School, Boston, Massachusetts, USA*

The use of machine learning for prediction allows us to build flexible estimators that identify patients at high risk for post-traumatic stress disorder (PTSD). Interventions for PTSD are costly, and, proportionally, only a small percentage of individuals who are exposed to traumatic events (TEs) will develop PTSD. Accurately differentiating those subjects most likely to develop PTSD allows for targeted interventions. With clinical research moving toward personalized medicine, efforts to translate advances from the statistics literature into practice have become even more important. The WHO World Mental Health (WMH) Surveys administered the Composite International Diagnostic Interview (CIDI), a fully-structured psychiatric diagnostic interview, to community samples in 24 countries. PTSD after TE exposure was assessed for 47,466 exposures. Predictive algorithms were developed based on type of focal TE, socio-demographics, cumulative exposure to prior TEs, and prior lifetime DSM-IV/CIDI disorders. We describe several machine learning approaches for predicting PTSD in the WMH Survey Initiative. The core method is an ensembling machine learning technique that leverages the use of cross-validation to take a weighted average of multiple algorithms and form a single best predictor. Our results demonstrated very high accuracy for identifying PTSD, while protecting against overfitting.

## **Symposium**

**Friday, November 7**

**04:30 PM to 05:45 PM**

**Sevilla - LONG-TERM EFFECTS OF CHILD TRAUMA TRACK**

## **Innovative Methodological Approaches to Understanding Refugee and Immigrant Experiences of Trauma, Resilience, and Healing**

(CulDiv, Comm/Int-Refugee-Res Meth, Lifespan, M, Industrialized)

Goodkind, Jessica, PhD

*University of New Mexico, Albuquerque, New Mexico, USA*

Recent research with refugees and immigrants has highlighted the importance of interrogating multiple apparent dichotomies, including: refugee/immigrant, treatment/healing, trauma/resilience, and quantitative/qualitative. This symposium will include presentations from four research teams who utilize community-based participatory, mixed-method, and/or qualitative approaches to elucidate trauma-related experiences of refugees and immigrants from countries in Africa and the Middle East. All presentations will include a focus on the innovative methods or methodologies employed in the studies and the findings obtained.

## **Symposium**

**Friday, November 7**

**04:30 PM to 05:45 PM**

**Sevilla - LONG-TERM EFFECTS OF CHILD TRAUMA TRACK**

## **Developing a “Moving On” Narrative as an Engagement Tool for Treating Trauma in Refugee Populations**

(CulDiv, Clin Res-Refugee-Civil/War, Adult, M, Global)

Isakson, Brian, PhD; Stein, Elizabeth, BS; Amer, Suha, MA

*University of New Mexico, Albuquerque, New Mexico, USA*

In clinical interventions, refugees who have experienced trauma often prefer to focus on present and future issues rather than dwelling on their trauma history and often want to be in control of how and when the trauma narrative is shared (if at all). Therefore, exposure based therapy may not always be culturally appropriate at the beginning of treatment for many refugee groups. Using community-based participatory research methodology, the goal of this study was to develop a culturally-appropriate, narrative-based engagement tool that can be used clinically for refugees who have experienced trauma. The focus is on factors and strengths that promoted moving on after trauma. We conducted this “moving on narrative,” a semi-structured interview, with refugee trauma survivors and later asked for feedback on the questions and the narrative process to understand how the questions could be modified to promote a discussion on moving on and treatment engagement. We also interviewed refugee mental health experts about the questions. This interview will help trauma survivors focus on the healing process and their strengths while also providing mild exposure and, hopefully, promote treatment engagement. Data from this preliminary study will be used to formalize the questions for the engagement tool that will be used to evaluate the effectiveness of the tool.

## **Symposium**

**Friday, November 7**

**04:30 PM to 05:45 PM**

### **Sevilla - LONG-TERM EFFECTS OF CHILD TRAUMA TRACK**

#### **Healing from a Refugee Perspective: Qualitative Research on Culturally Specific Processes of Healing and Recovery from Trauma**

(Res Meth, Cul Div-Health-Refugee-Res Meth, Adult, M, M East & N Africa)

**Hess, Julia, PhD; Goodkind, Jessica, PhD; Isakson, Brian, PhD;** Baca, Brandon, BA; Amer, Suha, MA; Ndayisenga, Martin, Community Leader; Ndaheba, Eric, Undergraduate; Christian, Charlisa, MBA  
*University of New Mexico, Albuquerque, New Mexico, USA*

Much of refugee scholarship focuses on trauma and its impact on refugees. We know that many are able to move on from the past and start their lives anew; however, less is known about emic experiences of healing from trauma. As part of a multi-year community-based intervention study that addresses social determinants of mental health, post-resettlement stressors and connects refugees to trauma-focused treatment, we wanted to measure refugee distress in multiple ways. In addition to established measures of PTSD, depression and anxiety, we implemented a process described by Miller (2006) to create culturally sensitive measures of stress/distress. We asked participants to describe and compare the experiences of two people they knew well who had experienced trauma, one of whom had recovered and one of whom was still suffering. Two refugee groups in our study participated in this process—Great Lakes Africans and Iraqis. In this presentation, we will examine narratives of recovery from two distinct cultural perspectives, exploring conditions important for recovery. Most prominent for both groups were the ability to work, family support, social life, and access to resources. Comparison of the two groups may aid in developing relevant approaches to healing from trauma for culturally distinct populations.

## **Symposium**

**Friday, November 7**

**04:30 PM to 05:45 PM**

### **Sevilla - LONG-TERM EFFECTS OF CHILD TRAUMA TRACK**

#### **Comparing Forced and Voluntary Migration Narratives in West African Families in New York City**

(Global, Cul Div-Ethnic-Fam/Int-Refugee, Adult, M, Industrialized)

**Rasmussen, Andrew, PhD<sup>1</sup>; Keatley, Eva, BS<sup>2</sup>; De Haene, Lucia, PhD<sup>3</sup>**

<sup>1</sup>*Fordham University, Bronx, New York, USA*

<sup>2</sup>*University of Windsor, Windsor, Ontario, Canada*

<sup>3</sup>*Katholieke Universiteit Leuven, Leuven, Flanders, Belgium*

Refugees and other forced migrants are identified in the psychological literature almost entirely by their trauma history. But forced migrants are immigrants, and therefore experience many of the same challenges that those who migrate for economic opportunities do. Moreover, many voluntary immigrants bring trauma histories that may make them similar to forced migrants. The current study examined migration narratives of West African families in order to compare narrative patterns of forced and voluntary migrants. Participants comprised a purposive sample of 20 West African parents (10 women) from 12 families, age 29 - 66. All were Muslim, and originated from Mauritania, Sierra Leone, Guinea, and Cote d'Ivoire. The study design was qualitative, comprised of three interviews with each family: (1) parents' migration histories, (2) and (3) individual interviews to discuss family processes, conflict and acculturative experiences. Transcripts were each coded by two investigators with final versions determined through consensus. Transcripts were analyzed using a grounded theory approach. Findings suggest that the forced-voluntary

axis fits a continua rather than a binary classification. Discussion contextualizes findings in line with the trauma theory, resilience, and conservation of resources (Hobfoll, 1989; 2001). Implications for research and policy will be presented.

## **Symposium**

**Friday, November 7**

**04:30 PM to 05:45 PM**

**Sevilla - LONG-TERM EFFECTS OF CHILD TRAUMA TRACK**

### **Using Mixed Methods to Build Practical Knowledge on Refugee Mental Health**

(Res Meth, Cul Div-Refugee-Res Meth-Civil/War, Lifespan, M, Global)

**Weine, Stevan, MD;** Durrani, Aqsa, MPH; Polutnik, Chloe, MPH

*University of Illinois Chicago, Chicago, Illinois, USA*

Mixed methods should be well suited to studying refugee mental health; however, this has not yet been adequately discussed or demonstrated. This presentation illustrates key opportunities and challenges for using mixed methods for building practical knowledge regarding refugee mental health. Twenty-six articles from the health and social sciences literature were systematically reviewed with a focus on examining study designs and key findings. The studies reviewed were mostly conducted in Europe, Australia, and North America. The mixed methods designs were largely sequential, explanatory, and involved surveys and interviews. The key mixed methods findings were in the domains of loss of connection, loss of status, lack of adequate services, and resilience. One mixed methods research example which studied protective resources among adolescent refugees in U.S. resettlement is offered to illustrate some advantages of mixed methods data collection and analysis. There is a need for further research on refugee mental health which rigorously uses mixed methods to address priority needs and questions and needs in refugee mental health, especially involving resilience-focused interventions.



**Symposium**  
**Friday, November 7**  
**04:30 PM to 05:45 PM**  
**Brickell - MILITARY TRACK**

## **Trauma and Suicide in Military Personnel and Veterans: Contribution of Pre-Military, Military, and Post-Military Factors**

(Prevent, Rape-Mil/Vets, Adult, M, Industrialized)

Maguen, Shira, PhD  
*San Francisco VA Medical Center and UCSF, San Francisco, California, USA*

Suicide rates among Operation Enduring Freedom (OEF), Operation Iraqi Freedom (OIF), and Operation New Dawn (OND) military personnel and Veterans are a growing public health concern. In this symposium, we present several studies that identify pre-military, military, and post-military factors associated with suicide outcomes. The first study examines the association of civilian trauma (e.g., childhood abuse) and military sexual trauma (MST) on self-injurious thoughts and behaviors among military personnel and Veteran students, and finds differential impact of these traumas on suicide outcomes among males and females. The second study examines the association of MST and suicidal ideation after adjusting for combat exposure in a sample of OEF/OIF/OND Veterans, and highlights the important association between MST and suicidal ideation. The third study examines a large, national sample of OEF/OIF/OND Veterans enrolled in VA care screening positive for either post-traumatic stress disorder or depression, and highlights that age, race, alcohol problems and longer time to mental health care are associated with having suicidal thoughts and plan. The fourth study compares profiles of suicide decedents and attempters in a large military sample, and identifies commonalities and differences between the groups. Implications for treatment and suicide prevention are discussed.

**Symposium**  
**Friday, November 7**  
**04:30 PM to 05:45 PM**  
**Brickell - MILITARY TRACK**

## **Comparison of Suicide Decedents and Attempters in the US Military: A Latent Class Analysis**

(Prevent, Civil/War-Mil/Vets, Adult, M, Global)

Skopp, Nancy, PhD  
*US Army, Madigan Health Systems, Tacoma, Washington, USA*

Objective: A clearer understanding of the factors that place service members at risk for suicidal behavior is of principal importance to the US military suicide prevention mission. The objective of this research was to explore whether suicide decedents and attempters represent similar groups or distinct groups with different configurations of risk factors. Method: Cases were 1,843 US soldiers with reported suicides (n = 419) or suicide attempts (n=1,424) in the Department of Defense Suicide Event Report (DoDSER) from 2008-2010. Latent class analyses were conducted to examine several identified suicide risk factors in soldiers. Results: Analyses revealed that suicide decedents and attempters share similar profiles represented by three classes: 1) *External Factors*, 2) *Mental Health Factors*, and 3) *No Pattern*. Within the *Mental Health Factors* class, failed relationships were more likely have co-occurred among suicide decedents, compared to attempters. Conclusions: Army suicide decedents and attempters appear to represent overlapping populations. Some soldiers' self-violence may be associated with external stresses whereas, for others, self-violence may relate more strongly to mental health difficulties; in some cases, no problems may be apparent.

Assessment and vigilance toward early detection of potential precursors to self-directed violence may help reduce soldier suicide risk.

## **Symposium**

**Friday, November 7**

**04:30 PM to 05:45 PM**

**Brickell - MILITARY TRACK**

### **Military Sexual Trauma, Combat Experiences, and Suicidal Ideation among OEF/OIF/OND Veterans**

(Clin Res, Depr-Rape-Mil/Vets, Adult, M, Industrialized)

**Monteith, Lindsey, PhD<sup>1</sup>**; Menefee, Deleene, PhD<sup>2</sup>; Wanner, Jill, PhD<sup>2</sup>; Bahraini, Nazanin, PhD<sup>1</sup>

<sup>1</sup>*VA Eastern Colorado Health Care System- VISN 19 Denver VA MIRECC, Denver, Colorado, USA*

<sup>2</sup>*Michael E. DeBakey VA Medical Center / Baylor College of Medicine, The Menninger Department of Psychiatry and Behavioral Medicine, Houston, Texas, USA*

Compelling evidence has emerged on military sexual trauma (MST) and increased risk for suicide attempt (Gradus, Shipherd et al., 2013; Kimerling et al., 2007; Pavao et al., 2013). In contrast, research on MST and suicidal ideation has yielded mixed findings (Gradus, Street et al., 2013; Lemaire & Graham, 2011). No research has examined whether MST associates with suicidal ideation after controlling for combat exposure. We examined the association between MST and suicidal ideation, controlling for combat experiences. We also examined symptoms of depression and post-traumatic stress disorder (PTSD) as mediators of the association between MST and suicidal ideation. Our sample included 199 OEF/OIF/OND Veterans entering inpatient trauma-focused treatment. Veterans completed the Deployment Risk and Resilience Inventory (DRRI) Sexual Harassment Scale, DRRI Combat Experiences Scale, Beck Scale for Suicide Ideation, Beck Depression Inventory, and PTSD Checklist. We used hierarchical regression to examine the association between MST and suicidal ideation. MST significantly associated with suicidal ideation, controlling for age, gender, and combat. Depression, but not PTSD, mediated the association between MST and suicidal ideation. These findings underscore the importance of assessing for MST and depression when assessing suicide risk with OEF/OIF/OND Veterans in inpatient settings.

## **Symposium**

**Friday, November 7**

**04:30 PM to 05:45 PM**

**Brickell - MILITARY TRACK**

### **Increased Risk for Suicidal Thoughts and Behaviors among Male Survivors of Military Sexual Trauma**

(Commun, Orient-Mil/Vets, Adult, M, Industrialized)

**Bryan, Craig, PsyD**; Bryan, AnnaBelle, BS, BA; Clemans, Tracy, PsyD

*National Center for Veterans Studies and University of Utah, Salt Lake City, Utah, USA*

Objective: Military sexual trauma (MST) is a strong predictor of psychiatric disorders and negative health outcomes, but less is known about the relationship of MST with self-injurious thoughts and behaviors (SITB) among military personnel and veterans. The current study investigates the association of MST with SITB in a sample of military personnel and veterans. Method: 422 U.S. military personnel and veterans enrolled in college classes completed standardized self-report measures of sexual trauma history, depression, post-traumatic stress disorder (PTSD), and SITB. Results: The relationship of MST with SITB differed for male and female participants. Among men, MST was associated with significantly increased risk for suicide ideation, plans, and attempts. Among women, MST was

associated with significantly increased risk for NSSI but not suicide ideation, plans, and attempts. Nonmilitary sexual trauma (NMST), which most often occurred as a child, was associated with increased rates of suicide ideation, plan, attempts, and NSSI for both men and women. Results were no longer significant when adjusting for age, depression, and PTSD symptoms. Conclusions: MST is associated with increased risk for SITB among male but not female military personnel and veterans, and is explained by concurrent emotional distress.

## **Symposium**

**Friday, November 7**

**04:30 PM to 05:45 PM**

**Brickell - MILITARY TRACK**

### **Suicide Risk among Iraq and Afghanistan Veterans with Mental Health Problems**

(Prevent, Mil/Vets, Adult, M, Industrialized)

**Maguen, Shira, PhD<sup>1</sup>**; Madden, Erin, MPH<sup>2</sup>; Dinh, Julie, BA<sup>2</sup>; Seal, Karen, MD MPH<sup>1</sup>

<sup>1</sup>*San Francisco VA Medical Center and UCSF, San Francisco, California, USA*

<sup>2</sup>*San Francisco VA Medical Center (VAMC-SF), San Francisco, California, USA*

Our goal was to identify suicide risk among Iraq and Afghanistan Veterans with mental health problems in VA care, as well as demographic, military and temporal factors associated with suicide risk. Using a retrospective design, we used national VA data from Veterans screened 10/02-7/13. We included 152,257 Veterans who screened positive on either the post-traumatic stress disorder (PTSD) or depression screens during a VA visit, and were subsequently screened for suicide. Suicide screens include questions about hopelessness, thoughts of suicide, a suicidal plan, and prior suicide attempt. Among Veterans screening positive for PTSD and/or depression, 17% reported hopelessness, 18% reported suicidal thoughts, 16% reported a plan, and 60% reported a prior suicide attempt. We conducted a multivariate logistic regression to determine risk factors for having current suicidal thoughts and a plan. Younger age, Black and Asian race (vs. White), enlisted status, Army, alcohol problems, and longer time from last deployment to screen were each significantly associated with current suicidal thoughts and a plan. Black and Asian Veterans being at risk for suicidal thoughts/plan may be unique to this cohort. Importantly, longer time from last deployment to screening was a strong predictor, highlighting the need to get Veterans with mental health problems engaged in care as soon as possible.

## **Panel Presentation**

**Friday, November 7**

**04:30 PM to 05:45 PM**

### **Biscayne - BIOLOGY TRACK**

#### **Social Cognitive and Affective Neuroscience: Bridging Research and Theory for Clinical Application**

(Clin Res, Affect/Int-Clin Res-Cog/Int-Bio/Int, Lifespan, I, N/A)

Smith, Andrew, MA<sup>1</sup>; Benight, Charles, PhD<sup>2</sup>; Lanius, Ruth, MD, PhD<sup>3</sup>; D'Andrea, Wendy, PhD<sup>4</sup>; Frewen, Paul, PhD<sup>3</sup>; Shalev, Arie, MD<sup>5</sup>

<sup>1</sup>Virginia Tech, Blacksburg, Virginia, USA

<sup>2</sup>UCCS, Colorado Springs, Colorado, USA

<sup>3</sup>University of Western Ontario, London, Ontario, Canada

<sup>4</sup>New School for Social Research, New York, New York, USA

<sup>5</sup>Hadassah Hospital, Jerusalem, Jerusalem, Israel

This panel is submitted on behalf of the Theory and Traumatic Stress Studies Special Interest Group. The goal of this panel is to promote an interactive discussion among panelists and a clinical audience aimed at merging and interpreting neurobiological findings through the practical and clinically palatable lens of social cognitive theory. Due to the current zeitgeist that places a premium on understanding neural-networks associated with PTSD and disordered emotional/behavioral manifestations, it is crucial to collate empirical findings and interpret through the lens of usable theory to move clinical application forward. Considering the nature of scientific journal restrictions, many studies that examine neurobiological phenomena are not able to explicate and interpret findings through theory that would enable application in clinical settings. This panel will focus on unique empirical and theoretical approaches to understanding self-regulation. Dr. Benight will present his coping self-efficacy work, Dr. Lanius will focus on self-regulation and dissociative phenomena, Dr. D'Andrea will focus on physiology and information processing, and Dr. Frewen will discuss his emotional awareness, appraisals, and mindfulness work. The majority of the session will be dedicated to discussion with the audience. Dr. Shalev will summarize and discuss implications moving forward.

## **Workshop Presentation**

**Friday, November 7**

**04:30 PM to 05:45 PM**

### **Bayfront A - CHILD TRACK ONE**

#### **Trauma Treatment and Clinical Decision-Making Dilemmas: Using Adaptive Treatment Strategies to Improve Care**

(Clin Res, Clin Res-Complex, Lifespan, M, Global)

Kiser, Laurel, PhD MBA<sup>1</sup>; Pella, Jeffrey, PhD, MSc<sup>1</sup>; Berkowitz, Steven, MD<sup>2</sup>; Ford, Julian, PhD<sup>3</sup>

<sup>1</sup>University of Maryland School of Medicine, Baltimore, Maryland, USA

<sup>2</sup>University of Pennsylvania School of Medicine, Philadelphia, Pennsylvania, USA

<sup>3</sup>University of Connecticut Health Center, Farmington, Connecticut, USA

Too many families live in stressful circumstances, including poverty, which exposes them to multiple traumas. Families who are overwhelmed by chronic stress and trauma demonstrate a variety of negative adaptations leading to a breakdown in family functioning. Lapses in basic family functioning are well documented as mechanisms in the intergenerational transmission of psychopathology leading to psychosocial impairment and mental illnesses in multiple family members. Based on the complex, multi-layered needs these families are faced with, they require carefully staged and sequenced multi-modal services and providers are often overwhelmed by their clinical decision-

making dilemmas. Providers need adaptive treatment strategies (ATS) that help determine an empirically-supported sequence of decisions about how to adjust the order, type and intensity of treatment to optimize positive outcomes. This workshop describes development of a pilot Sequential Multiple Assignment Randomized Trial designed to develop such an ATS. We present results from semi-structured interviews of experts identifying factors contributing to poor treatment outcomes with this population, the ATS decision-rules being studied, and preliminary data from the SMART pilot. We discuss the promises and challenges of using this methodology for research designed to inform providers and improve trauma treatment.

## **Case Study Presentation**

**Friday, November 7**

**04:30 PM to 05:45 PM**

**Bayfront B - CHILD TRACK TWO**

### **Prolonged Exposure Therapy for Toddlers with Traumas following Medical Procedures**

(Practice, Chronic-Illness, Child/Adol, M, Global)

**Yadin, Elna, PhD<sup>1</sup>**; Rachamim, Lilach, PhD<sup>2</sup>

<sup>1</sup>*University of Pennsylvania, Philadelphia, Pennsylvania, USA*

<sup>2</sup>*Schneider Medical Center, Petach Tikva, Israel*

Traumatic events have potentially debilitating long-lasting effects on the child's normal development and, therefore, should be effectively treated. Prolonged Exposure (PE) therapy has been found to be effective in reducing post-traumatic stress disorder symptoms in adults and in adolescents and children (e.g., Foa et al., 2013; Gilboa-Schechtman et al., 2010; Nacasch et al., 2011). It has not yet been tested in toddlers. This case study presents four cases of PE therapy adapted to toddlers between the ages of 2-3 and their parents whose post-traumatic stress symptoms developed following invasive medical procedures. Treatment utilized several active PE components that were tailored specifically for the treatment of toddlers: psychoeducation about trauma, recounting scenes from the traumatic events, and in-vivo exposures to associated feared stimuli and triggers. The treatments resulted in substantial improvement in the post-traumatic symptoms in the toddlers and in their parents. At the time of treatment termination all toddlers had lost the post-traumatic stress disorder diagnosis and resumed age-appropriate functioning. These case studies provide preliminary clinical evidence for the efficacy of PE in toddlers.

## **Media Presentation**

**Friday, November 7**

**04:30 PM to 05:45 PM**

**Gusman/Tuttle**

### **Using Film as a Tool for Understanding and Overcoming Grief & Traumatic Loss**

(Multi-Media, Commun-Complex-Death-Grief, Lifespan, I, N/A)

**Rafferty, Helen, BA<sup>1</sup>**; Keegan, William, BA<sup>2</sup>

<sup>1</sup>*Independent Filmmaker, New York, New York, USA*

<sup>2</sup>*Private Practice, NY, Newark, New Jersey, USA*

If there is one universal experience all human beings share, it is the experience of loss. Whether resulting from a disaster of epic proportions or from events at a more local or personal level, the need to face life's greatest challenges with personal resilience and strong community support is common to all. Yet so many people deny their own suffering and take the daunting journey through grief and trauma alone, feeling isolated and ashamed of their inability to feel whole and move on. Our workshop presenters propose to share Project Rebirth's unique film content

with conference participants in order to capture how a few individuals demonstrate resilience in the face of adversity. These films comprise the longest and most complete video record of human beings journeying through grief and trauma. They follow 9 individuals who suffered terrible losses on September 11, 2001. Conference participants will watch them battle grief, injury and post-traumatic stress over the course of several years. These films are now used in programs that empower viewers to confront and better understand their own battles with trauma and grief and to develop greater resilience for the future. Presenters Helen Rafferty (executive director, Project Rebirth) and Bill Keegan (executive director, HEART 9/11) will share their experiences healing communities affected by disasters or traumatizing conditions.

## **Oral Paper Presentation**

**Friday, November 7**

**04:30 PM to 05:45 PM**

**Merrick**

## **Global Studies on Community Violence**

### **The Enduring Effects of Child Maltreatment and Cumulative Adversity On Urban Adolescents: A Prospective Study**

(Clin Res, CPA-CSA-Chronic-Comm/Vio, Child/Adol, M, Industrialized)

**Wright, Margaret, PhD<sup>1</sup>**; Kaufman, Julia, Doctoral Student<sup>1</sup>; Folger, Susan, MA PhD Student<sup>1</sup>; Allbaugh, Lucy, MS PhD Student<sup>1</sup>; Noll, Jennie, PhD<sup>2</sup>

<sup>1</sup>*Miami University, Oxford, Ohio, USA*

<sup>2</sup>*Penn State University, University Park, Pennsylvania, USA*

Adolescents living in low income urban neighborhoods have an increased risk of experiencing adverse life events in many domains. This study assessed a range of often related traumatic experiences in 273 adolescents with substantiated reports of child maltreatment and 204 demographically comparable peers. The study's goal was to explore unique and cumulative contributions of specific types and numbers of traumatic experiences on mental health outcomes over a four year prospective study. Results revealed that physically and sexually violent life events predicted poor outlook on life at final assessment, whereas emotional and sexual trauma predicted depressive symptoms. A range of traumatic experiences at Time 1 (loss, emotional and sexual trauma, violence exposure) also predicted post-traumatic stress symptoms (PTSS) at final assessment. Negative peer influence impacted depression, externalizing behaviors, poor outlook, and drug use at Time 1, but only drug use at final assessment. Substantiated abuse heightened risk for PTSS, externalizing behaviors, and drug use at Time 1 and predicted PTSS and drug use at final assessment. Cumulative trauma exposure was the strongest predictor of adverse outcome across all domains and suggested a dose-response relationship. The findings increase our understanding of the complex traumatic roots of many often co-occurring mental health problems.

## **Oral Paper Presentation**

**Friday, November 7**

**04:30 PM to 05:45 PM**

**Merrick**

### **Traumatic Events and Trauma-Related Psychopathology in Former Drug Soldiers in Rio de Janeiro: A Controlled Study**

(Commun, Aggress-Anx-Comm/Vio-Depr, Lifespan, M, Latin Amer & Carib)

**Van Emmerik, Arnold, PhD;** Bojahr, Lisa, MA  
*University of Amsterdam, Amsterdam, North-Holland, Netherlands*

Research suggests that more than 14,000 children in Rio de Janeiro are involved in drug trafficking, of which 8,500 work as drug soldiers to defend selling points and laboratories against police raids and rival cartels. This controlled study investigated trauma exposure and trauma-related psychopathology in former drug soldiers (FDS) in Rio de Janeiro. Furthermore, we examined the relationship between the number of traumatic events and symptom severity, and compared symptom severity in perpetrators versus victims of traumatic events. We found high exposure rates to traumatic events, with 83.5% of the FDS (N = 97) and 57.9% of the controls (N = 95) having experienced more than five events. FDS reported more trauma exposure, post-traumatic stress (PTS), depressive symptoms, and general mental health problems, compared to controls. More FDS than controls satisfied DSM-IV symptom criteria for PTSD (43.7% versus 22.1%) and reported severe depressive symptoms (25.8% versus 8.2%). Trauma exposure was strongly related to PTS among FDS ( $r = .48$ ). Furthermore, more FDS than controls (23.7% versus 10.5%) identified themselves as a perpetrator of one or more traumatic events. Among FDS, perpetrators reported more PTS than victims. It is concluded that being a (child) drug soldier is associated with elevated trauma exposure and severe trauma-related psychopathology in later life.

**Oral Paper Presentation**  
**Friday, November 7**  
**04:30 PM to 05:45 PM**  
**Merrick**

**Community Violence and Post-Traumatic Stress among Salvadorian Adolescents:  
Testing the Role of Ecological Factors**

(Prevent, Chronic-Comm/Vio-Fam/Int-Global, Child/Adol, M, Latin Amer & Carib)

**Rojas-Flores, Lisseth, PhD<sup>1</sup>;** Holland, Jason, PhD<sup>2</sup>; Currier, Joseph, PhD<sup>3</sup>; Herrera, Sofia, PhD<sup>4</sup>

<sup>1</sup>*Fuller Theological Seminary, Graduate School of Psychology, Pasadena, California, USA*

<sup>2</sup>*University of Nevada, Las Vegas, Nevada, USA*

<sup>3</sup>*University of South Alabama, Mobile, Alabama, USA*

<sup>4</sup>*Fuller Graduate School of Psychology, Pasadena,, California, USA*

El Salvador has been ranked as one of the most violent countries in Latin America in recent decades. The current study examined factors from three ecological domains – family, school, and neighborhood – in indirectly explaining associations between community violence (CV) and post-traumatic stress disorder (PTSD) symptoms among 902 adolescents living in El Salvador (ages 12 to 17). Rates of lifetime exposure to CV were higher among boys and girls reported worse PTSD symptoms. Two main findings emerged from the structural equation model (SEM): (1) direct exposure to CV had a positive indirect effect on PTSD through family factors; and (2) vicarious exposure was indirectly linked with PTSD through factors related to adolescents' schools. Although witnessing CV events was associated with a poorer perception of one's neighborhood, this ecological domain was not predictive of PTSD in the SEM analysis. These findings underscore the importance of addressing multiple ecological domains in the prevention and treatment of PTSD symptomatology among adolescents living in high violence, post-conflict Central American settings.



**Oral Paper Presentation**  
**Friday, November 7**  
**04:30 PM to 05:45 PM**  
**Merrick**

**Marginal Structural Models for Estimating the Effects of Chronic Community Violence Exposure on Internalizing and Externalizing Symptoms**

(Res Meth, Chronic-Comm/Vio-Dev/Int, Lifespan, M, Industrialized)

**Kennedy, Traci, PhD<sup>1</sup>**; Kennedy, Edward, MS<sup>2</sup>

<sup>1</sup>*Johns Hopkins University School of Medicine, Baltimore, Maryland, USA*

<sup>2</sup>*University of Pennsylvania, Philadelphia, Pennsylvania, USA*

A major issue limiting our understanding of how chronic trauma affects individuals' well-being across the lifespan is time-dependent confounding of outcomes with ongoing trauma. Namely, youth who are exposed to community violence may develop internalizing and externalizing symptoms, which then influence their future involvement in violence (Lynch & Cicchetti, 1998). These dynamic processes make it impossible to isolate the effects of chronic community violence exposure (CVE) on psychological symptoms over time using traditional longitudinal methods. Thus, this study proposes the application of marginal structural models (MSMs; Robins & Hernan, 2009) to the study of chronic trauma on individuals' well-being. Using 3 waves of data from a representative sample of over 4,000 children and adolescents in the Project on Human Development in Chicago Neighborhoods, we use MSMs to estimate the effects of chronic CVE on youths' internalizing and externalizing symptoms over time, and we illustrate why MSMs should be preferred over standard longitudinal regression controlling for past outcomes. While both methods revealed significant linear trends between chronic CVE and externalizing symptoms alongside quadratic trends for internalizing symptoms, the effects estimated by MSMs were larger, highlighting standard approaches' underestimation of effect sizes.

**Oral Paper Presentation**  
**Friday, November 7**  
**04:30 PM to 05:45 PM**  
**Trade**

## **Family Violence and its Effects**

### **Quality of Attachment to Parents and Peers as Predictors of Adolescent Risk Outcome Following Childhood Maltreatment**

(Clin Res, CPA-CSA-Comm/Vio-Fam/Int, Child/Adol, M, Industrialized)

**Allbaugh, Lucy, MS PhD Student<sup>1</sup>**; Wright, Margaret, PhD<sup>1</sup>; Kaufman, Julia, Doctoral Student<sup>1</sup>; Folger, Susan, MA PhD Student<sup>1</sup>; Noll, Jennie, PhD<sup>2</sup>

<sup>1</sup>*Miami University, Oxford, Ohio, USA*

<sup>2</sup>*Penn State University, University Park, Pennsylvania, USA*

Attachment security has been shown to be negatively impacted by child maltreatment, and disruptions in attachment relationships following child abuse reports may be one important mediator of later problems in adaptation among child abuse survivors (Cicchetti & Toth, 2005; 2013). The aim of this study was to explore changes in the quality of attachments to parents and peers as predictors of depressive symptoms and externalizing behaviors among 287 urban adolescent females who experienced substantiated child maltreatment and their 187 demographically matched controls. Regression analyses explored race, family income, substantiated abuse status, other types of traumatic experiences, attachment with mother, father and peers, and change scores associated with all three attachment relationships over three or more years as predictors of depressive symptoms and externalizing behaviors. Caucasian race, other types of trauma exposure, and low peer attachment predicted depressive symptoms, while trauma exposure, low peer attachment, and negative change in attachment to father predicted externalizing behaviors. Findings highlighted the importance of considering a constellation of attachment relationships and additional trauma exposure as risk factors predictive of adverse outcome after maltreatment, and emphasize the role that peers and fathers play in adolescent resilience.

**Oral Paper Presentation**  
**Friday, November 7**  
**04:30 PM to 05:45 PM**  
**Trade**

### **The Impact of Childhood Maltreatment and Ongoing Intimate Partner Violence on Trajectories of Post-Traumatic Stress Disorder across the Transition to Parenthood**

(Clin Res, CPA-Chronic-DV-Res Meth, Adult, M, Industrialized)

**Guyon-Harris, Katherine, MS PhD Student**; Huth-Bocks, Alissa, PhD; Alfaro-Bordon, Silvana, Undergraduate; Pitzen, Jerrica, BA

*Eastern Michigan University, Ypsilanti, Michigan, USA*

The transition to parenthood is an especially difficult time for women who experience maltreatment as children and intimate partner violence (IPV) as adults. Research examining the impact of ongoing interpersonal trauma on individual differences in the severity of post-traumatic stress disorder (PTSD) symptoms over time is needed. The present study examined trajectories of PTSD symptoms across the transition to parenthood among 120 ethnically diverse, economically disadvantaged women. Symptoms of PTSD and experiences of IPV were assessed in the third trimester of pregnancy and 1-, 2-, and 3-years following the birth of the child. Childhood maltreatment was

assessed retrospectively during the third trimester. Trajectories of PTSD symptoms were identified using latent class growth analysis. Experiences of childhood maltreatment and IPV before, during, and after pregnancy were included as covariates. Four classes were identified: steady mild (60%), steady moderate (18%), initial increase (9%), and late increase (13%). Childhood maltreatment predicted PTSD severity during pregnancy and IPV in the year before pregnancy predicted class membership. Thus, women experience different trajectories of PTSD symptoms following past trauma and accounting for ongoing trauma, highlighting the need for ongoing assessment of experiences of trauma and PTSD symptoms.

## **Oral Paper Presentation**

**Friday, November 7**

**04:30 PM to 05:45 PM**

**Trade**

## **Caregiver Reports of Partner-to-Partner Psychological Aggression: A Latent Class Growth Analysis**

(Prevent, CPA-Dev/Int-Fam/Int-Res Meth, Child/Adol, M, Industrialized)

**Phillips, David, Doctoral Student;** Riggs, Jessica, MS PhD Student; Harris, Katherine, MS; Poehacker, Stefanie, BS; Lauterbach, Dean, PhD

*Eastern Michigan University, Ypsilanti, Michigan, USA*

Most IPV studies have used measures that combine both physical violence and psychological aggression. Consequently, it is impossible to know how psychological IPV (independently) changes over time and how such changes may negatively impact children. The current study attempted to identify latent subgroups of psychological IPV among caregivers. This study used a sample of 1070 maternal caregivers currently living with a spouse or partner from the LONGSCAN study. Participants were administered the psychological aggression subscale of the CTS(2) when their child was 6, 12, and 14. Findings from a latent class growth analysis support the superiority of a 4-class model of psychological IPV in comparison to 1-, 2-, 3-, and 5-class models. The trajectories are high-decreasing (6%), low-increasing (74%), moderate-decreasing (15%), and moderate-increasing (5%). Findings clearly indicate that level of psychological aggression is not constant across time. Since it is known that children who witness IPV are at risk for a host of difficulties, additional findings will be reported on the relationship between class membership and internalizing (i.e., depression and anxiety) and externalizing (i.e., ADHD and substance abuse) problems at age 14.

## **Oral Paper Presentation**

**Friday, November 7**

**04:30 PM to 05:45 PM**

**Trade**

## **Strength at Home Veterans Program for Intimate Partner Violence Perpetration: Final Randomized Clinical Trial Findings**

(Prevent, Aggress-DV, Adult, M, N/A)

**Taft, Casey, PhD<sup>1</sup>;** Creech, Suzannah, PhD<sup>2</sup>; Stavitsky Gilbert, Karina, PhD<sup>3</sup>; Massa, Andrea, BA<sup>3</sup>; Macdonald, Alexandra, PhD<sup>3</sup>; Murphy, Christopher, PhD<sup>4</sup>

<sup>1</sup>*National Center for PTSD at VA Boston Healthcare System and Boston University, Boston, Massachusetts, USA*

<sup>2</sup>*Providence VA Medical Center, Brown University, Providence, Rhode Island, USA*

<sup>3</sup>*National Center for PTSD, Boston VA Medical Center, Boston, Massachusetts, USA*

<sup>4</sup>*University of Maryland Baltimore County, Baltimore, Maryland, USA*

Intimate Partner Violence (IPV) in military populations is a national public health problem. To date, there has yet to be an empirically supported treatment for IPV for these individuals. The Strength at Home (SAH) program for service members and Veterans who have engaged in recent physical IPV was developed to serve as a model intervention. We will present final results from a randomized clinical trial examining the efficacy of the intervention in a sample of 135 male Veterans and 111 of their partners who were enrolled in either the SAH intervention or an enhanced treatment as usual (ETAU) condition. Initial results comparing baseline reports of Veteran perpetrated psychological IPA to those from a 6-month post-intervention follow-up revealed a significant group effect whereby psychological IPV was significantly lower in the SAH group than in the ETAU group  $F(1,93) = 5.06, p = .03$ . Physical IPV perpetration also decreased over follow-up in both conditions,  $F(1,93) = 1.50, p = 0.20$ . There was also an indication of increased relationship satisfaction as reported by both Veterans and partners in the active treatment group and decreased relationship satisfaction in the ETAU group as reported by the Veterans  $F(1,66) = 2.04, p = .16$ . Results suggest that the SAH program is a promising intervention with evidence of effectiveness in reducing perpetration of IPV in military samples.

**Oral Paper Presentation**  
**Friday, November 7**  
**04:30 PM to 05:45 PM**  
**Flagler**

## **Trauma in the Context of Asylum-Seeking**

### **A Survey of Compassion Fatigue, Burnout and Compassion Satisfaction in Interpreters**

(Self-Care, Cul Div-Refugee, Other: Interpreters, I, Industrialized)

**Becher, Emily, PhD Candidate;** Mehus, Chris, Doctoral Student  
*University of Minnesota Department of Family Social Science, St. Paul, Minnesota, USA*

Interpreters are established collaborators in the field of traumatic stress, particularly in clinical work with refugee, asylum-seeking and immigrant communities exposed to mass trauma. Many interpreters are members of the cultural communities for which they interpret and are at potentially higher risk of developing secondary traumatic stress (STS) through re-exposure to traumatic material while interpreting (Tribe & Morrissey, 2003). Little is known about the prevalence of interpreter STS and how symptoms may impact the clinical encounter. The literature consists of a small body of qualitative research (e.g. Splevins et al., 2010) and one unpublished thesis with a sample of 26 professional medical interpreters (White, 2012). To address this gap, this study is a presentation of levels of compassion satisfaction, compassion fatigue (STS is a component of compassion fatigue), and burnout in a sample of 119 interpreters, utilizing the ProQOL measure. Compared to normed ProQOL results (Stamm, 2005), t-tests showed this sample had higher compassion fatigue but lower burnout and higher compassion satisfaction. Results of a one-way ANOVA showed that refugee status was related to lower compassion satisfaction, although the effect size was small. Additional significant and non-significant predictors will be discussed and future needs will be highlighted.

**Oral Paper Presentation**  
**Friday, November 7**  
**04:30 PM to 05:45 PM**  
**Flagler**

### **Immigration Detention: An Evaluation of Benefits to Society Versus Mental and Medical Health of Detainees**

(Social, Refugee, Lifespan, M, Industrialized)

Keller, Allen, MD<sup>1</sup>; **Granski, Megan, BS<sup>2</sup>**  
<sup>1</sup>*New York University School of Medicine, New York, New York, USA*  
<sup>2</sup>*NYU School of Medicine, Bellevue/NYU Program for Survivors of Torture, New York, New York, USA*

Immigration detention is the fastest growing segment of the United States prison population. A commonly held belief is that Immigration Customs Enforcement (ICE) primarily detains those individuals who pose a danger to the community. We conducted interviews of individuals receiving pro bono representation who were identified as having significant health concerns. We found that many health concerns, particularly mental health, were not being adequately addressed and were likely exacerbated by detention. Furthermore we found that the majority of detained immigrants do not appear to represent a significant threat to the community. Re-evaluation of immigration detention policies including increased utilization of alternatives to detention is indicated.

**Oral Paper Presentation**  
**Friday, November 7**  
**04:30 PM to 05:45 PM**  
**Flagler**

### **Unaccompanied Asylum Seeking Children – Development of Mental Health and Post-Traumatic Stress Symptoms after Settlement**

(Assess Dx, Chronic-DV-Health-Refugee, Child/Adol, M, Industrialized)

**Skaardalsmo, Envor, Clinical Psychologist<sup>1</sup>**; Fjermestad, Krister W, PhD<sup>2</sup>; Jensen, Tine, PsyD<sup>3</sup>

<sup>1</sup>*Norwegian Center for Violence and Traumatic Stress Studies (NKVTS), Oslo, Norway*

<sup>2</sup>*Frambu Resource Center for Rare Disorders, Siggerud, Norway*

<sup>3</sup>*University of Oslo, Oslo, Norway*

In this presentation results from a longitudinal study examining mental health problems of unaccompanied asylum seeking children arriving in Norway before the age of 16 will be presented. Seventy-five minors aged 10-17 years (83 % boys) were first assessed 6 months, and later 2 years after arrival. Participants originated from 12 different countries; most from Afghanistan (51 %). The youth were assessed for severe life events, symptoms of post-traumatic stress (PTSD), depression, anxiety and internalizing/ externalizing symptoms. At the initial assessment 54% scored above clinical cutoff on PTSD, 30% on anxiety, and 20% on depressive symptoms. Results indicate also that many unaccompanied asylum-seeking children have experienced not only war-related traumas but several other severe life adversities as well. Two years later there is very little change in the mean scores, but there were considerable individual differences. This shows that unaccompanied minors continue to be an extremely vulnerable group and many of them are at risk of developing long-lasting psychological problems. However many youth do seem to be resilient and possible pathways to recovery will be discussed.

**Oral Paper Presentation**  
**Friday, November 7**  
**04:30 PM to 05:45 PM**  
**Flagler**

### **The Longitudinal Association between Symptoms of PTSD and Depression among Unaccompanied Minor Asylum-Seekers after Resettlement**

(Social, Depr-Dev/Int-Health-Refugee, Child/Adol, M, Industrialized)

**Oppedal, Brit, PhD<sup>1</sup>**; Idsoe, Thormod, PhD<sup>2</sup>

<sup>1</sup>*Norwegian Institute of Public Health, Oslo, Norway*

<sup>2</sup>*University of Stavanger, Stavanger, Norway*

There is a lack of knowledge about the longitudinal associations between symptoms of PTSD and depression among unaccompanied minor asylum-seekers after arrival in their destination countries. The aim of the present study was to test this, and to explore the effects of gender, age, and length of residence on the developmental processes. The study was based on 3 waves of questionnaire data provided by 918 unaccompanied minor asylum-seekers after resettlement in Norway over a 5 years' time period. Latent growth curve modeling with individually-varying times of observations gave no significant effects when estimating cross-lagged predictions from intercepts (baseline levels) to slopes (change scores) in the two developmental processes. However, an alternative model with correlated slopes showed a significant relation between the two. Upon further investigations of this association it was revealed that the slope of PTSD symptoms predicted the slope of depressive symptoms stronger than vice versa. Intercepts, but not slopes, of PTSD and depressive symptoms were significantly predicted by gender, age, and length of

residence in the country. The study confirms that changes in PTSD and depression are parallel, with changes in PTSD predicting changes in depression stronger. Changes are age independent and similar for boys and girls.



**Saturday, November 8**

**Keynote Panel**

**Saturday, November 8**

**09:00 AM to 10:15 AM**

**Versailles**

**Pioneers in Child Trauma: Lessons Learned and Future Directions**

(Global, Clin Res-Clinical Practice-Dev/Int-Global, Child/Adol, I, Global)

Scheeringa, Michael, MD MPH<sup>1</sup>; Terr, Lenore, MD<sup>2</sup>; Yule, William, PhD<sup>3</sup>; Intebi, Irene, MD<sup>4</sup>

<sup>1</sup>*Tulane University Health Sciences Center, New Orleans , Louisiana, USA*

<sup>2</sup>*University of California, San Francisco, San Francisco, California, USA*

<sup>3</sup>*University College London, London, United Kingdom*

<sup>4</sup>*Private Practice, Buenos Aires, Argentina*

In this moderated panel, distinguished pioneers in childhood trauma representing Latin America, Europe and the U.S. will reflect on their experiences and their clinical work and research with different populations of traumatized children over the last 30 years. With their work among children exposed to maltreatment, violence, disaster, and war, the panelists have all contributed in a crucial way to the development of our current knowledge on the understanding, impact, and treatment of trauma that occurs in childhood. What are the lessons learned from the past and how can the experiences of these pioneers inform future work with traumatized children? The panel will also discuss current challenges for our field and how we might overcome them.

# CONCURRENT SESSION 9

## Symposium

Saturday, November 8

09:00 AM to 10:15 AM

Windsor/Sandringham

## Research Informing the Treatment of Trauma and Substance Use in Under-Researched, At-Risk Populations

(Clin Res, CSA-Clin Res-Res Meth-Sub/Abuse, Lifespan, M, Industrialized)

Delahanty, Douglas, PhD

*Kent State University, Kent, Ohio, USA*

Despite the availability of evidence-based interventions for PTSD, less is known about their efficacy in under-researched, at-risk community populations. This symposium examines current research that informs trauma-related interventions for addiction treatment-seekers, HIV+ adults, adolescent gang members, and opioid-dependent pregnant women. The first presentation examines substance use patterns commonly associated with PTSD in addiction treatment-seekers, and discusses implications for integrated PTSD-substance use treatments. The second analyzes trajectories of PTSD symptom reduction during prolonged exposure therapy in HIV+ adults, suggesting treatment implications for individuals with complex trauma histories. Third, the relationship between early adversity, gang activities, and PTSD in adolescent gang members will be considered, highlighting the need to adapt interventions to this population. Lastly, we examine trauma history, obstetric history, PTSD symptoms, and substance use in opioid-dependent pregnant women, and discuss implications of these factors for PTSD treatments in the context of addiction. Together, these presentations demonstrate the need for tailored interventions that consider complex trauma histories, childhood trauma, and medical/psychiatric comorbidities that characterize these populations, and offer insight into the adaptation of existing treatments.

## Symposium

Saturday, November 8

09:00 AM to 10:15 AM

Windsor/Sandringham

## PTSD and Substance Use Disorder Patterns in Addiction Treatment-Seekers: A Latent Class Analysis

(Assess Dx, Assess Dx-Sub/Abuse, Adult, M, Industrialized)

Hruska, Bryce, MA; Delahanty, Douglas, PhD

*Kent State University, Kent, Ohio, USA*

Existing integrated PTSD-substance use disorder (SUD) treatments for addiction treatment-seekers address PTSD in the context of a single SUD, while polysubstance use characterizes this population. Thus, research examining substance use patterns commonly associated with PTSD can inform treatment practices. Using a sample of N=312 addiction treatment-seekers, the current study used latent class analysis (LCA) to identify patterns of SUDs that co-occur with PTSD. PTSD was assessed using the Post-Traumatic Diagnostic Scale (Foa, Cashman, Jaycox, & Perry 1997) while SUDs (alcohol, sedative, amphetamine, cocaine, tobacco, opioid, and cannabis use disorders) were determined by chart review. Results indicated 3 classes: a low PTSD/high alcohol & tobacco use disorder class (23.1%); a low PTSD/high opioid & tobacco use disorder class (28.2%); and a high PTSD/high alcohol, opioid, cannabis, & tobacco use disorder class (48.7%). Classes also differed on variables not included in the LCA; most

notably, the high PTSD/high alcohol, opioid, cannabis, & tobacco use disorder class displayed elevated rates of physical/sexual assault before age 16 compared to the other classes. These findings identify SUDs most commonly associated with PTSD and suggest that integrated PTSD-SUD treatments addressing complex polysubstance use patterns may increase the efficacy of integrated intervention approaches.

## **Symposium**

**Saturday, November 8**

**09:00 AM to 10:15 AM**

**Windsor/Sandringham**

### **Childhood Adversity and Mental Health in a Sample of Adolescent Gang Members: A Mixed-Method Analysis**

(Clin Res, CPA-Comm/Int-Comm/Vio-Cul Div, Child/Adol, M, Industrialized)

**Pacella, Maria, PhD;** Quinn, Katherine, PhD Candidate; Dickson-Gomez, Julia, PhD; Broaddus, Michelle, PhD  
*Medical College of Wisconsin, Milwaukee, Wisconsin, USA*

Although PTSD is more prevalent in juvenile gang vs. non-gang members (Harris et al., 2013), few studies have focused on the impact of trauma in this sample. As childhood adversity and exposure to violence contribute to gang membership (Eitle et al., 2004) and additional traumatization (Glover et al., 2009), research informing gang prevention/intervention is crucial. The current study applied qualitative (N = 58) and quantitative methods (n = 137; data collection ongoing) to investigate early adversity, gang activities, and PTSD symptoms (PTSS) in male and female adolescent gang members. Parental substance use/absence, financial hardship, neighborhood/ domestic violence, and child abuse served as reasons for gang involvement in qualitative interviews. On average, participants experienced 12 different trauma types, with PTSS most strongly related to having a serious illness/ injury, being beaten up, and witnessing a shooting ( $r's > .20$ ). PTSS was also associated with neighborhood violence, drug dealing, being a gang rape victim, and having sex with someone for money/drugs ( $p's = .02-.04$ ). Further, higher PTSS was significantly related to greater past-year substance use problems, and past-month marijuana use and risky sexual behaviors ( $r's > .30$ ). Discussion will highlight the need for adapting trauma and sexual violence interventions to gang members.

## **Symposium**

**Saturday, November 8**

**09:00 AM to 10:15 AM**

**Windsor/Sandringham**

### **An Exploratory Analysis of the Relationship between Trauma and Substance Use during Pregnancy**

(Clin Res, CSA-Chronic-Sub/Abuse, Adult, M, Industrialized)

**Coleman, Jennifer, MA PhD Student; Smith, Brian, MA PhD Student; Delahanty, Douglas, PhD;** Hruska, Bryce, MA  
*Kent State University, Kent, Ohio, USA*

Individuals with comorbid PTSD and substance use disorders (SUD) experience greater impairment and poorer treatment outcomes than individuals suffering from either disorder alone. Substance abuse during pregnancy continues to be a widespread public health concern with well-documented adverse societal, medical, and psychological consequences; however, limited research has examined the impact of trauma on SUD in pregnant women. The current study characterized 15 substance dependent pregnant women across multiple domains, including trauma history, obstetric history, post-traumatic distress symptoms, and substance use. Descriptive

statistics revealed that over 90% of the sample experienced a traumatic event, with over 60% having experienced childhood sexual abuse. Over 60% of the sample reported clinically significant post-traumatic stress symptoms (PTSS). Hierarchical linear regression showed that age of first trauma significantly predicted age of first self-reported drug-related problems,  $R^2 = .44$ ,  $F(2, 12) = 3.94$ ,  $p = .02$ , supporting the tension reduction hypothesis and underscoring the link between trauma history and SUD. Given the alarming rate of PTSS, and associated poorer health and treatment outcomes, the results highlight the need for addressing PTSD in the context of SUD treatment for pregnant women.

## **Symposium**

**Saturday, November 8**

**09:00 AM to 10:15 AM**

**Windsor/Sandringham**

### **A Multi-level Modeling Approach Examining PTSD Symptom Reduction during Prolonged Exposure Therapy: Moderating effects of Complex Trauma History among HIV Positive Adults**

(Clin Res, Clin Res-Complex-Illness-Res Meth, Adult, M, Industrialized)

**Smith, Brian, MA PhD Student<sup>1</sup>**; Coleman, Jennifer, MA PhD Student<sup>1</sup>; Pacella, Maria, PhD<sup>2</sup>; Boarts, Jessica, PhD<sup>1</sup>; Delahanty, Douglas, PhD<sup>1</sup>

<sup>1</sup>*Kent State University, Kent, Ohio, USA*

<sup>2</sup>*Medical College of Wisconsin, Milwaukee, Wisconsin, USA*

PTSD and complex trauma histories including childhood physical/sexual abuse are highly prevalent in HIV+ adults. Prolonged exposure (PE) therapy is efficacious in reducing PTSD across a variety of samples and traumas; however, a complex trauma history may make PE less effective due to an inability to target distressing memories from multiple traumas during limited PE sessions. Using multi-level modeling, the current study examined whether the number of trauma types experienced (NTTE) moderated the trajectory of PTSD symptom reduction during a 10-session PE protocol. Forty-seven HIV+ adults completed the PSS before PE and after sessions 2, 4, 6, 8, and 10. Results indicated that NTTE moderated the trajectory of re-experiencing symptoms,  $t(43) = 2.29$ ,  $p = .027$ ; individuals with higher NTTE had a flatter slope of re-experiencing symptom reduction ( $\beta = -.73$ ) than individuals with lower NTTE ( $\beta = -1.09$ ). NTTE did not moderate the slope of other PTSD symptom clusters, indicating that complex trauma histories may serve as a barrier to successful processing of trauma memories through imaginal exposure or re-experiencing symptom reduction. Future research should examine whether clients with higher NTTE would benefit from added PE sessions, focusing on a broader range of traumas to facilitate re-experiencing symptom reduction.

**Symposium**  
**Saturday, November 8**  
**09:00 AM to 10:15 AM**  
**Bayfront A - CHILD TRACK ONE**

## **The Developmental Trauma Disorder (DTD) Field Trial: Scientific Integrity and Clinical Utility of a Developmentally-Informed Complex Traumatic Stress Disorder for Children**

(Assess Dx, Assess Dx-Chronic-Clin Res-Complex, Child/Adol, M, Industrialized)

Ford, Julian, PhD<sup>1</sup>; Courtois, Christine, PhD, ABPP<sup>2</sup>

<sup>1</sup>*University of Connecticut Health Center, Farmington, Connecticut, USA*

<sup>2</sup>*Courtois & Associates, PC, Washington, District of Columbia, USA*

Traumatized children are at risk for complex psychobiological impairments and multiple psychiatric diagnoses that may be more parsimoniously and effectively assessed and treated as a singular Developmental Trauma Disorder. Julian Ford describes psychometric results from a five-site U.S. DTD field trial with reliability, incremental validity, and confirmatory factor analyses supporting a 3-criterion DTD structure. Joseph Spinazzola describes evidence from DTD field trial logistic regression analyses showing that DTD is associated with living in violent family and community contexts and traumatic separation from caregivers, while PTSD is related traumatic separation/loss and direct victimization by physical assault and emotional abuse. Bessel van der Kolk describes psychiatric comorbidities identified for both DTD and PTSD (depressive, manic, psychotic, phobic, separation/generalized anxiety, and obsessive-compulsive disorders) and those unique to DTD (panic, ADHD, ODD, CD, and eating disorders; DSM-5 dysregulation diagnoses, concluding that DTD represents a broader range of post-traumatic dysregulation than DSM-IV or DSM-5 PTSD. Christine Courtois discusses implications of DTD for clinical and research assessment of traumatized children's emotional, behavioral, and self/relational dysregulation, and for training mental health professionals to recognize and treat complex trauma.

**Symposium**  
**Saturday, November 8**  
**09:00 AM to 10:15 AM**  
**Bayfront A - CHILD TRACK ONE**

## **Developmental Trauma Disorder (DTD) Field Trial: I. Evidence of Reliability, Structure, and Validity of the DTD Semi-structured Interview (DTD-SI)**

(Assess Dx, Assess Dx-Chronic-Clin Res-Complex, Child/Adol, M, Industrialized)

**Ford, Julian, PhD<sup>1</sup>**; Spinazzola, Joseph, PhD<sup>2</sup>; van der Kolk, Bessel, MD<sup>2</sup>; Grasso, Damion, PhD<sup>1</sup>

<sup>1</sup>*University of Connecticut Health Center, Farmington, Connecticut, USA*

<sup>2</sup>*Trauma Center at Justice Resource Institute, Brookline, Massachusetts, USA*

The Developmental Trauma Disorder Semi-Structured Interview (Child/Parent) was developed and field tested at five U.S. sites with 236 children (ages 7-18; 50% female; 30% African American/Biracial, 17% Hispanic; 20% with no trauma histories). Inter-rater reliability was confirmed for each 15 DTD-SI item. Confirmatory factor analysis showed good fit with a proposed 3-criterion structure, with correlated but distinct and internally consistent (Alpha = .61-.72) sub-scales for emotion, behavioral and self/relational dysregulation: Comparative Fit Index = .92, Tucker-Lewis Index = .91, Bayesian Information Criterion = 4395.52, Root Mean Square Error of Approximation = .05, Standardized RMR = .005. With only one exception, a single factor model and a hybrid EFA-based 3-factor model (distress intolerance, reactive aggression, threat schemas) had poorer fit. DTD construct validity was tested with

hierarchical regressions: controlling for DSM-IV and -5 PT SD, DTD was associated with the CBCL Dysregulation Profile ( $B = .42$ ), DTD emotion dysregulation with parent-rated child alexithymia ( $B=.51$ ), DTD behavioral dysregulation with parent-rated child emotion/impulse dysregulation ( $B=.50$ ), and DTD self/relational dysregulation with parent-rated CBCL Dysregulation ( $B=.32$ ). Implications for assessment/ diagnosis in clinical practice and research with traumatized children are discussed.

## **Symposium**

**Saturday, November 8**

**09:00 AM to 10:15 AM**

**Bayfront A - CHILD TRACK ONE**

### **Developmental Trauma Disorder (DTD) Field Trial Outcomes: II. Association of DTD v. PTSD with Interpersonal Trauma, Neglect, Emotional Abuse, and Caregiver Impairment or Separation**

(Assess Dx, Assess Dx-Complex, Child/Adol, M, Industrialized)

**Spinazzola, Joseph, PhD<sup>1</sup>**; van der Kolk, Bessel, MD<sup>1</sup>; Ford, Julian, PhD<sup>2</sup>

<sup>1</sup>*Trauma Center at Justice Resource Institute, Brookline, Massachusetts, USA*

<sup>2</sup>*University of Connecticut Health Center, Farmington, Connecticut, USA*

Adverse effects of childhood exposure to violence, neglect, emotional abuse, and impaired/absent caregivers are complex, including but not limited to PTSD. Developmental Trauma Disorder was formulated to describe the range of dysregulatory problems characterizing children exposed to complex traumatic and relational adversities (D'Andrea et al., 2011). In the DTD Field Trial, children meeting criteria for DSM-IV PTSD (38%; 23% with comorbid DTD) and DTD (41%; 24% with comorbid PTSD) had similar significant (95% CI  $p < .05$ ) Odds Ratios (2.0-5.1) of exposure to family violence, traumatic separation/loss, neglect, and emotional abuse. PTSD was uniquely associated with sexual trauma and traumatic arrest of a family member, and DTD with impaired caregiver(s) and community violence. In logistic regression analyses: (1) demographics were unrelated to DTD or PTSD, (2) intact family status was associated with reduced risk of PTSD (OR=0.42, 95% CI = 0.19-0.92); (3) DTD was associated with traumatic separation from caregiver (OR=1.97, 95% CI = 1.06-3.67) and community violence (OR=2.12, 95% CI = 1.00-4.50); and (4) PTSD was associated with interpersonal violence, emotional abuse, and traumatic separation/loss (ORs=2.55- 5.06, 95% CIs = 1.00 - 14.73). The related and distinct profiles of antecedent adversities for DTD and PTSD are discussed as a step toward discriminating these two disorders.

## **Symposium**

**Saturday, November 8**

**09:00 AM to 10:15 AM**

**Bayfront A - CHILD TRACK ONE**

### **Developmental Trauma Disorder (DTD) Field Trial Outcomes: III. Differential Comorbidity of DTD and PTSD**

(Assess Dx, CPA-CSA-Chronic, Child/Adol, M, Global)

**van der Kolk, Bessel, MD<sup>1</sup>**; Ford, Julian, PhD<sup>2</sup>; Spinazzola, Joseph, PhD<sup>1</sup>

<sup>1</sup>*Trauma Center at Justice Resource Institute, Brookline, Massachusetts, USA*

<sup>2</sup>*University of Connecticut Health Center, Farmington, Connecticut, USA*

In the DTD Field Trial, children meeting criteria for DSM-IV PTSD (38%; 23% with comorbid DTD) and DTD (41%; 24% with comorbid PTSD) had significant (95% CI  $p < .05$ ) Odds Ratios (OR=2.3-5.0) for a K-SADS positive

screen for depressive, manic, psychotic, phobia, separation/generalized anxiety or obsessive-compulsive disorders. However, DTD had a significant ORs (2.8-4.1, 95% CIs = 1.5-2.0 to 4.8-9.6) for DSM-IV panic, ADHD, ODD, CD, and eating disorders but DSM-IV PTSD did not. Although DSM-5 PTSD prevalence was comparable to DSM-IV PTSD (33%, 18% with comorbid DTD), few (4.5-7.5%) participants met criteria for DSM-5 dysregulation diagnoses (NSSI; DSED; DMDR; RAD). DTD was associated with DSM-5 dysregulation disorders (OR=2.6, 95% CI = 1.1-6.5) but DSM-5 PTSD was not. Findings discussed as consistent as DTD representing a broader range of forms of post-traumatic dysregulation than DSM-IV or DSM-5 PTSD, with implications for clinical utility in diagnosis (DTD may identify children with trauma-related symptoms who receive multiple other diagnoses) and treatment (DTD may facilitate trauma-specific therapies for traumatized children with dysregulation problems).

## **Symposium**

**Saturday, November 8**

**09:00 AM to 10:15 AM**

**Bayfront B - CHILD TRACK TWO**

## **Negative Trauma-Related Cognitions in Samples of Traumatized Children and Adolescents**

(Practice, Acute-Chronic-Cog/Int-Depr, Child/Adol, M, Industrialized)

Holt, Tonje, PhD

*Norwegian Center for Violence and Traumatic Stress Studies (NKVTS), Oslo, Norway*

Negative trauma-related cognitions (appraisals) have been found to play a role in the onset and the maintenance of PTSD in children and youth. Cognitions such as negative thoughts about oneself and the world may maintain the child's sense of threat and destructive self-image after experiencing traumatizing events. Change in cognitions has also been found to mediate treatment outcome in treatment of traumatized children and youth. In this symposium, four researchers will present findings regarding trauma related cognitions derived from different samples of traumatized children and youth. Meiser-Stedman (PhD) will present results from a British study examining how negative appraisals are associated with the maintenance of PTSD in children exposed to single event trauma. Goldbeck (PhD) will present findings from a German study examining the association between post-traumatic cognitions, PTSD and depression in a clinical sample of children with chronic PTSD. Sue Hogan (MS) will describe results from an Australian study investigating how a web-based intervention may change attribution bias in children and adolescents exposed to single event traumas. Lastly, Tonje Holt (MS) will present changes in and the types of cognitions ("permanent and disturbing change" and "a fragile person in a scary world") over time by comparing two Norwegian samples of highly exposed traumatized youth.

## **Symposium**

**Saturday, November 8**

**09:00 AM to 10:15 AM**

**Bayfront B - CHILD TRACK TWO**

## **How Cognitive Mechanisms Shape Early Responses to Trauma: Data from a Prospective Longitudinal Study of Children and Adolescents Exposed to Single Event Trauma**

(Prevent, Acute-Cog/Int, Child/Adol, M, Industrialized)

Meiser-Stedman, Richard, PhD

*Cambridge, Cambridge, United Kingdom*



Previous studies suggest that children and adolescents exposed to single event trauma may develop PTSD but there is a large degree of natural recovery over the first few months. Understanding more about exactly when this natural recovery occurs and the mechanisms that underpin such recovery is vital for the development of early interventions and management approaches for these youth. The study comprises a prospective longitudinal study of 8-17 year olds (n=226) interviewed at two and eight weeks following a single event trauma (e.g. assault, road traffic collision). Structured interviews were used to assess for the prevalence of DSM5 ASD and PTSD, while questionnaires were used to assess putative psychosocial and cognitive mechanisms. Different recovery patterns were identified using group-based trajectory modelling. Resilient, recovering and persistent PTSD group were distinguishable by their cognitive profile, with negative appraisals particularly associated with the maintenance of PTSD. Implications for the management of recently trauma-exposed youth will be discussed.

## **Symposium**

**Saturday, November 8**

**09:00 AM to 10:15 AM**

**Bayfront B - CHILD TRACK TWO**

### **Post-Traumatic Cognitions in Children and Adolescents with Chronic PTSD**

(Clin Res, Cog/Int-Dev/Int, Child/Adol, M, Industrialized)

**Goldbeck, Lutz, PhD<sup>1</sup>**; de Haan, Anke, BA<sup>2</sup>; Tutus, Dunja, BA<sup>2</sup>; Wolff, Saskia, MS<sup>2</sup>; Loos, Sabine, DPhil<sup>2</sup>

<sup>1</sup>*University Ulm, Ulm, Baden-Wuerttemberg, Germany*

<sup>2</sup>*University Hospital Ulm, Ulm, Baden-Württemberg, Germany*

Dysfunctional post-traumatic cognitions (PTC) are claimed as part of PTSD and have therefore recently been included in the diagnostic criteria according to DSM5. There is a gap in the literature on PTC in children and adolescents with chronic PTSD. We examined the hypotheses that PTC are associated with “classical” post-traumatic stress symptoms (PTSS) in a clinical sample of minors with chronic PTSD and that this association holds true when considering the effect of co-morbid depression. N=108 patients (7-16 years) with PTSD participating in a randomized controlled trial of trauma-focused cognitive-behavioral therapy filled in the Child Post-Traumatic Cognitions Inventory, the UCLA PTSD Reaction Index, and the Child Depression Inventory before therapy. Correlations and partial correlations between both PTC subscales (permanent and disturbing change, fragile person in a scary world), PTSS, and depression were determined. Moderate to high correlations between PTC and PTSS as well as with depression were found. The correlations between PTC and PTSS were still statistically significant, however less pronounced, when partialling out CDI scores. Negative post-traumatic cognitions are associated both with PTSS and depression. The results emphasize the need to include cognitive interventions aiming to challenge dysfunctional thoughts in trauma-focused treatments for pediatric PTSD.

## **Symposium**

**Saturday, November 8**

**09:00 AM to 10:15 AM**

**Bayfront B - CHILD TRACK TWO**

### **Appraisal Bias Modification Training for Children with Post-Traumatic Stress Disorder Following Accidental Injury**

(Clin Res, Acute-Cog/Int-Prevent, Child/Adol, M, N/A)

**Hogan, Sue, PhD Candidate**; Nixon, Reginald, PhD

*Flinders University, School of Psychology, Adelaide, South Australia, Australia*

Negative appraisal bias is theorised to be a maintaining factor of child post-traumatic stress disorder (PTSD). Brief Attribution Bias Modification (ABM) trainings have shown strong effects in general anxiety child samples but have not been tested in child PTSD. The present study is the first to examine the efficacy of ABM training with children (aged 7-14 years) following accidental injury requiring hospitalisation. While data collection is ongoing it is anticipated at least 30 children will have been recruited before November. Children demonstrating significant PTSD symptoms 6 weeks post-trauma are randomly allocated to treatment (ABM) or waitlist control (WL). The ABM training uses 60 ambiguous scenarios that children might typically encounter and are asked questions about the scenario which facilitate a benign interpretation response. Children undertake 3 x 30 minute online training sessions over a 1-week period. Pre-, post- and 6-week follow-up assessments include PTSD severity (Child PTSD Symptom Scale), a test of interpretive bias developed for this study, and unhelpful trauma related beliefs (Child Post-Traumatic Cognitions Inventory). We predict that ABM will result in greater reductions in PTSD relative to the WL group, and that improvements in unhelpful trauma-related beliefs and interpretative biases will mediate this outcome.

## **Symposium**

**Saturday, November 8**

**09:00 AM to 10:15 AM**

**Bayfront B - CHILD TRACK TWO**

### **Post-Traumatic Cognitions in Two Samples of Highly Traumatized Youth**

(Practice, Acute-CPA-Clin Res-Cog/Int, Child/Adol, M, Industrialized)

**Holt, Tonje, PhD<sup>1</sup>**; Jensen, Tine, PhD<sup>2</sup>; Ormhaug, Silje, Doctoral Student<sup>1</sup>

<sup>1</sup>*Norwegian Center for Violence and Traumatic Stress Studies (NKVTS), Oslo, Norway*

<sup>2</sup>*University of Oslo, Oslo, Norway*

Negative trauma-related cognitions have been found to play a significant role in the onset and maintenance of post-traumatic stress. This has mainly been studied in samples of adults, but there is a growing literature supporting that the negative cognitions also play a significant role for children and adolescents' post trauma recovery. However, little is known about whether different types of traumas lead to different types of negative cognitions and how these change over time. In this presentation youth who have experienced interpersonal trauma such as sexual abuse and violence will be compared with youth who experienced the 22 July attack at Utøya Island in Norway. Negative trauma-related cognitions were measured using the Child Post-Traumatic Cognitions Inventory (CPTCI). The CPTCI measures two types of cognitions: "Permanent and disturbing change" comprises appraisals about being permanently and negatively changed and "Fragile person in a scary world", contains thoughts about the world as a dangerous and negative place to live in. The presentation will focus on whether there were differences in cognitions between the samples, the degree of change over time and their relation to PTSD and depression. Clinical implications will be discussed.

**Symposium**  
**Saturday, November 8**  
**09:00 AM to 10:15 AM**  
**Brickell - MILITARY TRACK**

## **Prevalence and Correlates of Trauma Types Among Service Members and Veterans with PTSD**

(Assess Dx, Bio/Int-Grief-Civil/War-Mil/Vets, Adult, M, Industrialized)

Dondanville, Katherine, PsyD<sup>1</sup>; Litz, Brett, PhD<sup>2</sup>

<sup>1</sup>University of Texas Health Science Center at San Antonio, San Antonio, Texas, USA

<sup>2</sup>VA Boston Health Care System/Boston University, Boston, Massachusetts, USA

Although PTSD is no longer considered a fear-based anxiety disorder, life-threat dangers are still *sine qua non*. We have argued that in many traumatic contexts, but especially in war-zones, an over-emphasis on life-threat danger events is problematic. War-zone trauma is multifaceted and multidimensional and, arguably, because of training, preparation, leadership, and peer-support, danger-based experiences are the least psychically damaging. Two broad event-types are distinguishable from life-threat trauma, namely traumatic loss and events that entail moral transgression. In this symposium, several papers will be presented that challenge the explanatory validity of the sole reliance on danger-based PTSD. Three presentations will focus on the prevalence and correlates of varying war-zone event-types. Shumaker et al., and Wortmann et al., will present findings from a large cohort of Service Members seeking treatment for PTSD, and a large cohort of Service Members in primary care, respectively. Bovin and colleagues will examine disaggregated event-types among Veterans with PTSD. Finally, Ramage and colleagues will present neuroimaging analysis on resting state 18FDG PET suggesting differences between fear and non-fear based Criterion-A events among Service Members seeking treatment for PTSD. Litz will serve as a co-chair and a discussant facilitating questions.

**Symposium**  
**Saturday, November 8**  
**09:00 AM to 10:15 AM**  
**Brickell - MILITARY TRACK**

## **Relationships among Index Trauma Event Categories and Trauma-related Measures in Military PTSD Trials**

(Assess Dx, Clin Res-Mil/Vets, Adult, M, Industrialized)

Shumaker, Erik, PhD<sup>1</sup>; Dondanville, Katherine, PsyD<sup>2</sup>; Holder, Nicholas, BSc<sup>3</sup>; Litz, Brett, PhD<sup>4</sup>; Resick, Patricia, PhD, ABPP<sup>5</sup>; Foa, Edna, PhD<sup>6</sup>; Lubin, Rebecca, BA<sup>1</sup>; Mintz, Jim, PhD<sup>2</sup>; Mendoza, Crystal, MA<sup>2</sup>; Young-McCaughan, Stacey, PhD<sup>2</sup>; Peterson, Alan, PhD<sup>2</sup>; Borah, Adam, MD<sup>7</sup>

<sup>1</sup>VA Boston Healthcare System, Boston, Massachusetts, USA

<sup>2</sup>University of Texas Health Science Center at San Antonio, San Antonio, Texas, USA

<sup>3</sup>University of Texas Health Science Center at San Antonio, Fort Hood, Texas, USA

<sup>4</sup>VA Boston Health Care System/Boston University, Boston, Massachusetts, USA

<sup>5</sup>National Center for PTSD / Boston University, Boston, Massachusetts, USA

<sup>6</sup>University of Pennsylvania School of Medicine, Philadelphia, Pennsylvania, USA

<sup>7</sup>Darnell Army Medical Center, Ft. Hood, Texas, USA

Although life threat is pervasive in war zones, dangerous events are only a subset of the traumas that contribute to PTSD. Across three samples of soldiers in garrison seeking treatment for PTSD ( $N = 573$ ), we determined the prevalence of distinct index event types and examined the association of event-type with demographic/military history variables, PTSD symptoms, and comorbid symptomology. The six event-types were life threat to self (LTS),

life threat to other, aftermath of violence, traumatic loss, moral injury by self (MIS), and moral injury by other (kappas .75 to 1.00). The coding scheme permitted multiple categories, yet 52% had only one. There were significantly more life threat events ( $n = 329$ ) than moral injuries ( $n = 80$ ,  $z = 151.59$ ,  $p < .001$ ). When coders were instructed to select one category that best described the index event, the most common category was LTS (26%) and the least common was MIS (6%). BDI-II scores were significantly higher when the primary event was a moral injury ( $M = 30.95$ ,  $SD = 10.63$ ) versus another event type ( $M = 27.93$ ,  $SD = 10.69$ ,  $t = 2.63$ ,  $p = .009$ ). Findings involving event-type and other variables will also be presented.

## **Symposium**

**Saturday, November 8**

**09:00 AM to 10:15 AM**

**Brickell - MILITARY TRACK**

### **Neurophysiologic Differences between Fear and Non-Fear Based Post-Traumatic Stress Disorder**

(Bio Med, Anx-Assess Dx-Bio Med-Chronic, Adult, M, Industrialized)

**Ramage, Amy, PhD<sup>1</sup>**; Fox, Peter, MD<sup>1</sup>; Dondanville, Katherine, PsyD<sup>1</sup>; Holder, Nicholas, BSc<sup>2</sup>; Williamson, Douglas, PhD<sup>1</sup>; Resick, Patricia, PhD<sup>3</sup>; Peterson, Alan, PhD<sup>1</sup>; Litz, Brett, PhD<sup>4</sup>

<sup>1</sup>*University of Texas Health Science Center at San Antonio, San Antonio, Texas, USA*

<sup>2</sup>*University of Texas Health Science Center at San Antonio, Fort Hood, Texas, USA*

<sup>3</sup>*Duke University Medical Center, Durham, North Carolina, USA*

<sup>4</sup>*VA Boston Health Care System/Boston University, Boston, Massachusetts, USA*

Post-traumatic stress disorder (PTSD) is thought to result from threat of death, serious injury, or physical integrity of self or other and therefore is linked to the fear arising from such a trauma. Consequently, experimental PTSD research has centered on response to fear. However, peri-traumatic fear and life-threat dangers are not prototypic of PTSD. Here, we grouped active-duty military PTSD patients into Fear and Non-Fear groups based on characteristics of their “worst” trauma. Using 18FDG PET as an index of resting neuronal activity via consumption of glucose (CMRglu), Fear ( $n=21$ ) and Non-Fear ( $n=28$ ) groups were contrasted with active duty combat ( $n=28$ ) and civilian ( $n=28$ ) control groups. The main differences amongst the groups were in left-sided fusiform, inferior temporal and parahippocampal regions and right-sided hippocampus, and it was the Fear group accounting for these differences. By direct contrast, it was evident that the Fear group had higher CMRglu to bilateral hippocampi, and the Non-Fear group had higher CMRglu in middle temporal and parietal regions. These findings validate a biological basis for typing PTSD based on the nature of the trauma precipitating the disorder with Fear associated with ventral fear circuitry and Non-Fear associated with dorsal attention or default mode networks.

## **Symposium**

**Saturday, November 8**

**09:00 AM to 10:15 AM**

**Brickell - MILITARY TRACK**

### **Mental Health Correlates of Combat and Operational Trauma Types among Active Duty Soldiers in Primary Care**

(Clin Res, Anx-Depr-Sub/Abuse-Mil/Vets, Adult, M, Industrialized)

**Wortmann, Jennifer, PhD<sup>1</sup>**; Litz, Brett, PhD<sup>1</sup>; Bray, Robert, PhD<sup>2</sup>; Rae Olmsted, Kristine, MPH<sup>2</sup>; Williams, Jason, PhD<sup>2</sup>; Engel, Charles, MD, MPH<sup>3</sup>

<sup>1</sup>VA Boston Health Care System/Boston University, Boston, Massachusetts, USA

<sup>2</sup>RTI International, Research Triangle Park, North Carolina, USA

<sup>3</sup>RAND Corporation, Arlington, Virginia, USA

Recent studies indicate that specific combat and operational experiences differentially predict PTSD and other mental health outcomes (e.g., Pietrzak et al., 2011; Stein et al., 2012). We replicate and extend these studies, examining the association between specific categories of high magnitude combat and operational experiences with PTSD severity and symptom clusters, suicidality, depression, and alcohol use in a baseline sample (N=666) of active duty soldiers screened in primary care clinics. Combat experiences will be classified using card sort methodology to create categories such as danger/life threat (e.g., I, or members of my unit, encountered mines, booby traps, or IEDs, N=444), traumatic loss (e.g., I witnessed members of my unit or an ally unit being seriously wounded or killed, N=372), and moral injury (e.g., I witnessed or engaged in acts of cruelty, excessive force, or acts violating rules of engagement, N=54). We will first conduct confirmatory factor analysis of PTSD checklist data to create PTSD symptom clusters that best fit baseline data. We will then use card-sort-derived combat categories as independent variables in linear regression analyses predicting PTSD factor scores and other continuous outcomes, and logistic regression analyses predicting PTSD caseness and other categorical outcomes.

## **Symposium**

**Saturday, November 8**

**09:00 AM to 10:15 AM**

**Brickell - MILITARY TRACK**

### **The Association Between Military Trauma Types and Psychopathology among OIF/OEF Veterans**

(Assess Dx, Assess Dx-Mil/Vets, Adult, M, N/A)

**Bovin, Michelle, PhD<sup>1</sup>**; Green, Jonathan, PhD<sup>1</sup>; Marx, Brian, PhD<sup>2</sup>; Keane, Terence, PhD<sup>3</sup>; Rosen, Raymond, PhD<sup>4</sup>

<sup>1</sup>VA - National Center for PTSD, Boston, Massachusetts, USA

<sup>2</sup>National Center for PTSD, VA Boston Healthcare System and Boston University, Boston, Massachusetts, USA

<sup>3</sup>National Center for PTSD, VA Boston Healthcare System, Boston University School of Medicine, Boston, Massachusetts, USA

<sup>4</sup>New England Research Institutes, Inc., Watertown, Massachusetts, USA

Stein et al. (2012) proposed that traumatic events incurred during military service are not all associated with life threat. Instead, they identified six categories of trauma that can occur in the military context; each of these categories was associated with unique reactions among active duty military. We sought to replicate and extend these findings in a sample of 530 Operation Iraqi Freedom and Operation Enduring Freedom veterans (Mage = 37.38 years, SDage = 9.81; 56% female). Consistent with Stein et al., these trauma categories were not associated with differences in post-traumatic stress disorder (PTSD) diagnostic status ( $\chi^2 = 4.71$ ;  $p > .05$ ). However, they were associated with meeting criteria for PTSD cluster B ( $\chi^2 = 13.40$ ;  $p > .05$ ) and with the number of symptoms endorsed in both PTSD cluster B ( $F = 2.29$ ;  $p = .045$ ) and cluster C ( $F = 2.61$ ;  $p = .024$ ). Further, trauma category was associated with suicidality ( $F = 3.47$ ;  $p = .004$ ), social support ( $F = 2.60$ ;  $p = .024$ ), and TBI status ( $\chi^2 = 17.22$ ;  $p = .004$ ). Traumas involving moral injury were related to greater functional impairment than other trauma types. The implications of these findings will be discussed.

## **Symposium**

**Saturday, November 8**

**09:00 AM to 10:15 AM**

**Sevilla - LONG-TERM EFFECTS OF CHILD TRAUMA TRACK**

## **Aging, Trauma, and the Life Course: Implications of Childhood Trauma Exposure across the Life Span**

(Clin Res, CSA-Cul Div-Health-Civil/War, Older, M, Industrialized)

Davison, Eve, PhD

*VA Boston Health Care System/Boston University, Boston, Massachusetts, USA*

Traumatic exposure in childhood – in particular, severe or repeated exposure – can have unique implications for psychological and physical health as survivors enter later life and encounter challenges and losses associated with aging, as well as potential opportunities for growth and meaning-making. The papers presented here offer a sample of current inquiry into the lifespan effects of early trauma exposure in diverse populations within both Europe and the United States. In the first paper, the profound psychosocial consequences of growing up as an “occupation child” in post-World War II Germany are illuminated. The next paper examines the particularly deleterious long-term effects of conflict-related rape as contrasted with effects of non-sexual war trauma in matched samples of elderly female German WWII survivors. Next, associations among stressful events in childhood and well-being in later life are examined in older American men from the VA Normative Aging Study. Lastly, analyses from the Nurses’ Health Study II demonstrate that early abuse victimization is associated with cardiometabolic disease for midlife and older American women. Taken together, these studies illustrate the far-reaching effects of trauma experienced early in life, and suggest avenues for further research and intervention.

## **Symposium**

**Saturday, November 8**

**09:00 AM to 10:15 AM**

**Sevilla - LONG-TERM EFFECTS OF CHILD TRAUMA TRACK**

## **Post-Traumatic Stress, Depression and Somatization in the German “Occupation Children” Compared to a Representative Sample of the German Population**

(Global, Comm/Int-Depr-Dev/Int-Health, Older, M, Industrialized)

**Kaiser, Marie, Dipl Psych<sup>1</sup>**; Kuwert, Philipp, MD<sup>2</sup>; Brähler, Elmar, PhD<sup>1</sup>; Glaesmer, Heide, PhD<sup>1</sup>

<sup>1</sup>*University of Leipzig, Leipzig, Saxony, Germany*

<sup>2</sup>*Psychiatric Dept., University Hospital, Stralsund, Mecklenburg Western Pomerania, Germany*

**Objectives:** At the end of World War II and during the first decade after the end of the war numerous children (children born of war) were fathered in intimate contacts between German women and foreign soldiers. So far, the experiences of these German “occupation children” were described in case reports and from historical perspective using oral history approaches or archival studies. Research on psychosocial consequences of growing up as a German “occupation child” was missing so far. **Methods:** This study examines traumatic experiences, post-traumatic stress disorder (PTSD), somatization and depression in the German “occupation children” (N=155) using self-report instruments (Post-Traumatic Diagnostic Scale (PDS); Patient Health Questionnaire (PHQ)). The findings will be compared with representative data from the general population. **Results:** German “occupation children” showed significantly higher prevalence of traumatic experiences, higher one-month prevalence rates of full and partial PTSD I, depression and somatization. **Discussion:** We know that “occupation children” often grew up under difficult conditions (e.g. poverty, single mothers and stigmatization). Even decades later, they show higher rates of



depression, somatization and post-traumatic stress. These findings underline the complex and long-term impact of these difficult social, financial and familial conditions.

## **Symposium**

**Saturday, November 8**

**09:00 AM to 10:15 AM**

### **Sevilla - LONG-TERM EFFECTS OF CHILD TRAUMA TRACK**

#### **Long-Term Effects of Conflict-Related Sexual Violence Compared with Non-Sexual War Trauma in Female World War II Survivors: A Matched Pairs Study**

(Social, Health-Rights-Rape-Civil/War, Older, M, Industrialized)

Kuwert, Philipp, MD<sup>1</sup>; Glaesmer, Heide, PhD<sup>2</sup>; Eichhorn, Svenja, Doctoral Student<sup>2</sup>; Grundke, Elena, Doctoral Student<sup>3</sup>; Pietrzak, Robert, PhD MPH<sup>4</sup>; Freyberger, Harald, MD<sup>3</sup>; Klauer, Thomas, PhD<sup>3</sup>; **Kaiser, Marie, Dipl Psych<sup>2</sup>**

<sup>1</sup>*Psychiatric Dept., University Hospital, Stralsund, Mecklenburg Western Pomerania, Germany*

<sup>2</sup>*University of Leipzig, Leipzig, Saxony, Germany*

<sup>3</sup>*Department of Psychiatry, Stralsund, Mecklenburg-Vorpommern, Germany*

<sup>4</sup>*National Center for PTSD, West Haven, Connecticut, USA*

The aim of the study was to compare the long-term effects of conflict-related sexual violence experienced at the end of World War II (WWII) with non-sexual WWII trauma, e.g. being exposed to shell shock or physical violence. 26 elderly wartime rape survivors were compared to age- and gender-matched control subjects who had experienced WWII-related trauma. A modified version of the PDS was used to assess trauma characteristics and post-traumatic stress disorder (PTSD) symptoms and the BSI-18 was used to assess current psychopathology. Additionally, measures of post-traumatic growth and social acknowledgement as a trauma survivor were used to assess two mediating variables in post-trauma conditions of rape victims. Women exposed to conflict-related sexual violence reported greater severity of PTSD-related avoidance and hyperarousal symptoms, as well as anxiety, compared with female long-term survivors of non-sexual World War II trauma. The vast majority—80.9%—of these women also reported severe sexual problems during their lifetimes, relative to 19.0% of women who experienced non-sexual war trauma. Women exposed to conflict-related sexual violence also reported greater post-traumatic growth, but less social acknowledgement as trauma survivors, compared to survivors of non-sexual war trauma.

## **Symposium**

**Saturday, November 8**

**09:00 AM to 10:15 AM**

### **Sevilla - LONG-TERM EFFECTS OF CHILD TRAUMA TRACK**

#### **Patterns of Childhood Experiences and Later-Life Well-Being: Findings from the VA Normative Aging Study**

(Prevent, CPA-CSA-Dev/Int-Res Meth, Older, M, Industrialized)

**Lee, Lewina, PhD; Spiro III, Avron, PhD**

*Boston University School of Public Health, Boston, Massachusetts, USA*

Early adversities have been linked to poor physical health in old age, but few studies have investigated how multiple dimensions of early experiences jointly influence psychological functioning in later life. This study characterized profiles of risk and resilience factors in early experiences, and examined how these profiles related to psychological well-being and personality in later life. The sample was 1,076 men ( $M_{age}=69.3$ ,  $SD_{age}=7.3$ ) in the VA Normative Aging Study who completed the Childhood Experiences Scale in 1995. In 2001, 649 of these men completed



measures of psychological well-being and personality. Using latent class analysis, we found that three classes (normative/supportive, difficult/harsh discipline, and low social integration) best captured the heterogeneity of early experiences in this sample. Men with early experiences best captured by the normative/supportive class demonstrated the most favorable psychological outcomes in later life. Men whose childhood was best characterized by the difficult/harsh discipline class had lower levels of well-being and less favorable personality traits than other classes. Despite potential limitations of using a retrospective, self-report measure of childhood experiences, our findings highlight the value of considering multiple dimensions of early experiences in relation to later life well-being and personality.

## **Symposium**

**Saturday, November 8**

**09:00 AM to 10:15 AM**

**Sevilla - LONG-TERM EFFECTS OF CHILD TRAUMA TRACK**

### **Impacts of Abuse Victimization in Childhood and Adolescence on Cardiometabolic Health in the Nurses' Health Study II**

(Bio Med, CPA-CSA-Health-Pub Health, Older, M, Industrialized)

**Mason, Susan, PhD<sup>1</sup>**; Rich-Edwards, Janet, ScD<sup>2</sup>

<sup>1</sup>*University of Minnesota-Twin Cities Campus, Minneapolis, Minnesota, USA*

<sup>2</sup>*Harvard Medical School, Boston, Massachusetts, USA*

Abuse victimization is highly prevalent stressor among women in the US, yet little is known about the impacts of abuse victimization on stress-related diseases associated with ageing, such as type 2 diabetes and cardiovascular disease. This talk will discuss findings from the Nurses' Health Study II (NHSII) regarding the influence of abuse victimization in childhood, adolescence, and adulthood on cardiometabolic outcomes in later life. The NHSII is a large longitudinal cohort of female registered nurses, now in their fifties and sixties, that has been followed for 25 years with biennial questionnaires collecting demographic and medical data. In 2001, a supplemental questionnaire asked about exposure to violence over the lifecourse. Analyses in this cohort have found physical and sexual abuse in childhood or adolescence to be associated with 60-70% increased risks of type 2 diabetes and cardiovascular disease. Overall, abuse victimization in childhood and adolescence appears to be more strongly associated with later-life cardiometabolic disease than abuse victimization in adulthood. These findings are consistent with the idea that childhood and adolescence are critical windows of development, and that trauma during these periods may have important and lasting impacts on health in older age.

**Symposium**  
**Saturday, November 8**  
**09:00 AM to 10:15 AM**  
**Trade**

## **Beyond PTSD Symptoms: The importance of Trust, Attachment, and Emotional Regulation in Recovery from PTSD**

(Clin Res, Aggress-CPA-Clin Res, Adult, , Global)

Williams, Wright, PhD, ABPP  
*Michael E. DeBakey VA Medical Center; Baylor College of Medicine, Houston, Texas, USA*

Background: Traumatic events don't occur in a vacuum. While reducing PTSD symptoms is the gold standard for recovery from PTSD (Steenkamp & Litz, 2013), interpersonal or contextual factors often impinge on PTSD treatment outcomes. Herman (1992) suggests that: interpersonal trust, a sense of safety, and reconnection to oneself and others are important in recovery from chronic PTSD. Purpose: This symposium examines the role of: (1) interpersonal trust, (2) adult attachment, and (3) emotional regulation in the development and maintenance of PTSD symptom severity over the lifespan, and in successful treatment and recovery. Method: To address these aims, our presenter's will, respectively, draw upon data from their research on: (1) the impact of interpersonal trust on PTSD treatment completion and success (two studies), (2) the influence of adult attachment on the relationship between the type of trauma and PTSD severity in male and female Veterans (one study), (3) emotional regulation strategies which mediate the relationship between impulsive aggression and PTSD symptom severity in male and female Veterans with PTSD (one study). Conclusion: Finally, panelists will discuss the impact these variables play in successfully coping with PTSD symptoms over the lifespan, and the implications of their research for improving treatment.

**Symposium**  
**Saturday, November 8**  
**09:00 AM to 10:15 AM**  
**Trade**

## **Emotional Dysregulation and Borderline Personality Traits as Predictors of PTSD**

(Clin Res, Complex-Rape-Mil/Vets, Adult, , N/A)

**Menefee, Deleene, PhD<sup>1</sup>**; Leopoulos, Wendy, MD<sup>1</sup>; Wanner, Jill, PhD<sup>1</sup>; Miles, Shannon, PhD<sup>2</sup>; Gonzalez, Rose, Doctoral Student<sup>3</sup>; Noor, Nausheen, Doctoral Student<sup>3</sup>; Bannister, Jenny, BS<sup>4</sup>

<sup>1</sup>*Michael E. DeBakey VA Medical Center / Baylor College of Medicine, The Menninger Department of Psychiatry and Behavioral Medicine / South Central Mental Illness Research Education and Clinical Center (MIRECC) / Traumatic Brain Injury Center of Excellence, Houston, Texas, USA*

<sup>2</sup>*Michael E. DeBakey VA Medical Center; Baylor College of Medicine, Houston, Texas, USA*

<sup>3</sup>*Michael E. DeBakey VA Medical Center, Houston, Texas, USA*

<sup>4</sup>*University of Houston, Houston, Texas, USA*

Changes to the diagnostic criteria of PTSD warrant examination of variables that contribute to the DSM-V cluster "D, negative alterations in cognitions and mood" (APA, 213). Few have examined emotional dysregulation and negative self-perceptions often associated with borderline personality traits as predictors of variance in PTSD symptom severity. The current study examined affect regulation, self-destructive tendencies, and hostility as predictors of PTSD symptom scores in a sample of women Veterans (n=266) seeking treatment at an urban VA medical center. Women completed self-report measures at admission to treatment. In this sample, 72% were victims of childhood physical abuse, 54% experienced childhood sexual abuse, and 32% experienced both. Military sexual

trauma was also prevalent (83.2%). Veterans completed the PCL ( $M = 65.7$ ,  $SD = 12.8$ ) and the Borderline Symptom Checklist (BSL-23, ( $M = 53.5$ ,  $SD = 17.4$ ). Linear regression results indicated that scores on the BSL-23 significantly accounted for variance in PTSD symptoms,  $R^2 = .47$ ,  $F(1,265) = 76.9$ ,  $p < .000$ ). Difficulties with impulse control ( $M = 18.0$ ,  $SD = 6.4$ ) and strategies for regulating emotions ( $M = 16.8$ ,  $SD = 3.9$ ) were also problematic. Implications for treatment with the DSM-V cluster D will be discussed.

## **Symposium**

**Saturday, November 8**

**09:00 AM to 10:15 AM**

**Trade**

### **Attachment Anxiety and Avoidance: Relations with Veterans' Collective Trauma Experiences**

(Clin Res, CPA-Complex-Rape-Mil/Vets, Adult, , Industrialized)

**Bannister, Jenny, BS<sup>1</sup>**; Lopez, Frederick, PhD<sup>1</sup>; Menefee, Deleene, PhD<sup>2</sup>; Norton, Peter, PhD<sup>1</sup>

<sup>1</sup>*University of Houston, Houston, Texas, USA*

<sup>2</sup>*Michael E. DeBakey VA Medical Center / Baylor College of Medicine, The Menninger Department of Psychiatry and Behavioral Medicine / South Central Mental Illness Research Education and Clinical Center (MIRECC) / Traumatic Brain Injury Center of Excellence, Houston, Texas, USA*

Research demonstrates an inverse relationship between attachment security and PTSD severity (Dekel et al., 2004; Dieperink, et al., 2001; Mikulincer et al., 2006). However, researchers have overlooked trauma experiences that are common within military populations, such as military sexual trauma (Yaeger et al., 2006) and interpersonal traumas (Brewin et al., 2000; Wolfe et al., 2005), focusing myopically on combat trauma in relation to attachment theory for veterans. This study examined adult attachment on the Experiences in Close Relationships - Revised Scale as a function of collective trauma experiences (MS-I-C, MS-I, I-C, I, C: MS - military sexual trauma, I - childhood/adulthood physical/sexual assault, C - combat) in the prediction of PTSD scores on the Clinician Administered PTSD Scale for 545 male and female veterans. An ANOVA showed that attachment anxiety varied significantly  $F(4, 423) = 3.80$ ,  $p < .01$ , with Tukeys HSD indicating veterans who experienced MSIC or MSI trauma reported higher levels of anxiety than veterans who experienced C. The groups varied in attachment avoidance  $F(4, 423) = 5.40$ ,  $p < .0001$ , with veterans who experienced MSIC or MSI trauma reporting higher levels of attachment avoidance than veterans who experienced combat or IC trauma. Regression analysis indicated, controlling for trauma; attachment avoidance significantly predicted PTSD severity.

## **Symposium**

**Saturday, November 8**

**09:00 AM to 10:15 AM**

**Trade**

### **The Impact of Interpersonal Trust on PTSD Treatment Engagement, Completion, and Success**

(Clin Res, Affect/Int-Clin Res-Cog/Int-Mil/Vets, Adult, , Global)

**Williams, Wright, PhD, ABPP<sup>1</sup>**; King-Casas, Brooks, PhD<sup>2</sup>; Chiu, Pearl, PhD<sup>3</sup>

<sup>1</sup>*Michael E. DeBakey VA Medical Center; Baylor College of Medicine, Houston, Texas, USA*

<sup>2</sup>*Salem VA Medical Center, University of Virginia School of Medicine, Virginia Tech Carilion School of Medicine, Roanoke, Virginia, USA*

<sup>3</sup>*Virginia Tech Carilion Research Institute, Roanoke, Virginia, USA*

Interpersonal trust is fundamental for the recovery of trauma survivors (Herman, 1992). To assess interpersonal trust and cooperation we used the Iterated Trust Game, a social exchange game in which two people can mutually benefit through the expression and repayment of trust. Study 1: In 21 Vietnam Veterans with PTSD, short-term Cognitive Processing Therapy (CPT) was better than long-term process therapy at improving PTSD symptoms, but long-term process therapy was better at improving interpersonal trust. Study 2: We recruited 62 OEF/OIF/OND Veterans with PTSD at Time 1 (T1), and reassessed 47 at Time 2 (T2), after group CPT-C. At T1, PTSD Check List (PCL) and Beck Depression Inventory (BDI-II) scores of Treatment Non-responders (TxNon) were lower than Treatment Responders (TxRes) and Treatment Drop-outs (DO), but TxNon Investment Ratio (IR) scores were trending lower (indicating less trust). We found a clear, although non-significant ( $p=.1$ ), trend in IR scores for TxRes > Treatment-as-Usual > TxNon > DO. Pre-treatment interpersonal trust may be a key predictor of post treatment improvements in PTSD symptoms and depression. I will discuss these result's implications in: the development and maintenance of PTSD over the life cycle, and improving treatment engagement, retention, and success in people with PTSD.

## **Panel Presentation**

**Saturday, November 8**

**09:00 AM to 10:15 AM**

**Merrick**

### **Federal Agencies Supporting PTSD Research: Priorities and National Research Action Plan**

(Res Meth, Acute-Sub/Abuse-Civil/War-Mil/Vets, Lifespan, M, N/A)

Gleason, Terri, PhD<sup>1</sup>; Tuma, Farris, ScD<sup>2</sup>; Borja, Susan, PhD<sup>2</sup>; Hoover, Ronald, PhD<sup>3</sup>; Nassauer, Katherine, PhD<sup>3</sup>; Powell, Patricia, PhD<sup>4</sup>; Reider, Eve, PhD<sup>5</sup>; McGurk, Dennis, PhD<sup>6</sup>

<sup>1</sup>Department of Veteran Affairs, Washington, District of Columbia, USA

<sup>2</sup>National Institute of Mental Health/NIH, Bethesda, Maryland, USA

<sup>3</sup>U.S. Army/Department of Defense, Fort Detrick, Maryland, USA

<sup>4</sup>National Institutes of Health, Bethesda, Maryland, USA

<sup>5</sup>National Institute of Drug Abuse, Bethesda, Maryland, USA

<sup>6</sup>US Army Medical Research and Materiel Command, Fort Detrick, Maryland, USA

As a component of President Obama's Executive Order (issued in August 2012), federal agencies were called upon to collaborate on research focused on PTSD, suicide prevention, traumatic brain injury, and other comorbidities (including substance abuse). For this research component, Department of Veterans Affairs, Department of Defense, and National Institutes of Health developed a National Research Action Plan (NRAP). The NRAP provides priority research goals and requirements over the near and long term, with at least annual reports to the White House Office of Science and Technology Policy. A Research Vision is described for PTSD that encompasses scientific advances to directly improve clinical practice. As major supporters of federally funded research operating to achieve the NRAP goals, the panel membership will describe the NRAP requirements and potential impact upon the scientific community when setting priorities for funding considering both agency and NRAP objectives. This discussion will be focused on increasing understanding of the goals for PTSD research as well as meeting objectives to improve lives of those who have experienced traumatic exposure across the population of Veterans, Service Members and Military Families.

## **Workshop Presentation**

**Saturday, November 8**

**09:00 AM to 10:15 AM**

**Gusman/Tuttle**

### **Effect of Pharmacotherapy on Sleep Disorders in Post-Traumatic Stress Disorder (PTSD)**

(Practice, Clinical Practice-Sleep, Adult, I, Industrialized)

**De Jong, Joop, MD<sup>1</sup>; Vermetten, Eric, MD, PhD<sup>2</sup>**

<sup>1</sup>*Parnassia Group, Den Haag (The Hague), ZH, Netherlands*

<sup>2</sup>*Military Mental Health Research/UMC Utrecht, Utrecht, Netherlands*

Reviews on the research and treatment of post-traumatic stress disorder (PTSD) confirm that problems with sleep are the hallmark of PTSD. This is well known to patients and prescribing clinicians, as patients with PTSD often request and use many substances (e.g. alcohol, cannabis, benzodiazepines) known to have a positive effects for some time on sleep. Good sleep is vital. Sleep-related problems due to PTSD do not respond well to standard treatments for PTSD, but insomnia and nightmares can bother patients in a way that functioning in day and night becomes distorted. In this way sleep disorders can undermine recovery as they lead to e.g. concentration problems and irritability. In this workshop background- and practical information will be given about sleep disorders and medication on PTSD. There is knowledge available about the drugs used for PTSD and their effect on sleep and also of medication used for sleep problems and their effect on other PTSD symptoms. Most knowledge has been based on uncontrolled studies and this makes it difficult for clinicians to choose rationally. There are several guidelines for medication on PTSD with, however, different or no advice concerning sleep which makes the call for more knowledge more urgent. Still it is possible to give advices. Some patient cases will be discussed during the workshop.

## **Case Study Presentation**

**Saturday, November 8**

**09:00 AM to 10:15 AM**

**Flagler**

### **Building Resilience in Healthcare Providers: A Case Presentation**

(Self-Care, Affect/Int-Chronic-QoL-Self-Care, Other, M, N/A)

**Yeager, Kenneth, PhD**

*The Ohio State University, College of Medicine, and Stress, Trauma and Resilience Program, Columbus, Ohio, USA*

Methods to reduce stress and build resilience are on the mind of all healthcare professionals today. The Ohio State University Medical Center's Stress, Trauma and Resilience (STAR) program has developed supports designed to address exposure to "unexpected events" that lead practitioners to a cascade of negative thoughts, secondary traumatization/second victim syndrome often resulting in increased levels of stress and burnout, absenteeism, physical and emotional exhaustion, and compassion fatigue. This presentation outlines efforts to combat vicarious trauma and compassion fatigue and build resilience in healthcare providers. The presentation will begin with challenges faced by a Medical Intensive Care Unit, a Blood and Marrow Transplant Unit and a Brain Tumor Program, outlining specific, unique and divergent challenges. This presentation will describe the impact of series of Psychological Trauma Support Services; aimed to build resilience within each unit. Both quantitative and qualitative data will be presented outlining: level of staff distress (quantitative); response to interventions (qualitative); and post intervention staff distress (quantitative). Participants will gain insight into methods to build institutional support, caregiver buy-in to creating a culture of staff support that builds resilience.

**Oral Paper Presentation**  
**Saturday, November 8**  
**09:00 AM to 10:15 AM**  
**Biscayne - BIOLOGY TRACK**

## **Brain and Genes in Traumatized Individuals**

### **Evidence of Excess White Matter in the Amygdala in PTSD**

(Bio Med, Bio/Int-Res Meth, Adult, A, N/A)

**Woodward, Steven, PhD<sup>1</sup>**; Schaer, Maire, MD PhD<sup>2</sup>

<sup>1</sup>*National Center for PTSD-Dissemination and Training Division, Palo Alto, California, USA*

<sup>2</sup>*University of Geneva, Geneva, Geneva, Switzerland*

Recently, two groups studying large samples of Veterans found discrepant results in the volume of the amygdala in PTSD: Morey et al found the amygdala to be smaller in PTSD, Kuo et al, larger. Though the samples were distinct in accrual and symptomology, the researchers also used different analysis methods, manual delineation via BrainImage versus automated extraction in FreeSurfer. We first reanalyzed the Kuo et al sample (N = 99) using FreeSurfer and found no effect of PTSD diagnosis on amygdala or hippocampal volume. Relaxing a rule followed in prior work, we next examined segmented “gray” and “white” matter volumes which BrainImage calculated as the sum of tissue class probabilities. We then observed amygdala “white” matter volume to be larger in PTSD ( $p < 0.05$ ) and positively correlated with PTSD severity ( $p < 0.001$ ). Amygdala “gray” matter volume demonstrated the direct and interactive associations with childhood and combat trauma seen by Kuo et al. And, hippocampal “gray” but not “white” matter volume was smaller in PTSD. This pattern of results in gray/white segmented data, present in data from both study sites, raises many questions, chief among them the source of the “white matter” T1-weighted intensities observed. Their resolution may require imaging at the highest field strengths. Glucocorticoid- and NMDA-dependent influences on oligodendrocytes will also be discussed.

**Oral Paper Presentation**  
**Saturday, November 8**  
**09:00 AM to 10:15 AM**  
**Biscayne - BIOLOGY TRACK**

### **Early fMRI Evidence of Emotion Dysregulation in Motor Vehicle Crash Survivors**

(Bio Med, Acc/Inj-Bio/Int, Adult, M, Industrialized)

**deRoos-Cassini, Terri, PhD<sup>1</sup>**; Taubitz, Lauren, PhD Candidate<sup>2</sup>; Larson, Christine, PhD<sup>2</sup>

<sup>1</sup>*Medical College of Wisconsin, Milwaukee, Wisconsin, USA*

<sup>2</sup>*University of Wisconsin - Milwaukee, Milwaukee, Wisconsin, USA*

**Purpose:** The purpose of the present study was to evaluate if early (within 2 weeks post-trauma) neural circuitry dysregulation is a predictor of chronic PTSD after a traumatic injury event in civilian motor vehicle crash (MVC) survivors. **Methods:** 24 participants who had experienced a MVC underwent fMRI assessment of neural circuitry during trauma and neutral event imagery within 2 weeks post-trauma. PTSD symptom severity was assessed at 6 months. Regression analyses were used with neural circuitry dysregulation as predictor of 6 month intrusive, avoidant, and hyperarousal PTSD symptoms separately (while controlling for the other two symptom clusters in each analysis). **Results:** An increase in amygdala and ventromedial prefrontal cortex (vmPFC) activation during trauma script imagery significantly predicted an increase in 6 month hyperarousal and avoidance symptoms, while an increase in right anterior cingulate cortex (ACC) activation significantly predicted a decrease in intrusive symptoms. **Discussion:** Dysregulation of neural circuitry immediately after a traumatic event is predictive of chronic



PTSD symptom clusters in somewhat surprising patterns. These findings highlight the need to investigate symptom clusters separately when assessing neural circuitry dysregulation and support targeted early intervention to prevent the development of PTSD.

## **Oral Paper Presentation**

**Saturday, November 8**

**09:00 AM to 10:15 AM**

**Biscayne - BIOLOGY TRACK**

### **FKBP5 DNA Methylation Does Not Mediate the Association between Childhood Maltreatment and Depression in the Detroit Neighborhood Health Study.**

(Bio Med, CPA-Depr-Gen/Int, Adult, M, Industrialized)

**Bustamante, Angela, BS<sup>1</sup>**; Koenen, Karestan, PhD<sup>2</sup>; Aiello, Allison, MS, PhD<sup>3</sup>; Galea, Sandro, MD PhD<sup>4</sup>; Wildman, Derek, PhD<sup>5</sup>; Uddin, Monica, PhD<sup>5</sup>

<sup>1</sup>Wayne State University, School of Medicine, Detroit, Michigan, USA

<sup>2</sup>Columbia University School of Public Health, New York, New York, USA

<sup>3</sup>University of North Carolina at Chapel Hill, Gillings School of Global Public Health, Chapel Hill, North Carolina, USA

<sup>4</sup>Columbia University, Mailman School of Public Health, New York, New York, USA

<sup>5</sup>Wayne State University, Detroit, Michigan, USA

Exposure to childhood maltreatment (CM) increases the likelihood of adverse mental health later in life. Genetic variation at *FKBP5*, a modulator of glucocorticoid receptor sensitivity, is associated with PTSD and depression, and recent work suggests genotype and CM exposure influence DNA methylation (DNAm) levels at this locus. We hypothesized that *FKBP5* DNAm mediates the CM-depression relationship, subsequently influencing gene expression (GE) levels. Participants (N=112) were drawn from the Detroit Neighborhood Health Study (DNHS), a population-based study of adult Detroit residents. Availability of whole-blood-derived DNA, leukocyte-derived RNA, and data regarding CM exposure, depressive symptom severity (DSS), and *FKBP5* genotype (rs1360780) determined selection. *FKBP5* DNAm was assessed in both the promoter region and glucocorticoid response elements (GREs) via pyrosequencing; Taqman assays measured GE. Mediation analyses were conducted in SPSS using sequential linear regressions, controlling for age and sex. CM was significantly associated with DSS; however, CM was not a significant predictor of DNAm in either the promoter region or GREs. No significant CM-genotype interactions were observed for DNAm. No significant GE differences were detected for either CM or depression. Our results suggest DNAm does not mediate the CM-depression association in the DNHS.

## **Oral Paper Presentation**

**Saturday, November 8**

**09:00 AM to 10:15 AM**

**Biscayne - BIOLOGY TRACK**

### **The Relationship Between Polymorphisms of the Glutamate Genotype and the Development of PTSD Following Combat Exposure in a Veteran Sample**

(Bio Med, Gen/Int-Mil/Vets, Adult, M, Industrialized)

**Sheerin, Christina, PhD<sup>1</sup>**; Amstadter, Ananda, PhD<sup>2</sup>; Zhang, Jingmei, MD<sup>3</sup>; Mandel, Howard, BA<sup>4</sup>; Banducci, Anne N., MS<sup>5</sup>; Zhewu, Wang, MD<sup>3</sup>

<sup>1</sup>Richmond VA Medical Center, Richmond, Virginia, USA

<sup>2</sup>Virginia Institute for Psychiatric and Behavioral Genetics, VCU, Richmond, Virginia, USA

<sup>3</sup>Medical University of South Carolina, Charleston, South Carolina, USA



<sup>4</sup>*Ralph H. Johnson VA Medical Center, Charleston , South Carolina, USA*

<sup>5</sup>*University of Maryland, College Park, College Park, Maryland, USA*

Molecular genetic studies of post-traumatic stress disorder (PTSD) have implicated numerous single nucleotide polymorphisms (SNPs) within the hypothalamic pituitary adrenal (HPA) Axis (Pitman et al, 2012) that confer risk. While converging evidence supports examination of genetic variation in the glutamate system, the primary excitatory neurotransmitter of the HPA-axis, (Nair & Singh, 2008; Bermudo-Soriano et al., 2012), candidate gene studies have yet to investigate this gene related to PTSD risk. We investigated 13 SNPs in the glutamate receptor gene (SLC1A1) in relation to PTSD among combat-exposed veterans. Participants (n=418; 63% with PTSD) completed a diagnostic interview and provided a blood sample for DNA isolation and genotyping. A logistic regression was conducted to test for associations between SLC1A1 polymorphisms and PTSD after controlling for demographic factors (sex, age, race). Gender and rs10739062 were significant (OR=.48; OR=.71, respectively), with the major allele of this SNP and female gender associated with increased risk of PTSD. Although results are limited, the present study provides preliminary support for the relationship of glutamate variation and PTSD, and supports further investigations of genes within this system.

# CONCURRENT SESSION 10

**Master Methodologist**

**Saturday, November 8**

**10:30 AM to 11:45 AM**

**Versailles**

## **Introduction to Dyadic Data Analysis**

(Res Meth, Res Meth, N/A, I, Global)

**Laurenceau, Jean-Philippe, PhD**

*University of Delaware, Newark, Delaware, USA*

This workshop will introduce participants to answering research questions involving cross-sectional and longitudinal dyadic data. These data present data-analytic challenges stemming from their various sources of interdependence. Not only is there non-independence between members of the dyad, but in the longitudinal context there is also non-independence of repeated observations within each dyad member. Path modeling and multilevel modeling are flexible analytic tools that can accommodate these complexities. The workshop will begin by considering the core features of a dyadic design and the resulting dyadic data. It will then cover Kenny's Actor-Partner Interdependence Model for cross-sectional dyadic data as well as extensions to two-wave panel data. The focus then shifts to the analysis of repeated measure dyadic data using both growth curve models and (time permitting) multilevel process models that capture within-couple correlated errors. Example code from SPSS and Mplus will be provided and example data will focus on trauma-related variables assessed on dyads.

## **Workshop Presentation**

**Saturday, November 8**

**10:30 AM to 11:45 AM**

**Chopin - SPANISH TRACK**

*Presented in Spanish with simultaneous translation to English*

## **Familismo y Terapia Contextual (Contextual Therapy and Familismo)**

(CulDiv, Clin Res-Complex-Cul Div-Neglect, Lifespan, M, Industrialized)

**Juanes Vaquero, Veronica Francia, MS; Painter, Kelly, MEd; Gold, Steven, PhD**

*Nova Southeastern University, Fort Lauderdale, Florida, USA*

Cultural context is an essential component in the development of trauma related disorders. Clinicians who failed to recognize and integrate this critical information into treatment may jeopardize the treatment outcomes. Understanding how culture impacts both the individual and the traumatic incident itself shapes the course of treatment. In Hispanic populations, it is imperative to examine the role of familismo, a system value associated with loyalty to family members, reciprocity, and attachment within the framework of treatment. Familismo values can serve as a protective factor for children and adolescents that experience adversity; however, some family environment characteristics can contribute to psychological maladjustment. According to Gold's Contextual Therapy model, individuals who grow up in a dysfunctional family may lead to development of insecure attachment, which in turn will increase the likelihood of developing mental health disorders. This paper aims to advocate that familismo can serve as a predictor of mental health outcomes in a group of Hispanic teenagers seeking treatment for traumatic stress in South Florida. Applying Contextual Therapy as the treatment intervention, familismo will be incorporated into treatment to address underlying cultural issues that may serve as protective factors in the face of adversity.

**Symposium**  
**Saturday, November 8**  
**10:30 AM to 11:45 AM**  
**Biscayne - BIOLOGY TRACK**

## **The Transdiagnostic Impact of Childhood Trauma on Cognitive and Emotional Brain Functioning**

(Bio Med, CPA-CSA-Cog/Int-Depr, Adult, M, Industrialized)

Elzinga, Bernet, PhD<sup>1</sup>; Green, Melissa, PhD<sup>2</sup>

<sup>1</sup>*Leiden University, Leiden, Netherlands*

<sup>2</sup>*University of New South Wales, Sydney, NSW, Australia*

In this symposium brain and experimental research will be presented on the impact of childhood abuse (physical, sexual and emotional abuse) on cognitive functioning, and the emotional processes that may interfere with cognitive functioning in traumatized individuals. Based on the assumption that many of the consequences of exposure to childhood abuse are not restricted to one type of diagnosis, we will present data from a transdiagnostic perspective, ranging from depression to schizophrenia. In the first presentation (Elzinga) a summary of findings will be presented on the impact of emotional abuse and neglect on the neural correlates related to emotional and cognitive functioning in a large sample of patients with depression and anxiety disorders. In the second presentation (Krause-Utz), data of a script-driven neuroimaging study investigating emotional distractibility in Borderline Personality Disorder patients with high versus low dissociation will be presented, whereas in the third presentation (Green) will present findings on the brain alterations during working memory performance as observed in a sample of patients with Bipolar disorder and schizophrenia. In the fourth and last presentation (Tollenaar) studies on working memory performance in healthy individuals with a history of childhood trauma will be presented, including an oxytocin trial.

**Symposium**  
**Saturday, November 8**  
**10:30 AM to 11:45 AM**  
**Biscayne - BIOLOGY TRACK**

## **The Neural Correlates of Childhood Emotional Maltreatment in Depression and Anxiety**

(Bio Med, Chronic-Depr-Fam/Int-Neglect, Adult, M, Industrialized)

**Elzinga, Bernet, PhD<sup>1</sup>**; van Harmelen, Anne-Laura, PhD<sup>2</sup>; Spinhoven, Philip, PhD<sup>1</sup>; Penninx, Brenda, PhD<sup>3</sup>; van der Werff, Steven, PhD Candidate<sup>4</sup>; van der Wee, Nic, PhD, MD<sup>4</sup>

<sup>1</sup>*Leiden University, Leiden, Netherlands*

<sup>2</sup>*Cambridge, Cambridge, United Kingdom*

<sup>3</sup>*University of Amsterdam, Amsterdam, Netherlands*

<sup>4</sup>*Leiden University Medical Center, Leiden, Netherlands*

Chronic childhood emotional maltreatment (CEM; emotional abuse and/or neglect) is a significant risk factor for the development of anxiety and depression. Here, I aim to summarize our research on the neural correlates related to CEM by comparing a large group of healthy controls and unmedicated patients with depression and/or anxiety disorders reporting CEM before the age of 16 (n=84) versus healthy controls and patients who do not reported CEM (n=94). In sum, we have found morphological reductions in the dmPFC, together with reduced activation in this same area during encoding and retrieval of neutral and emotional words. In contrast, we found that adults reporting CEM showed enhanced bilateral amygdala reactivity to emotional (angry, fearful, sad, happy) versus

scrambled facial expressions, and structural alterations in the intrinsic organization of the limbic and salience network in individuals reporting CEM. These findings suggest that enduring CEM may lead to life-long programming of the brain, prioritizing the detection of social threat over other cognitive functions. These studies relied on retrospective reports in adults, however, and brain alterations in individuals reporting CEM might (partly) also reflect inherited characteristics from the parents.

## **Symposium**

**Saturday, November 8**

**10:30 AM to 11:45 AM**

**Biscayne - BIOLOGY TRACK**

### **Influence of Emotional Distraction on Working Memory in Borderline Personality Disorder: The Role of Dissociation**

(Clin Res, CPA-CSA-Cog/Int-Complex, Adult, M, Industrialized)

**Krause-Utz, Annegret, PhD, MSc<sup>1</sup>**; Winter, Dorina, Dipl Psych<sup>1</sup>; Oei, Nicole, PhD<sup>2</sup>; Bohus, Martin, MD<sup>1</sup>; Schmahl, Christian, MD<sup>1</sup>; Elzinga, Bernet, PhD<sup>3</sup>

<sup>1</sup>*Central Institute of Mental Health, Mannheim, Baden Württemberg, Germany*

<sup>2</sup>*Leiden University Medical Center, Leiden, Gemeente Leiden, Netherlands*

<sup>3</sup>*Leiden University, Leiden, Netherlands*

Emotion dysregulation is a core feature in Borderline Personality Disorder (BPD) and has been associated with amygdala hyperreactivity. Previous research suggests a disruptive effect of affective hyperreactivity on cognitive functioning in BPD. At the same time, individuals with BPD frequently report dissociative experiences, especially during emotional distress. Current conceptualizations of dissociation propose an overmodulation of affect reflected in dampened limbic brain regions. The objective of our study was to investigate the influence of dissociative states on emotional distractibility during a working memory task in BPD. 31 unmedicated BPD patients with a history of complex trauma and 17 healthy controls (HC) performed a working memory task, while being distracted by negatively arousing and neutral pictures. BPD patients were exposed either to a personalized script that induced dissociation (n=16) or to a neutral script (n=15) before performing the emotional working memory task. Significantly lower amygdala activation but higher prefrontal brain activation during emotional distraction was observed in BPD patients after dissociation induction compared to BPD controls. Findings of our study are in line with models proposing dampened limbic reactivity during dissociation. Possible implications for future research in BPD and the clinical setting are discussed.

## **Symposium**

**Saturday, November 8**

**10:30 AM to 11:45 AM**

**Biscayne - BIOLOGY TRACK**

### **Effects of Childhood Trauma on Brain Function during Working Memory in Psychosis**

(Bio Med, Bio Med-Clin Res-Cog/Int-Bio/Int, Adult, M, Industrialized)

**Green, Melissa, PhD<sup>1</sup>**; Quidé, Yann, PhD<sup>2</sup>; Gould, Ian, PhD<sup>1</sup>; O'Reilly, Nicole, BSc Hons Psychology<sup>1</sup>; Carr, Vaughan, MBBS(Hons)MDFRANZCP<sup>3</sup>; Elzinga, Bernet, PhD<sup>4</sup>

<sup>1</sup>*University of New South Wales, Sydney, NSW, Australia*

<sup>2</sup>*Schizophrenia Research Institute, Sydney, NSW, Australia*

<sup>3</sup>*University of New South Wales, Darlinghurst, NSW, Australia*

<sup>4</sup>*Leiden University, Leiden, Netherlands*

Childhood trauma is a significant risk factor for the development of psychosis, and may influence the regulation of genes controlling the growth and maturation of the brain. In this study we investigated the effects of exposure to severe childhood trauma on brain function, during a common working memory (n-back) task, in a cross-disorder sample of patients with schizophrenia (n=27), schizoaffective disorder (n=14), bipolar-I disorder (n=34), and 33 healthy controls (HC). Cluster analyses of abuse items on the Childhood Trauma Questionnaire (CTQ) delineated a clinical group of mixed diagnoses with severe levels of childhood abuse (High-trauma cases; N=42), compared to a clinical group with low levels of abuse (Low-trauma cases; N=33), comparable to low levels of abuse reported by healthy controls (N=33). In a functional imaging study of working memory processes, the subgroup of patients exposed to high levels of childhood trauma demonstrated a lack of deactivation in the posterior cingulate cortex (PCC), compared to HC. There was also evidence for greater activation of the left amygdala in High-trauma, relative to Low-trauma, cases. These findings demonstrate cross-disorder effects of early childhood trauma on executive function that may reflect epigenetic mechanisms affecting the development of cognitive and emotional brain networks.

## **Symposium**

**Saturday, November 8**

**10:30 AM to 11:45 AM**

**Biscayne - BIOLOGY TRACK**

### **The Effects of Childhood Abuse and Oxytocin Administration on Working Memory Performance in Healthy Individuals**

(Clin Res, Affect/Int-CPA-Neglect-Bio/Int, Adult, M, Industrialized)

**Tollenaar, Marieke, PhD**

*Leiden University, Leiden, Netherlands*

Several studies have shown that pre-frontal dependent, working memory is affected by stress and stress hormones like cortisol. Early life stress can create sensitivity to stress in later life, which might explain problems in cognitive functioning in individuals who have survived childhood abuse. In a first study we found that childhood emotional abuse in healthy, adult individuals is related to reduced working memory performance, measured with an N2-back task, and this relation was partly mediated by recent life stress. Currently we are trying to replicate these findings, and are studying the effects of childhood trauma on cognitive empathic abilities. Furthermore, in a recent study we found that childhood abuse in healthy individuals led to more errors in a Steinberg working memory task, during which neutral and emotional distractors were presented. Interestingly, in this same study oxytocin administration enhanced performance in individuals who experienced childhood abuse to the level of individuals without a past of childhood abuse. While oxytocin administration has mostly been implicated in enhancing social functioning, these findings may lead to new routes towards the clinical use of oxytocin administration in traumatized individuals.

**Symposium**  
**Saturday, November 8**  
**10:30 AM to 11:45 AM**  
**Bayfront A - CHILD TRACK ONE**

## **Relationships between Cumulative and Complex Trauma Exposure and Symptoms in Children: Implications for DSM and ICD Diagnostic Classification**

(Assess Dx, CPA-Clinical Practice-Complex-Neglect, Child/Adol, M, Industrialized)

Stolbach, Bradley, PhD<sup>1</sup>; Cloitre, Marylene, PhD<sup>2</sup>

<sup>1</sup>*University of Chicago, Chicago, Illinois, USA*

<sup>2</sup>*National Center for PTSD-Dissemination and Training Division, Menlo Park, California, USA*

Research has shown that most childhood trauma survivors experienced chronic, co-occurring, and/or multiple types of adversity. Cumulative trauma has been shown to predict a myriad of negative physical, emotional, and behavioral health outcomes. More than two decades have passed since Herman (1992) proposed Complex PTSD (CPTSD) as a diagnosis for adults and nearly a decade has passed since van der Kolk (2005) introduced the concept of Developmental Trauma Disorder (DTD) for children. Until recently, most studies of complex trauma were limited to adult samples and relied on retrospective reports. With the data collection efforts of the National Child Traumatic Stress Network (NCTSN) and new definitions of developmental trauma, it is now possible to answer questions about what trauma-exposed children actually experience and how cumulative trauma shapes development. This symposium includes four papers that explore co-occurrence and how different amounts and combinations of trauma types may lead to different symptom profiles. Findings are presented from a national DTD Field Trial latent class analysis (n=236), a latent class analysis replicating findings from Proposed ICD-11 CPTSD adult research in a sample of urban trauma-exposed children (n=270), and NCTSN Core Data Set studies examining trauma exposure patterns and symptoms in 0-5 year-olds (n=1,417) and 7-18 year-olds (n=3,998).

**Symposium**  
**Saturday, November 8**  
**10:30 AM to 11:45 AM**  
**Bayfront A - CHILD TRACK ONE**

## **Symptoms of Developmental Trauma Disorder Differentiated by Distinct Profiles of Exposure to Childhood Adversity and Trauma**

(Assess Dx, Chronic-Complex, Child/Adol, M, Industrialized)

Grasso, Damion, PhD<sup>1</sup>; Ford, Julian, PhD<sup>1</sup>; Spinazzola, Joseph, PhD<sup>2</sup>; van der Kolk, Bessel, MD<sup>2</sup>

<sup>1</sup>*University of Connecticut Health Center, Farmington, Connecticut, USA*

<sup>2</sup>*Trauma Center at Justice Resource Institute, Brookline, Massachusetts, USA*

Developmental Trauma Disorder (DTD) embodies a pattern of symptoms characterized by profound emotional, behavioral, and self dysregulation that can emerge from interpersonal trauma and poly-victimization. Employing latent class analysis on data from a national DTD field trial, we examined whether unique profiles of adversity and trauma place children and adolescents (N = 236) at higher risk for DTD symptoms. Three sub-groups were identified: poly-victims with high likelihood (72%-95%) of relational trauma, emotional abuse, and neglect (36% of the sample), children with moderately high likelihood (53%-69%) of witnessing accidental trauma, being bullied, and experiencing caregiver loss, separation, and mental illness (39%), and children with low likelihood of exposure to all types (25%). Poly-victims had significantly more behavioral and relational/ self-dysregulation symptoms than

the high and low adversity children, and both poly-victimized and high adversity sub-groups had more emotional dysregulation symptoms than low adversity children, Pillai's Trace  $F = 9.91$ ,  $p < .001$ . While children in the high exposure sub-groups tended to be older, they were equally likely to be female than male. Implications for clinical practice and future research to further clarify and develop valid classification procedures for the complex sequelae of developmental trauma are discussed.

## **Symposium**

**Saturday, November 8**

**10:30 AM to 11:45 AM**

**Bayfront A - CHILD TRACK ONE**

### **Trauma Exposure and Psychosocial Adjustment in a National Cohort of Young Children**

(Practice, Chronic-Clin Res-Complex-Dev/Int, Child/Adol, M, Industrialized)

**Briggs, Ernestine, PhD<sup>1</sup>**; Coffino, Brianna, PhD<sup>2</sup>; Lee, Robert, MS/MA<sup>3</sup>; Stolbach, Bradley, PhD<sup>4</sup>; Lieberman, Alicia, PhD<sup>5</sup>

<sup>1</sup>*National Center for Child Traumatic Stress, Durham, North Carolina, USA*

<sup>2</sup>*Bayview Child Health Center, San Francisco, California, USA*

<sup>3</sup>*Duke University Medical Center/National Center for Child Traumatic Stress, Durham, North Carolina, USA*

<sup>4</sup>*University of Chicago, Chicago, Illinois, USA*

<sup>5</sup>*University of California, San Francisco - San Francisco General Hospital, San Francisco, California, USA*

While numerous studies have found that exposure to trauma in early childhood increases the risk for behavioral health problems in childhood and adulthood, fewer have focused on the unique role of early relational trauma in initiating pathways that lead to further traumatic exposure and/or impairments in multiple developmental domains. This study used a cohort ( $n = 1,417$ ) of ethnically diverse, clinic-referred young children (0-5 years) from the National Child Traumatic Stress Network to examine how exposure to different types of relational trauma (e.g., abuse, neglect, exposure to domestic violence) impact behavioral and emotional adjustment. Young children in this cohort were more likely to have experienced relational trauma than other forms of trauma and exposures to these traumas are strongly interrelated. Among children with reported adverse exposures limited to some combination (1 or greater) of the 7 identified relational traumas ( $n=898$ ;  $M = 3.6$  years;  $SD = 1.1$  years), the majority experienced co-occurring trauma types ( $M = 2.4$  and  $SD = 1.6$ ). The risk for clinically significant internalizing and externalizing behavior problems increased with exposure to more types of relational trauma, until plateauing at 4 types. Additional analyses examined the odds ratios for other potential risk profiles. Implications for prevention and clinical intervention will be discussed.

## **Symposium**

**Saturday, November 8**

**10:30 AM to 11:45 AM**

**Bayfront A - CHILD TRACK ONE**

### **Trauma Histories and Symptom Profiles of Youth Exposed to Caregivers with Mental Illness and Alcohol/Substance Use Problems**

(Clin Res, Chronic-Clin Res-Complex, Child/Adol, M, N/A)

**Vivrette, Rebecca, PhD<sup>1</sup>**; Lee, Robert, MS/MA<sup>2</sup>; Briggs, Ernestine, PhD<sup>3</sup>

<sup>1</sup>*University of Maryland School of Medicine, Baltimore, Maryland, USA*

<sup>2</sup>*Duke University Medical Center/National Center for Child Traumatic Stress, Durham, North Carolina, USA*

<sup>3</sup>*National Center for Child Traumatic Stress, Durham, North Carolina, USA*



Parent mental illness and alcohol/substance abuse is a common challenge faced by numerous families across the United States. Many of these parents are unable to provide the physical and emotional support required to promote healthy child development. Impaired caregiving (ICG) is a potent risk factor for a number of adverse childhood experiences, including abuse and neglect. Unlike single incident traumas, intrafamilial traumas are often characterized by chronic exposure and high rates of co-occurrence, leading to highly complex clinical presentations. This study utilized a large national dataset of trauma-exposed youth to examine differences in rates of intrafamilial trauma, polytrauma exposure, and clinical symptoms of youth with and without ICG histories. Clinic-referred, trauma-exposed youth age 7-18 were included in the sample (n=3998). Youth with ICG had significantly higher rates of sexual abuse, physical abuse, emotional abuse, neglect, and domestic violence ( $p<.05$ ), and youth with multiple types of ICG were exposed to twice as many traumas as those without ICG ( $M=5.9$  vs.  $2.5$  types,  $p<.05$ ). After accounting for demographics and polytrauma, youth with ICG had significantly higher PTSD, internalizing symptoms, behavioral problems at home and school, and attachment problems ( $p<.05$ ). Implications for family-focused assessment and treatment will be discussed.

## **Symposium**

**Saturday, November 8**

**10:30 AM to 11:45 AM**

**Bayfront A - CHILD TRACK ONE**

### **A Latent Class Analysis of PTSD and Complex Trauma Symptoms in Urban Trauma-Exposed Children and Adolescents**

(Assess Dx, Complex, Child/Adol, M, Industrialized)

**Stolbach, Bradley, PhD<sup>1</sup>; Cloitre, Marylene, PhD<sup>2</sup>; Garvert, Donn, MS<sup>3</sup>**

<sup>1</sup>*University of Chicago, Chicago, Illinois, USA*

<sup>2</sup>*National Center for PTSD-Dissemination and Training Division, Menlo Park, California, USA*

<sup>3</sup>*National Center for PTSD, Menlo Park, California, USA*

The WHO working group for stress and trauma-related disorders for ICD-11 has proposed two distinct disorders: PTSD and Complex PTSD (CPTSD). The PTSD disorder describes trauma-related re-experiencing and consequent avoidance and hyperarousal within a conceptual frame of a conditioned fear model. CPTSD includes these symptoms as well as 3 additional clusters: affect dysregulation, negative self-concept, and problems sustaining relationships. Three separate studies among adult trauma samples have used latent profile analyses and consistently found evidence for distinct classes of individuals fitting the PTSD and CPTD profiles. We conducted a similar analysis in an urban clinic sample of trauma-exposed children and adolescents (n=270) and obtained similar results. Three classes emerged: 22.8% followed the CPTSD symptom profile, 52.0% the PTSD profile, and 25.2% represented a low symptom group. Girls were more likely than boys to fall in the CPTSD class and boys were more likely than girls to be in the PTSD class. Older age increased risk for CPTSD while rates of PTSD remained constant across age. Characteristics of trauma exposure for each group will be reported. Comparisons to DSM-5 formulations and implications for research and clinical practice will be discussed.

**Symposium**  
**Saturday, November 8**  
**10:30 AM to 11:45 AM**  
**Brickell - MILITARY TRACK**

## **Children and Their Parents' Combat Deployments: From Emotional and Behavioral Problems to Community Interventions**

(Commun, Commun-Mil/Vets, Child/Adol, I, Industrialized)

Bui, Eric, MD PhD<sup>1</sup>; Kerig, Patricia, PhD<sup>2</sup>

<sup>1</sup>*Massachusetts General Hospital, Harvard Medical School, Boston, Massachusetts, USA*

<sup>2</sup>*University of Utah, Salt Lake City, Utah, USA*

Since September 11, 2001, over 2 million service members have been deployed to Iraq or Afghanistan, resulting in hundreds of thousands of military-connected children experiencing at least one parental deployment. Deployment and reintegration are accompanied by unique stressors including renegotiation of family of roles, responsibilities and boundaries, change in routines, or lack of awareness about military service in their communities, and may result in significant behavioral and emotional disturbances among military-connected children (e.g. Chandra et al. 2011, Esposito-Smythers et al. 2011). This symposium brings together clinicians and researchers from three separate groups, to present research on the impact of parental deployment, and on community-based interventions aiming to promote resilience in military connected children. Specifically, we will present new data on: (1) the impact of multiple parental deployments on military-connected children; (2) a parenting program to strengthen resilience in military children and families; (3) a web-based resilience support curriculum for school professionals and military parents; (4) feasibility of an elementary school-based intervention. Our data suggest that community-based interventions may be efficacious to promote resilience among military-connected children who experience combat parental deployment.

**Symposium**  
**Saturday, November 8**  
**10:30 AM to 11:45 AM**  
**Brickell - MILITARY TRACK**

## **Help-Seeking by Military Families with Children in Military and Civilian Communities**

(Commun, Commun-Fam/Int-Prevent-Mil/Vets, Child/Adol, I, Industrialized)

MacDermid Wadsworth, Shelley, PhD<sup>1</sup>; Flittner, Allison, PhD<sup>1</sup>; Mustillo, Sarah, PhD<sup>1</sup>; Lester, Patricia, MD<sup>2</sup>

<sup>1</sup>*Purdue University, West Lafayette, Indiana, USA*

<sup>2</sup>*UCLA Semel Institute for Neuroscience and Human Behavior, Los Angeles, California, USA*

Most mental health or behavioral problems in children go unreported, and most children with problems do not receive help (Skeat, 2010, Teagle, 2002). This study focused on how and where parents in military families sought and obtained help for their children, the role of military vs. civilian community-based resources in those efforts, and whether parents in the active and reserve components differed in their patterns of reporting and responses to children's problems. Data come from a probability sample selected from across the U.S. of 680 military families with children aged 0 to 10. Results suggested that parents appeared to be vigilant about their children and were at least as likely as civilian parents in community studies to recognize and report problems, especially when children had more exposure to deployment. Parents were most likely to report problems with children's behavior, sleep, and anxiety, and least likely to report developmental problems. Unlike parents in the general population, parents in

these military families were equally likely to report that their children had problems regardless of child or parent characteristics, although the nature of the problems reported varied with child age and gender. On average, families were more likely to report using community-based than military services.

## **Symposium**

**Saturday, November 8**

**10:30 AM to 11:45 AM**

**Brickell - MILITARY TRACK**

### **A Community-Based Parenting Intervention to Prevent Behavior and Emotional Problems in Children with Parents Deployed to War: ADAPT**

(Prevent, Fam/Int-Prevent-Tech-Mil/Vets, Lifespan, I, Industrialized)

**Gewirtz, Abigail, PhD LP<sup>1</sup>**; Zamir, Osnat, PhD MSW<sup>2</sup>; DeGarmo, David, PhD<sup>3</sup>

<sup>1</sup>*University of Minnesota-Twin Cities Campus, St Paul, Minnesota, USA*

<sup>2</sup>*University of Minnesota, St. Paul, MN 55108, Minnesota, USA*

<sup>3</sup>*University of Oregon, Eugene, Oregon, USA*

This presentation describes participation, and satisfaction in a web-enhanced, group-based parenting intervention for Reserve Component families. A key challenges for parents deployed to war is reintegrating into the family in general, and returning to active parenting in particular. Parenting is crucial for child adjustment, especially in stressful contexts, and parenting practices appear to mediate the influence of stressful events (e.g. deployment) on children's adjustment (Gewirtz & Zamir, 2014). Parenting programs are effective in preventing child behavior problems, yet their application in military contexts has been limited. ADAPT (After Deployment, Adaptive Parenting Tools) is an adaptation for military families of Parent Management Training-Oregon, an evidence-based, widely disseminated parenting program. We report participation and satisfaction data from a large-scale randomized controlled trial of ADAPT with 320 Reserve Component families (N=192 assigned to intervention). Over 70% of families participated in at least one session, and the majority participated in at least half of the 14-session intervention. Surprisingly, participation was equal across genders. 50% participants viewed the online components. Satisfaction was high (3.3 on a 0-4 scale). Addressing participation, retention, and satisfaction is crucial in implementing military family programs.

## **Symposium**

**Saturday, November 8**

**10:30 AM to 11:45 AM**

**Brickell - MILITARY TRACK**

### **Staying Strong: An Educational Website for Parents and Educators to Support Military Connected Children**

(Commun, Mil/Vets, Child/Adol, I, Industrialized)

**Ohye, Bonnie, PhD<sup>1</sup>**; Kelly, Hope, BA<sup>1</sup>; Bui, Eric, MD PhD<sup>2</sup>; Rauch, Paula, MD<sup>3</sup>

<sup>1</sup>*Massachusetts General Hospital, Boston, Massachusetts, USA*

<sup>2</sup>*Massachusetts General Hospital, Harvard Medical School, Boston, Massachusetts, USA*

<sup>3</sup>*Mailman School of Public Health at Columbia University and SUNY-Downstate Medical Center, Boston, Massachusetts, USA*

The stress of parental combat deployment may be accompanied by significant emotional and behavioral problems among military connected children. While most interventions to support military connected children during the different phases of the deployment cycle are available on base, or through summer camps, two in three military

families live outside a central base (Hoshmand and Hoshmand 2007) and do not have easy access to these interventions. In order to address the challenge of supporting military connected children living off-base, we have developed “Staying Strong”, a web-based resilience support program ([www.stayingstrong.org](http://www.stayingstrong.org)) directed to military parents and school professionals. The component for military families includes educational videos on general parenting, and on stages of development, as well as stories illustrating common deployment cycle challenges and children with different coping styles. The school professionals’ component includes a video documentary, and toolkits designed to promote resilience of children coping with the unique, significant challenge of parental military deployment. Since its inception in 2012, the website has received positive feedback, as evidenced by high number of downloads (classroom activities toolkits downloaded 1042 times, school nurse toolkits 738 times, and teachers toolkits 1223 times).

## **Symposium**

**Saturday, November 8**

**10:30 AM to 11:45 AM**

**Brickell - MILITARY TRACK**

### **Staying Strong With Schools: A School Based Intervention for Military Connected Children**

(Commun, Mil/Vets, Lifespan, I, Industrialized)

**Bui, Eric, MD PhD<sup>1</sup>**; Chen, Yan, BS<sup>2</sup>; Kelly, Hope, BA<sup>2</sup>; Simon, Naomi, MD<sup>1</sup>; Ohye, Bonnie, PhD<sup>2</sup>

<sup>1</sup>*Massachusetts General Hospital, Harvard Medical School, Boston, Massachusetts, USA*

<sup>2</sup>*Massachusetts General Hospital, Boston, Massachusetts, USA*

Based on ecological models of resilience in childhood (Masten & Powell 2003), we have developed a civilian school-based intervention, “Staying Strong With Schools (SSWS)”, to promote resilience in military connected children. SSWS aims to create direct support from the classroom teacher to the military child, create support to military parents, and increase recognition and support to the child and family from the school community. It includes a 60-minute training for all school professionals at the beginning of school; and a year-long training and supervision of the school guidance counselor, whose role is to coordinate psychosocial support within the school. We are currently piloting SSWS in two schools, with promising results for the beginning of year training, including a high attendance rate (94%, n=73), significant pre-post training increase in confidence in understanding family stresses associated with a parental deployment (66% vs. 98%,  $p<0.001$ ), and knowledge of deployment-related stress reactions among MCC (53% vs. 99%,  $p<0.001$ ). Further, satisfaction with the training was high (all aspects of the training yielding >90% satisfaction), and the majority of teachers indicated they would definitely consider implementing resilience supports to military children in their classroom. End-of-year assessments will provide further feasibility and satisfaction data for SSWS.

## **Symposium**

**Saturday, November 8**

**10:30 AM to 11:45 AM**

**Sevilla - LONG-TERM EFFECTS OF CHILD TRAUMA TRACK**

## **Charting a Path toward Resilience following Childhood Exposure to Trauma**

(Clin Res, Chronic-DV, Lifespan, M, Global)

Howell, Kathryn, PhD LP

*University of Memphis, Memphis, Tennessee, USA*

The impact of early childhood exposure to trauma on resilient functioning at different points across the lifespan will be presented by four clinical researchers. The short-term characteristics and profiles of resilience are examined in pre-adolescent youth, while the long-term aspects of resilience are examined first in young adults and then in middle-aged adults. All participants were high-risk and experienced potentially traumatic events during early childhood, including witnessing domestic violence, maltreatment, or exposure to community violence. These studies provide insight into the factors that may influence why individuals progress down pathways of risk or resilience following trauma exposure, including the examination of variables at the individual, family, and community levels. Further, international differences in the expression of positive functioning are assessed by including young adults from Sweden, as well as participants from the United States. This lifespan approach allows researchers to identify key tenets of resilient functioning that are common across time and cultural background and those that are tied more directly to developmental periods. The clinical and policy implications of study findings will be discussed in the context of engaging individuals, families, and communities in prevention and intervention efforts during early childhood.

## **Symposium**

**Saturday, November 8**

**10:30 AM to 11:45 AM**

**Sevilla - LONG-TERM EFFECTS OF CHILD TRAUMA TRACK**

## **Parental Warmth, Psychopathology, and Romantic Relationship Quality Mediate the Relationship between Childhood Exposure to IPV and Adult Life Satisfaction**

(Clin Res, Chronic-Depr-Fam/Int-QoL, Adult, M, Industrialized)

Miller, Laura, PhD<sup>1</sup>; Cater, Asa, PhD<sup>2</sup>; Howell, Kathryn, PhD<sup>3</sup>; Graham-Bermann, Sandra, PhD<sup>4</sup>

<sup>1</sup>*University of Notre Dame, Notre Dame, Indiana, USA*

<sup>2</sup>*Örebro University, Örebro, Sweden*

<sup>3</sup>*University of Memphis, Memphis, Tennessee, USA*

<sup>4</sup>*University of Michigan, Ann Arbor, Michigan, USA*

The link between childhood exposure to intimate partner violence (IPV) and adult well-being is clear, but less research has examined the mechanistic underpinnings of this relationship, especially the long-term effects of early parenting practices on adult functioning following exposure to IPV. We hypothesized that (1) childhood exposure to IPV would be directly related to disruptions in parental warmth in childhood, PTSD, depression and anxiety (psychopathology) in adulthood, (2) the relationship between childhood exposure to IPV and life satisfaction would be mediated by parental warmth and adult psychopathology and (3) romantic relationship quality would be an additional mediator for those in a romantic relationship. Participants were 703 Swedish adults (age 20-24) reporting exposure to IPV in childhood. Results of serial mediation models indicated that IPV exposure was related to lower

levels of parental warmth, higher psychopathology, poorer romantic relationship quality, and lower life satisfaction. The relationship between IPV and life satisfaction was mediated by parental warmth and adult psychopathology. A small amount of variance in satisfaction was explained by romantic relationship quality. These findings suggest that early intervention to facilitate positive parent-child relationships may promote long-term developmental resilience in those exposed to IPV.

## **Symposium**

**Saturday, November 8**

**10:30 AM to 11:45 AM**

**Sevilla - LONG-TERM EFFECTS OF CHILD TRAUMA TRACK**

### **The Interaction of Childhood Trauma Exposure and Adult Psychopathology in Predicting Reports of Post-Traumatic Growth following Duty-Related Trauma Exposure**

(Clin Res, Affect/Int, Adult, M, Industrialized)

**Lilly, Michelle, PhD**; London, Melissa, BA  
*Northern Illinois University, DeKalb, Illinois, USA*

This study seeks to examine the relations between childhood trauma exposure and broad-based psychopathology in predicting post-traumatic growth (PTG) among participants with recurrent exposure to duty-related trauma (i.e., 9-1-1 telecommunicators). While some level of psychological distress is surely needed to incite reconstructive processes that may lead to PTG, some argue that positive associations between pathology and PTG suggest that PTG may actually reflect avoidant coping or be illusory in nature. Further, the extent to which early exposure to trauma is implicated in PTG has remained limited. In a representative sample of 9-1-1 telecommunicators ( $N = 750$ ), those with early exposure to trauma reported marginally higher PTG scores ( $p = .054$ ) and more severe symptomatology (PTSD, depression, somatization, alcohol abuse) than those without early exposure. Those with the most severe pathology reported the highest PTG. An interactive effect was present in that at high levels of pathology, PTG was greater among those without early exposure to trauma. At low levels of pathology, those with early exposure reported greater PTG. Experiential avoidance had an indirect effect on the relationship between childhood exposure and adult pathology, but only for the low symptom group. Implications for the PTG construct will be discussed.

## **Symposium**

**Saturday, November 8**

**10:30 AM to 11:45 AM**

**Sevilla - LONG-TERM EFFECTS OF CHILD TRAUMA TRACK**

### **Resilience across Multiple Domains among Children At-Risk for Maltreatment**

(Practice, Aggress-Anx-CPA-Depr, Child/Adol, M, Industrialized)

**Martinez-Torteya, Cecilia, PhD<sup>1</sup>; Miller, Laura, PhD<sup>2</sup>; Howell, Kathryn, PhD<sup>3</sup>; Figge, Caleb, MS PhD Student<sup>1</sup>**

<sup>1</sup>*DePaul University, Chicago, Illinois, USA*

<sup>2</sup>*University of Notre Dame, Notre Dame, Indiana, USA*

<sup>3</sup>*University of Memphis, Memphis, Tennessee, USA*

Child maltreatment affects more than 3 million children in the U.S. yearly, increasing risk for psychiatric disorders, delinquency, teen pregnancy, and other psychosocial problems. Yet, positive adaptation to adversity, characterizes many maltreated children. Early definitions of resilience focused on single domains of functioning, without fully recognizing that youths' functioning is embedded in, and cannot be separated from, their social ecology. The present study aims to characterize resilience across multiple domains and social settings, using multiple reporters.

Participants were 686 12-year-olds with reports of suspected maltreatment histories. Data was drawn from the LONGSCAN multi-site longitudinal study. Self-, caregiver-, and teacher-report of child functioning (i.e., behavior problems, trauma symptoms, social skills, daily living skills, support, activity, leadership, awards, and religion) was obtained. Latent Profile Analysis revealed 6 distinct empirically based profiles: resilient across the board, impaired across the board, school-only problems, trauma symptoms, high self-reported functioning with school problems, and low problems with low adaptive functioning. Findings underscore the heterogeneity of child adaptation across settings and highlight that children with problems in one area may also possess significant strengths in other domains.

## **Symposium**

**Saturday, November 8**

**10:30 AM to 11:45 AM**

**Sevilla - LONG-TERM EFFECTS OF CHILD TRAUMA TRACK**

### **Resilience in Young Adulthood following Childhood Poly-Victimization: The Protective Role of Friends and Family**

(Clin Res, CPA-Chronic-Comm/Vio-Complex, Lifespan, M, Industrialized)

**Howell, Kathryn, PhD<sup>1</sup>**; Miller, Laura, PhD<sup>2</sup>

<sup>1</sup>*University of Memphis, Memphis, Tennessee, USA*

<sup>2</sup>*University of Notre Dame, Notre Dame, Indiana, USA*

Children may experience many forms of victimization, including maltreatment, assault, and violence exposure. A significant number will face multiple victimizations and these children are at high risk for psychological and emotional difficulties that may last into adulthood. Despite the increased risk for psychopathology, a substantial percentage of young adults exhibit resilience following a history of childhood poly-victimization. This study examines the role of social support in promoting resilience among 371 college students, age 18-25, who were attending either a regional public university in the Southeast or an elite private university in the Midwest. Analyses revealed a direct relationship between childhood poly-victimization and resilience during young adulthood that was moderated by university location, with students at the elite university experiencing less resilience if poly-victimization during childhood was high while students at the regional university experienced more resilience if childhood poly-victimization was high. This relationship was mediated by social connections with family members and friends during young adulthood. Findings suggest that even in the context of differential direct responses to childhood poly-victimization, resilient functioning is predicted by relationship-based factors, including contact with loved ones and communication with friends.



**Symposium**  
**Saturday, November 8**  
**10:30 AM to 11:45 AM**  
**Merrick**

## **Dysfunctional Avoidance: Trauma, Attachment, and Mindfulness**

(Clin Res, CPA-CSA-Chronic-Health, Lifespan, M, Industrialized)

Godbout, Natacha, PhD  
*Universite du Quebec a Montreal (UQAM), Montreal, Quebec, Canada*

Certain correlates of interpersonal trauma, such as suicidality, dissociation and tension-reduction behaviors, might be considered avoidance responses to the extent that they alter awareness, distract, anesthetize or temporarily redirect attention away from negative experiences (Briere et al., 2010). Interpersonal trauma may especially motivate such avoidance as it appears to produce enduring negative emotional states and disrupt emotional regulation (Pearlman & Courtois, 2005), perhaps especially to the extent that it disrupts early parent-child attachment. Four empirical studies are presented. First, avoidance behaviors and effects of child sexual abuse are documented, based on a longitudinal study of children. Next, in a large sample of university women and men, support was found for a dissociative form of post-traumatic stress that was linked with cumulative trauma, suicidality, insecure attachment, and impaired self-capacities. Third, as a test of the trauma-avoidance hypothesis, the relationship between affect dysregulation, attachment, and dissociation is examined in a sample of nontraumatized adults from the general population. Finally, the role of mindfulness, considered as contrary to dysfunctional avoidance, is explored in the relationship between interpersonal trauma and psychological health, in a clinical sample of adults. Practical implications are discussed.

**Symposium**  
**Saturday, November 8**  
**10:30 AM to 11:45 AM**  
**Merrick**

## **Mental Health of a Cohort of 2000 Sexually Abused and Non-Abused Youth: Psychosis-Related Diagnoses, Attempted Suicide-Related Hospitalizations and Psychotropic Drugs**

(Clin Res, CSA-Health, Child/Adol, M, Industrialized)

**Daigneault, Isabelle, PhD<sup>1</sup>**; Hébert, Martine, PhD<sup>2</sup>; Lecomte, Tania, PhD<sup>1</sup>  
<sup>1</sup>*Universite de Montreal, Montreal, Quebec, Canada*  
<sup>2</sup>*Uni du Quebec a Montreal, Montreal, Quebec, Canada*

A large number of studies have revealed that childhood sexual abuse has deleterious effects on children, youth and adults in many spheres of functioning. Severe mental health disorders, such as psychosis, have newly been documented as consequences of childhood maltreatment and abuse. These consequences have been less often studied in general, and this is even more evident in children and adolescent populations. This presentation reports on data gathered from two public service databases: one youth center and a universal health insurance provider. Participants are a cohort of 1000 children (less than 18 years of age) who, over a ten-year period, received child protection services for corroborated sexual abuse, and another cohort of 1000 children matched for age, gender and the fact they resided in the same youth service territory at the time of their counterparts' first corroborated sexual abuse report. Prevalence rates of psychosis-related diagnoses, suicide attempt related hospitalizations, and psychotropic drug prescriptions of these matched groups are compared across a 15-year period. Results are discussed with regards to the study design's strengths and limitations, and practice implications are highlighted.

**Symposium**  
**Saturday, November 8**  
**10:30 AM to 11:45 AM**  
**Merrick**

**Dissociation and Post-Traumatic Stress Symptoms: An Examination of the Correlates of a Dissociative PTS Subtype**

(Clin Res, CPA-CSA-Chronic-Complex, Adult, M, Industrialized)

**Runtz, Marsha, PhD<sup>1</sup>**; Godbout, Natacha, PhD<sup>2</sup>

<sup>1</sup>*University of Victoria, Victoria, British Columbia, Canada*

<sup>2</sup>*Uni du Quebec a Montreal, Montreal, Quebec, Canada*

Revised criteria for Post-Traumatic Stress Disorder (PTSD) in the DSM-5 include a dissociative subtype (characterized primarily by derealization and depersonalization) that is present in 15% of men and 30% of women diagnosed with PTSD (Wolf, 2013). The dissociative subtype of PTSD has been linked to higher levels of trauma (especially sexual trauma and childhood trauma), comorbid disorders such as specific phobias and personality disorders, suicidality, and greater functional impairment (Lanius et al., 2014). Due to the apparent severity of this disorder, research is needed to explore the causes and consequences of dissociative post-traumatic stress reactions. This study explores the correlates of PTS symptoms, dissociation, and cumulative interpersonal trauma in a sample of over 700 university men and women. Findings support the hypothesis that the combination of PTS and dissociative symptoms is particularly associated with higher levels of cumulative trauma and greater symptom severity (e.g., suicidality, tension reduction behaviors, impaired self capacities, and insecure attachment). Gender differences in symptoms patterns are presented and findings are discussed in relation to the importance of considering dissociation symptoms when planning treatment for those presenting with PTSD in the context of a history of interpersonal trauma.

**Symposium**  
**Saturday, November 8**  
**10:30 AM to 11:45 AM**  
**Merrick**

**Dissociation in Reportedly Non-Traumatized Individuals: The Role of Affect Dysregulation and Attachment Disturbance**

(Train/Ed/Dis, Assess Dx-Neglect, Adult, M, N/A)

**Briere, John, PhD<sup>1</sup>**; Runtz, Marsha, PhD<sup>2</sup>

<sup>1</sup>*University of Southern California, Los Angeles, California, USA*

<sup>2</sup>*University of Victoria, Victoria, British Columbia, Canada*

We investigated whether dissociation can occur in nontraumatized individuals, or is limited to trauma survivors. In the first of two internet-based studies, significant dissociation was found in a sample of general population participants who reported no trauma exposure (N = 151), as well as those with a history of trauma. Dissociative symptoms as measured by the Multiscale Dissociation Inventory (Briere, 2002) were related to affect dysregulation (AD) scores in the nontraumatized subgroup, as measured by the Inventory of Altered Self-Capacities (Briere, 2000). In a second study of nontraumatized university students (N = 162), dissociation was again associated with AD. Further, the relationship between AD and dissociation was not mediated by scores on the Relationship Questionnaire (RQ; Bartholomew & Horowitz, 1991). These findings suggest that (a) dissociation need not be trauma-related, (b) affect dysregulation can be a major contributor to dissociative symptomatology, irrespective of

trauma history, and (c) insecure attachment (at least as measured by the RQ) does not influence the extent to which affect dysregulation leads to dissociation.

## **Symposium**

**Saturday, November 8**

**10:30 AM to 11:45 AM**

**Merrick**

### **Exploring the Role of Mindfulness in the Relation between Child Maltreatment and Psychological Health**

(Clin Res, CPA-CSA-Chronic-Depr, Adult, M, Industrialized)

**Godbout, Natacha, PhD;** Bigras, Noemie, BA

*Universite du Quebec a Montreal (UQAM), Montreal, Quebec, Canada*

Continued attempts to avoid trauma-related experiences might provide temporary relief but lead to long-lasting psychological distress. The capacity to be aware, to label feelings and adopt a non-judgmental stance may facilitate regulation processes and psychological well-being. Although the concept of mindfulness recently emerged as a potential key variable for understanding and treating the effects of trauma, few empirical data are available on this topic. This study examined the relation between different facets of mindfulness, child maltreatment and psychological health. A clinical sample of 160 adults consulting for sexual-relational problems completed questionnaires assessing child maltreatment (e.g., sexual, psychological and physical abuse, neglect, bullying), mindfulness (e.g., observing, describing, acting with awareness, nonjudging), depression, dissociation and post-traumatic stress (PTS). Structural equation models yielded that diminished capacities to act with awareness in trauma survivors lead to higher levels of depression, dissociation and PTS. Difficulties to observe and label internal experiences were related to depression, while impaired capacities to adopt a non-evaluative stance toward thoughts and feelings were linked to depression and dissociation. Overall findings suggest that developing mindfulness skills might be beneficial for trauma survivors.

## **Panel Presentation**

**Saturday, November 8**

**10:30 AM to 11:45 AM**

**Flagler**

### **Lead User Innovation: a Unique Approach to Model Development and Dissemination**

(Train/Ed/Dis, Clin Res-Comm/Int-Complex, Child/Adol, M, Industrialized)

**Brown, Adam, PsyD<sup>1</sup>; Saxe, Glenn, MD<sup>1</sup>; McCauley, Kelly, LCSW<sup>2</sup>; Baron, Lisa, PhD<sup>3</sup>**

<sup>1</sup>*New York University Langone Medical Center, New York, New York, USA*

<sup>2</sup>*KVC Behavioral HealthCare, Lawrence, Kansas, USA*

<sup>3</sup>*Alliance for Inclusion and Prevention, Dorchester, Massachusetts, USA*

The need for trauma focused, evidence informed practice in child serving settings is clear, yet dissemination is challenging. This panel will describe a unique approach to model development and dissemination. Lead User Innovation is a process in which those using a product develop innovative adaptations specific to the needs of the users in their setting. After an introduction to this idea, we will describe the use of this approach in the ongoing development and innovative use of one model, Trauma Systems Therapy (TST). One of the biggest challenges to effective implementation is the balance between maintaining model fidelity, while encouraging improvements and adaptations that will allow the model to be effectively implemented in a variety of settings and populations. TST has created an “innovation community,” in which lead staff in agencies implementing TST, in consultation with the model developers, develop modifications of the model to best serve clients in their unique setting. These adaptations build on a core platform of minimal fidelity, and become the standard for similar settings implementing TST. This panel will feature the model developers, as well as “lead users,” who will describe in detail the process of developing specific adaptations in settings such as residential treatment, foster care, and school based programs.

## **Workshop Presentation**

**Saturday, November 8**

**10:30 AM to 11:45 AM**

**Bayfront B - CHILD TRACK TWO**

### **Assessing the Complex Effects of Trauma among Children and Adolescents: Strategies for Engaging Family Members and Applications in Clinical Practice**

(Assess Dx, Clinical Practice-Complex, Child/Adol, I, Industrialized)

**Kisiel, Cassandra, PhD<sup>1</sup>; Fehrenbach, Tracy, PhD<sup>1</sup>; Ghosh Ippen, Chandra, PhD<sup>2</sup>**

<sup>1</sup>*Northwestern University Feinberg School of Medicine, Chicago, Illinois, USA*

<sup>2</sup>*UCSF-San Francisco General Hospital, San Francisco, California, USA*

Utilizing a comprehensive approach to assessment is critical for capturing the complex effects of trauma across developmental stages. While there is no single approach, there are several key components to an effective trauma assessment to consider, including assessing key domains, use of multiple informants/ techniques, and considerations for development, culture, and applications in practice settings (Kisiel, Conradi, Fehrenbach, Torgersen, & Briggs, 2014). Three presenters will highlight specific assessment techniques based on their work with children/adolescents across age groups and settings with strategies for engaging family members in the process. Challenges remain in how to capture and utilize assessment information effectively across age groups and integrate this information into the treatment process. Partnering with family members is also an important component that may be overlooked. Participants will be engaged in a discussion of effective strategies and techniques with handouts and ‘tip sheets’ provided to support skill-building with providers (clinicians, supervisors), using examples from the CANS-Trauma tool and resources. A focus will be on how to use assessments effectively in treatment planning, with different

provider roles, and in engaging and sharing feedback with youth and caregivers as part of the treatment and psychoeducation process.

## **Oral Paper Presentation**

**Saturday, November 8**

**10:30 AM to 11:45 AM**

**Trade**

## **Psychological Treatments for Traumatized Adults**

### **Determining Person-Treatment Fit for Brief Treatment of Trauma in a Community Setting: Which Interventions are Best for Whom?**

(Clin Res, CSA-Clin Res-Commun-Ethnic, Adult, I, Industrialized)

**Bira, Lindsay, PhD;** Stuetzle, Rick, PhD; Ironson, Gail, MD PhD

*University of Miami, Coral Gables, Florida, USA*

This study (part of a larger NIH-funded study) compares 3 brief interventions (Psychological First Aid – PFA; Stress Management Therapy – SMT; and Eye Movement Desensitization and Reprocessing – EMDR) to determine whether certain interventions are better for certain types of people (considering gender, PTSD severity, substance abuse, childhood trauma, and borderline personality disorder) and trauma (considering time since trauma and trauma type). 87 participants were randomized to 4 active sessions of either PFA, SMT or EMDR. Follow-up assessments were conducted at 1, 3 and 6 months post-intervention and HLM analyses were used to test the hypotheses. Outcomes examined included PTSD symptoms, depression, and physical symptoms. Examination of individual and trauma factors showed that EMDR worked best for those high in baseline PTSD and for those endorsing borderline personality characteristics. SMT worked best for those who reported using marijuana and for those with a trauma of bereavement. PFA worked best for those with a history of childhood sexual abuse and those endorsing a violent trauma. Limitations and future directions are discussed. Results indicate that treatment type may be selected based on individual and trauma factors after a traumatic event, and brief treatments may have great utility, particularly when the need for treatment is high and time/resources are low.

## **Oral Paper Presentation**

**Saturday, November 8**

**10:30 AM to 11:45 AM**

**Trade**

### **A Comparison of Three Treatments for Traumas in a High Crime Neighborhood**

(Clin Res, Comm/Int, Adult, M, Industrialized)

**Ironson, Gail, MD PhD<sup>1</sup>;** Bira, Lindsay, PhD<sup>1</sup>; Stuetzle, Rick, PhD<sup>1</sup>; Freund, Blanche, PhD<sup>1</sup>; Goodwin, Jarrard, MD<sup>2</sup>

<sup>1</sup>*University of Miami, Coral Gables, Florida, USA*

<sup>2</sup>*University of Miami Miller School of Medicine, Miami, Florida, USA*

Trauma occurs at a greater rate in low SES high crime areas and there is an urgent need for brief treatments as there are limited resources. Our study was conducted to test the efficacy of three brief (4 session) treatments: individually administered exposure based therapy (Eye Movement Desensitization and Reprocessing -EMDR), group administered stress management with a trauma focus (SMT), and group administered coping modules from the Red

Cross' Psychological First Aid program (PFA). Our NIH funded study partnered with a community health center in a low SES, high crime neighborhood. Subjects who had experienced a traumatic event within the previous 6 months (n = 87) were randomly assigned to one of three treatments: EMDR, SMT, or PFA. They were assessed at baseline, post treatment, and at 3 and 6-month follow-ups. Outcome variables included PTSD symptoms (Davidson), depression (Beck Depression Inventory), and physical symptoms. Results indicated that EMDR worked best for reducing depression, PFA worked best at reducing PTSD, and SMT worked best for reducing physical symptoms. Implications of the findings suggest that brief interventions can be useful and that choice of intervention may be guided by the importance of a particular outcome.

## **Oral Paper Presentation**

**Saturday, November 8**

**10:30 AM to 11:45 AM**

**Trade**

### **Psychotherapeutic Efficiency of a 10 Session Protocol Associating EMDR on PTSD and Dissociation among Refugees Torture Survivors from Central and West Africa**

(Clin Res, Cul Div-Rights-Refugee-Torture, Adult, M, W & C Africa)

**de Fouchier, Capucine, PhD<sup>1</sup>**; Blanchet, Alain, PhD<sup>1</sup>; Jehel, Louis, PhD, MD<sup>2</sup>

<sup>1</sup>*Université Paris 8, Saint-Denis, Ile de France, France*

<sup>2</sup>*Université Antilles-Guyane - CHU de Martinique, Fort de France, Martinique, France*

Although EMDR is a therapy recognised by international scientific community as one of the first line treatment for PTSD, its application has never been assessed with torture survivors refugees. The aim of this research is to assess the therapeutic efficiency of a 10 session protocol associating psychoeducation, relaxation technique and EMDR on PTSD and dissociation in torture survivors refugees from Central and West Africa. Fifty-Two participants were recruited in two specialized trauma centres. Participants were allocated in three treatment conditions: "EMDR" (n = 21), "Stabilization" (n = 19) and "Intent to treat with medication" (n = 10). Each participant was assessed at the beginning, at the end and 4,5 months after the end of psychotherapy with a diagnostic interview (MINI) and self-report questionnaires (HTQ, DES). The "EMDR" protocol showed a large and superior therapeutic efficiency for PTSD and dissociation variables in comparison with the control groups at the end of the therapy (  $p_2 = .49$  and  $.25$  for PTSD and Dissociation) and at follow-up (  $p_2 = .53$  and  $.34$ ). At the end of the therapy, 91% of the participants in the EMDR group no longer met criteria for PTSD and the intensity of dissociative experiences dropped by 72%. In conclusion, associating EMDR with psychoeducation and relaxation techniques is a relevant therapeutic protocol in this population.

## **Oral Paper Presentation**

**Saturday, November 8**

**10:30 AM to 11:45 AM**

**Trade**

### **The Relationship between Post-Traumatic Symptoms, Depressive Symptoms, and Sleep Problems during Virtual Reality Exposure Therapy with a Cognitive Enhancer**

(Clin Res, Depr-Bio/Int-Sleep-Terror, Adult, M, Industrialized)

**Peskin, Melissa, PhD<sup>1</sup>**; Wyka, Katarzyna, PhD<sup>2</sup>; Cukor, Judith, PhD<sup>1</sup>; Difede, JoAnn, PhD<sup>1</sup>

<sup>1</sup>*New York Presbyterian Hospital/Weill Medical College of Cornell University, New York, New York, USA*

<sup>2</sup>*Hunter College, CUNY, New York, New York, USA*

Two recent studies suggest that reductions in post-traumatic symptoms (Aderka, Gillihan, McLean, & Foa, 2013) and cognitions (Zalta et al., 2014) precede reductions in depressive symptoms during prolonged exposure (PE) therapy for post-traumatic stress disorder (PTSD) in female assault survivors. The present study is a post-hoc analysis examining the temporal relationship between post-traumatic and depressive symptoms and post-traumatic symptoms and sleep problems in a D-Cycloserine (DCS)-augmented virtual reality exposure (VRE) therapy for chronic World Trade Center-related PTSD (Difede et al., 2014). Twenty-five participants were randomly assigned to receive either 100 mg DCS (N=13) or placebo (N=12) 90 minutes before 12 weekly VRE sessions. Lagged mixed-effect regression models examining the relationship between PTSD and depressive symptoms revealed that session-to-session decreases in PTSD symptoms predicted subsequent decreases in depressive symptoms, most strongly in the DCS group; the reverse effects were non-significant in either the DCS or placebo group. The relationship between PTSD symptoms and sleep problems was reciprocal and again stronger in the DCS group. In the placebo group, both the effect of post-traumatic symptoms on subsequent sleep problems and the reverse effect were smaller and non-significant. Implications of these findings will be discussed.



# CONCURRENT SESSION 11

**Master Clinician**

**Saturday, November 8**

**01:30 PM to 02:45 PM**

**Chopin - SPANISH TRACK**

*Presented in English with simultaneous translation to Spanish*

## **Integrating Culturally Informed and Evidence Based Treatment with Traumatized Young Children and Their Families (Integrar Tratamiento Sensible a la Cultura y Basado en la Evidencia con Niños Traumatizados y Sus Familias)**

(Prevent, CPA-Dev/Int-Pub Health-Train/Ed/Dis, Child/Adol, M, Industrialized)

**Lieberman, Alicia, PhD**

*University of California, San Francisco - San Francisco General Hospital, San Francisco, California, USA*

This talk will present the theoretical premises and evidence base for child-parent psychotherapy, a multi-theoretical treatment for infants, toddlers and preschoolers exposed to traumatic stressors and multiple adversities. Examples that illustrate the integration of adherence to fidelity measures with an individualized approach to the clinical needs of children and families from different cultural backgrounds will be discussed in the context of clinical vignettes.

## **Symposium**

**Saturday, November 8**

**01:30 PM to 02:45 PM**

**Versailles**

## **Attacks from All Sides: Exploring Multiple Facets Affecting Response to the Boston Marathon Bombing**

(Global, Acute-Cog/Int-Comm/Int-Terror, Lifespan, M, Industrialized)

Chou, Tommy, MA<sup>1</sup>; Keane, Terence, PhD<sup>2</sup>

<sup>1</sup>*Oakland University, Miami, Florida, USA*

<sup>2</sup>*VA, Boston, Massachusetts, USA*

The Boston Marathon bombing resulted in considerable disruption and traumatic exposure to children, adolescents, and adults throughout the Boston community and surrounding areas. In the wake of this tragic event and the subsequent manhunt and shelter-in-place order, numerous organizations and independent researchers moved to provide relief to the residents of Boston and surrounding communities, explore the effects of the large-scale terror attack on major domains of individual and family functioning, and evaluate various methods by which parents and professionals might intervene and address these events in their aftermath. Four clinical researchers present findings concerning risk and protective factors such as direct exposure, interference in subsequent memory recall, and parental communication following the events on post-event functioning in children, adolescents, and emerging adults. Results indicate significant differences in each of these distinct areas' effects on individuals' post-event response. Presenters discuss limitations and implications on the growing understanding of trauma and post-traumatic stress and functioning in the field, as well as community intervention and parenting.

**Symposium**  
**Saturday, November 8**  
**01:30 PM to 02:45 PM**  
**Versailles**

### **Attack-Related Family Discussions and Children's Mental Health Following the Boston Marathon Bombing**

(Global, Acute-Comm/Vio-Global-Terror, Child/Adol, M, Industrialized)

**Carpenter, Aubrey, MA<sup>1</sup>**; Elkins, R. Meredith, MA<sup>1</sup>; Kerns, Caroline, MA<sup>1</sup>; Chou, Tommy, MA<sup>2</sup>; Dantowitz, Annie, MA<sup>1</sup>; Comer, Jonathan, PhD<sup>2</sup>

<sup>1</sup>*Boston University, Boston, Massachusetts, USA*

<sup>2</sup>*Oakland University, Miami, Florida, USA*

Research suggests anywhere from 20-90% of youth develop post-traumatic stress (PTS) symptoms after disaster exposure (see Furr, Comer, Edmunds & Kendall, 2010), but less is known about how post-disaster family processes, such as event-related discussions, might mitigate child outcomes. The 2013 Boston Marathon bombing and manhunt had a vast psychological impact on area families (Comer et al., under review). The present study assessed key links between immediate family discussions about this community trauma and child mental health outcomes. Boston-area parents of children completed an assessment of child PTS (UCLA PTSD RI) and total child difficulties (SDQ) across the first six months post-attack (N=460). Initial findings suggest that children whose parents informed them about the attack, rather than their children learning about it elsewhere, showed fewer PTS symptoms ( $r=-.14$ ,  $p=.002$ ) and total difficulties ( $r=-.132$ ,  $p=.005$ ), whereas the opposite was true among children whose parents asked them if they were angry (PTS:  $r=.18$ ,  $p<.001$ ; difficulties:  $r=.13$ ,  $p=.008$ ). Children also showed lower PTS when parents acknowledged their own feelings about the attack with their child ( $r=-.096$ ,  $p=.042$ ) and expressed confidence about their child's safety ( $r=-.17$ ,  $p<.001$ ). Findings will be discussed in terms of how parents may most effectively help children process community traumas.

**Symposium**  
**Saturday, November 8**  
**01:30 PM to 02:45 PM**  
**Versailles**

### **College Student Adjustment to the Boston Marathon Bombings**

(Global, Anx-Depr-Terror, Adult, M, Industrialized)

**Felix, Erika, PhD<sup>1</sup>**; Green, Jennifer, PhD<sup>2</sup>; Holt, Melissa, PhD<sup>2</sup>

<sup>1</sup>*University of California, Santa Barbara, Santa Barbara, California, USA*

<sup>2</sup>*Boston University, Boston, Massachusetts, USA*

The Boston Marathon terror attack greatly affected the city's university population, in part because one marathon victim was a university student and the police officer killed served at a university. A study of bullying and adjustment over the first year of college was in its second wave of data collection when the terror attack occurred, providing a unique opportunity to explore predictors and correlates of post-attack distress among first-year university students. A follow-up survey measuring exposure to the events was completed by 57 freshmen (95% female; 67% White). About 41% of students were at the marathon at the time of the attack. Hierarchical multiple regression models were used to identify correlates of post-attack distress. Attack exposure ( $\beta=.30$ ,  $p<.05$ ) was related to post-attack depression symptoms after controlling for demographics and pre-attack depression symptoms. Exposure approached significance ( $\beta=.26$ ,  $p<.06$ ) for post-attack anxiety symptoms after controlling for demographics and pre-attack anxiety. Significant interactions indicated that those with high pre-attack

psychopathology and high exposure had heightened post-attack distress. Pre-attack self-efficacy and college support were not related to post-attack distress. Instead, the emotion regulation strategies of catastrophizing and positive refocusing were significantly related to post-attack distress.

## **Symposium**

**Saturday, November 8**

**01:30 PM to 02:45 PM**

**Versailles**

### **Reconsolidation Interference of Trauma-Related Memories of the Boston Marathon Bombing**

(Clin Res, Acute-Clin Res-Cog/Int-Terror, Adult, M, N/A)

**Kredlow, Maria Alexandra, MA**; Jain, Sonal, Undergraduate; Otto, Michael, PhD  
*Boston University, Boston, Massachusetts, USA*

Research indicates that reactivated memories go through a process of reconsolidation, during which they are malleable and susceptible to modification. Strategies targeting the interruption of memory reconsolidation hold the promise of weakening fear memories that underlie traumatic stress disorders. Recently, reconsolidation studies have moved from the animal lab to human investigations. Schwabe & Wolf (2009) demonstrated that having adults read a story immediately after a verbal memory reactivation can interfere with the reconsolidation of neutral, but not negative, autobiographical memories. Yet, the emotional content of the interference was not manipulated. To address this limitation, the current study examined whether a negative interference story can block the reconsolidation of a negative affective memory - specifically, memories of the Boston Marathon bombing. Boston-area undergraduates (n=94) wrote about their personal memories of the bombing; were randomized to receive interference with a negative, positive, neutral, or no story; and were tested for memory recall one week later. Comparisons between conditions with relevant covariates, revealed a significant interfering effect for a negative story, relative to no story, on recall ( $F(1,41)=4.33$ ,  $p=.044$ ,  $d=0.62$ ). This finding indicates that reconsolidation interference effects can be achieved for trauma-related memories.

## **Symposium**

**Saturday, November 8**

**01:30 PM to 02:45 PM**

**Versailles**

### **Parents' Responses to the Boston Marathon Bombing: Communication, Support and Meaning-Making**

(Global, Acute-Comm/Int-Train/Ed/Dis, Lifespan, M, Industrialized)

**Moore, Cynthia, PhD<sup>1</sup>**; Gorrindo, Tristan, MD<sup>1</sup>; Pokela, Julie, PhD<sup>2</sup>; Steblea, Ingrid, BA<sup>2</sup>; Rauch, Paula, MD<sup>3</sup>

<sup>1</sup>*Massachusetts General Hospital, Harvard Medical School, Boston, Massachusetts, USA*

<sup>2</sup>*Market Street Research, Northampton, Massachusetts, USA*

<sup>3</sup>*Mailman School of Public Health at Columbia University and SUNY-Downstate Medical Center, Boston, Massachusetts, USA*

The 2013 Boston Marathon explosions and subsequent shelter-in-place order for nine Boston communities prompted a charitable foundation to request educational materials focused on supporting children following a community crisis. To tailor materials to community needs, we engaged Market Street Research to conduct a telephone survey asking about parent and child distress, communication about the events, supports for children, parenting challenges, and meaning making. Participants were 400 parents with children aged 4-19 years, living in towns affected by the

lockdown (70% women, 72% Caucasian, median age of 48 years). 23% of parents reported child's distress lasting up to a month; 6% endorsed a child's ongoing distress 9 months later. Two-tailed difference of proportion tests indicated that parents of boys vs. girls were significantly less likely ( $p < .05$ ) to report providing them support or initiating conversation about the events, and differed in how they explained the events and parenting challenges they faced. White vs. non-white parents were significantly more likely to initiate conversations with children, and differed in how they explained the events, what suggestions they found helpful in supporting children, most challenging aspects of the event, and lessons they hoped children would learn. Implications for developing educational materials will be discussed.

## **Symposium**

**Saturday, November 8**

**01:30 PM to 02:45 PM**

**Biscayne - BIOLOGY TRACK**

## **Neurodevelopmental Mechanisms Linking Child Maltreatment to Internalizing Psychopathology: The Role of Emotion Regulation**

(Bio Med, Affect/Int-CPA-Dev/Int-Bio/Int, Child/Adol, A, Industrialized)

McLaughlin, Katie, PhD

*Harvard Medical School/Children's Hospital Boston, Boston, Massachusetts, USA*

Child maltreatment is a robust risk factor for the onset of mood and anxiety disorders not only in childhood and adolescence, but also in adulthood. Despite the consistency of evidence linking child maltreatment to internalizing disorders, there is little knowledge about the neurodevelopmental mechanisms that underlie this association. The development of effective preventive interventions requires better understanding of the specific developmental processes that are disrupted as a result of child maltreatment and how those disruptions ultimately lead to psychopathology. One possibility is that child maltreatment disrupts neural development in regions that underlie emotion regulation. We examine this possibility in this symposium using data from four studies examining the association of child maltreatment with neurobiological markers of emotion regulation. Each of these studies documents associations between child maltreatment and different aspects of emotion regulation, including atypical attention to emotional information, poor behavioral markers of emotional control, and disruptions in neural function in the context of both automatic and effortful emotion regulation processes, including response inhibition and cognitive reappraisal. Together, these studies highlight the role of emotion dysregulation as a mechanism linking child maltreatment to internalizing psychopathology.

## **Symposium**

**Saturday, November 8**

**01:30 PM to 02:45 PM**

**Biscayne - BIOLOGY TRACK**

## **Child Maltreatment and Neural Function in Systems Underlying Emotion Regulation**

(Bio Med, Affect/Int-CPA-Dev/Int-Bio/Int, Child/Adol, A, Industrialized)

McLaughlin, Katie, PhD<sup>1</sup>; Sheridan, Margaret, PhD<sup>2</sup>

<sup>1</sup>*University of Washington, Seattle, Washington, USA*

<sup>2</sup>*Harvard Medical School/Children's Hospital Boston, Boston, Massachusetts, USA*

**OBJECTIVE:** Child maltreatment is a robust predictor of internalizing disorders, but the neurodevelopmental mechanisms underlying this association remains poorly characterized. We examined the role of emotion dysregulation as a mechanism linking child maltreatment to internalizing psychopathology in adolescents. Specifically, we examined whether child maltreatment influences PFC and amygdala structure and patterns of neural function and functional connectivity between these regions during an effortful emotion regulation task. **METHOD:** A sample of 44 adolescents participated; half had been exposed to physical or sexual abuse. Adolescents completed an effortful emotion regulation task involving simple viewing of affective stimuli (look) and use of cognitive reappraisal strategies to down-regulate emotional responses (regulation). **RESULTS:** Maltreated adolescents had greater activation than controls in the amygdala and medial OFC during look trials and greater amygdala and middle frontal gyrus activation during regulation trials. Functional connectivity between the PFC and amygdala during regulation trials was associated with internalizing psychopathology. **CONCLUSIONS:** Disruptions in PFC-amygdala connectivity may make it more difficult for maltreated youths to modulate the intensity and duration of negative emotions, heightening risk for internalizing psychopathology.

## **Symposium**

**Saturday, November 8**

**01:30 PM to 02:45 PM**

**Biscayne - BIOLOGY TRACK**

### **Long-Term Neurobiological Sequelae of Childhood Abuse**

(Bio Med, Anx-CPA-CSA-Bio/Int, Adult, A, Industrialized)

**Jovanovic, Tanja, PhD<sup>1</sup>**; Cross, Dorthie, PhD<sup>1</sup>; Ely, Timothy, BS<sup>2</sup>; Guzman, Dora, BS<sup>2</sup>; Ressler, Kerry, MD PhD<sup>1</sup>; Bradley, Bekh, PhD<sup>3</sup>

<sup>1</sup>*Emory University School of Medicine, Atlanta, Georgia, USA*

<sup>2</sup>*Emory University, Atlanta, Georgia, USA*

<sup>3</sup>*Atlanta VAMC/Emory University, Decatur, Georgia, USA*

Several studies have suggested that early adverse experiences are highly correlated with the development of adult mood and anxiety disorders including post-traumatic stress disorder (PTSD) and major depressive disorder. Understanding the neurobiological correlates of childhood maltreatment is critical to delineating stress-related psychopathology. The goal of this study was examine the relationship between childhood abuse and brain activation in adulthood. We used functional magnetic resonance imaging (fMRI) during a response inhibition task that has shown deficient activation in the prefrontal cortex in PTSD subjects compared to traumatized controls. We assessed self-reported history of abuse with the Childhood Trauma Questionnaire (CTQ) and examined correlates of sexual, physical, and emotional abuse separately, as well as the total abuse score. The results showed that total CTQ scores were positively correlated with dorsal anterior cingulate activity (dACC,  $p < .01$  corrected) and negatively correlated with ventromedial prefrontal cortex activity (vmPFC,  $p < .01$  corrected), but only in the PTSD subjects and not the traumatized controls. These effects were strongest for physical and emotional abuse, but not sexual abuse. These data suggest that a history of child abuse is related to persevering altered neurobiological activity that may increase risk for development of PTSD.

## **Symposium**

**Saturday, November 8**

**01:30 PM to 02:45 PM**

**Biscayne - BIOLOGY TRACK**

### **Child Maltreatment and PTSD Interact to Predict Poor *in Vivo* Emotion Regulation and Attentional Biases for Negative Photos**

(Bio Med, CPA, Adult, A, Industrialized)

**Walsh, Kate, PhD**

*Columbia University, New York, New York, USA*

Trauma exposed individuals with post-traumatic stress disorder (PTSD) demonstrate attentional biases for traumatic stimuli. Attentional deployment is an important component of emotion regulation (ER) that is involved in the down- or up-regulation of emotional states. However, no single study has examined the role of child maltreatment and PTSD in predicting attentional biases and *in vivo* ER problems. The objective of the current study was to use observational (eyetracking) and self-report methods to assess ER among women with child maltreatment histories and PTSD. Undergraduate women (N =142) reported on childhood physical, sexual, or emotional abuse and rated pairs of negative and positive pictures depicting interpersonal content while an eyetracker measured gaze patterns. Participants also completed an emotion regulation measure anchored to the picture task. Results indicated that maltreated women with PTSD dwelled on negative interpersonal photos for longer when a positive photo also was present,  $F=5.6$ ,  $p<.01$ , and reported greater problems with *in vivo* ER when compared to women without maltreatment and PTSD,  $F=6.4$ ,  $p<.01$ . In vivo ER problems also predicted attention allocation biases. Women with child maltreatment and PTSD may have difficulties disengaging from negative stimuli possibly due to ER problems. Implications for emotion-focused therapies will be discussed.

## **Symposium**

**Saturday, November 8**

**01:30 PM to 02:45 PM**

**Biscayne - BIOLOGY TRACK**

## **Emotion Regulation in Adults with a History of Childhood Sexual Abuse**

(Clin Res, CPA-CSA, Adult, A, N/A)

**Powers Lott, Abigail, PhD<sup>1</sup>**; Jovanovic, Tanja, PhD<sup>2</sup>; Fani, Negar, PhD<sup>2</sup>; Etkin, Amit, MD PhD<sup>3</sup>; Gyurak, Anett, PhD<sup>4</sup>; Ressler, Kerry, MD PhD<sup>2</sup>; Bradley, Bekh, PhD<sup>5</sup>

<sup>1</sup>*Emory University, Atlanta, Georgia, USA*

<sup>2</sup>*Emory University School of Medicine, Atlanta, Georgia, USA*

<sup>3</sup>*Stanford University/Palo Alto VA, Palo Alto, California, USA*

<sup>4</sup>*Stanford University School of Medicine/VA Palo Alto Health Care System, Stanford, California, USA*

<sup>5</sup>*Atlanta VAMC/Emory University, Decatur, Georgia, USA*

Difficulties with emotion regulation are often found in individuals exposed to traumatic events early in life. Emotion dysregulation is also a risk factor for adult psychopathology, and appears to be an important potential mechanism by which early trauma confers lifetime risk for psychological disorders. The present study examined whether exposure to childhood sexual, physical, and emotional abuse was related to self-reported emotional dysregulation and performance on an emotional conflict regulation task within a highly traumatized minority population. Participants were recruited from general medical clinics in an urban hospital and completed several questionnaires and the behavioral task. All types of child abuse were significantly related with self-reported emotion dysregulation ( $p<.01$ ), but only sexual abuse was significantly related to task accuracy ( $p<.01$ ). In a linear regression model, childhood sexual abuse was significantly predictive of lower accuracy on the emotional conflict task ( $p<.05$ ) above and beyond the effects of adult trauma and demographic variables. These results suggest that in addition to findings with self-reported emotion dysregulation, exposure to childhood sexual abuse may also negatively affect performance on tasks measuring implicit emotion regulation.



## **Symposium**

**Saturday, November 8**

**01:30 PM to 02:45 PM**

**Sevilla - LONG-TERM EFFECTS OF CHILD TRAUMA TRACK**

## **Pathways to Healthy Postpartum Functioning among Mothers with Childhood Maltreatment Histories**

(Clin Res, CPA-Depr-Dev/Int-Gen/Int, Adult, M, N/A)

Muzik, Maria, MD<sup>1</sup>; Ford, Julian, PhD<sup>2</sup>

<sup>1</sup>*University of Michigan, Dept of Psychiatry, Ann Arbor, Michigan, USA*

<sup>2</sup>*University of Connecticut Health Center, Farmington, Connecticut, USA*

This symposium brings together an interdisciplinary group of researchers to discuss and present findings related to psychosocial and parenting functioning within a sample of mothers who experienced childhood maltreatment. Through state-of-the-art quantitative, genetic, and qualitative methods, the different presentations address unique pathways linking childhood maltreatment experiences to mothers' postpartum functioning while also taking mothers' genetic predisposition into account. Measures of postpartum functioning include mothers' symptoms of depression and PTSD, their post-traumatic change, parental bonding and competency, and resilience. Collectively, results offer insights to pathways of healthy functioning and adaptive parenting in the postpartum period for mothers with histories of childhood maltreatment.

## **Symposium**

**Saturday, November 8**

**01:30 PM to 02:45 PM**

**Sevilla - LONG-TERM EFFECTS OF CHILD TRAUMA TRACK**

## **Individual Differences in Women's Strategies for Processing Childhood Maltreatment Experiences and Associations with Postpartum Functioning**

(Clin Res, Affect/Int-CPA-Cog/Int-Health, Adult, M, Industrialized)

Simon, Valerie, PhD<sup>1</sup>; Muzik, Maria, MD<sup>2</sup>

<sup>1</sup>*Wayne State University, Detroit, Michigan, USA*

<sup>2</sup>*University of Michigan, Dept of Psychiatry, Ann Arbor, Michigan, USA*

Processing trauma is central to recovery. Healthy processing strategies help ensure that meanings derived from trauma are updated and remain adaptive as individuals and their life circumstances change. Although the transition to parenthood is a significant life change, we know little about how mothers with histories of childhood maltreatment (CM) process their abuse. Our prior work with sexually abused youth illustrates that: the need to process persists long after the abuse ends; efforts to process CM are frequently guided by unhealthy strategies; and unhealthy processing is predicted by the persistence of early negative abuse reactions and linked to adjustment problems in adolescence and early adulthood. The current study extends this work to examine relations between CM processing and recovery from PTSD and depression symptoms over the postpartum period among mothers (n=100) with histories of CM. Postpartum PTSD and depression were assessed at 4 weeks, 4 months, and 6 months postpartum. CM processing strategies (Constructive, Absorbed, Avoidant) were coded from a semi-structured trauma interview at 6 months postpartum. Results link unhealthy processing strategies to the persistence of postpartum psychopathology over the postpartum period and suggest one potential mechanism by which early CM experiences may place women at risk for postpartum psychopathology.



## **Symposium**

**Saturday, November 8**

**01:30 PM to 02:45 PM**

**Sevilla - LONG-TERM EFFECTS OF CHILD TRAUMA TRACK**

### **Positive and Negative Post-Traumatic Changes: Unique and Combined Relations with Psychosocial and Parental Functioning among Mothers with Childhood Maltreatment Histories**

(Clin Res, Anx-CPA-Depr-Dev/Int, Adult, M, N/A)

**Fava, Nicole, PhD MSW<sup>1</sup>**; Simon, Valerie, PhD<sup>1</sup>; Khan, Maria, BA<sup>1</sup>; Kovacevic, Merdijana, BA<sup>1</sup>; Smith, Erin, MA<sup>1</sup>; Muzik, Maria, MD<sup>2</sup>

<sup>1</sup>Wayne State University, Detroit, Michigan, USA

<sup>2</sup>University of Michigan, Dept of Psychiatry, Ann Arbor, Michigan, USA

Research supports the relation of childhood maltreatment (CM) with negative and positive psychosocial outcomes (e.g., psychopathology, poor parent-child relationships, increased strengths). The meanings (internalized representations of relationships, the self, and worldviews) that individuals ascribe to experiences of CM vary and likely shape one's adaptation and functioning. Few studies examine the co-occurrence of positive and negative meanings and associations with adjustment and parenting. We examined maternal perceptions of positive and negative post-traumatic changes (PTC) experienced in relation to CM with psychosocial and parenting adjustment at 6 months postpartum (N=100). Through semi-structured trauma interviews, the valence (positive, negative), type (general vs. parenting specific) and strength of PTC were coded. Positive PTC were more common than negative PTC (general: 92%; parenting-specific: 81%). Controlling for age and multiple maltreatment, positive and negative general PTC were associated with family functioning, romantic attachment style, perceived parental competency, negative self-cognitions, depression, and PTSD. Significant associations with parenting-specific PTC were limited to negative changes. Findings highlight the postpartum period as a salient time to examine abuse-related changes and their impact on psychosocial adjustment and parenting skills.

## **Symposium**

**Saturday, November 8**

**01:30 PM to 02:45 PM**

**Sevilla - LONG-TERM EFFECTS OF CHILD TRAUMA TRACK**

### **Oxytocin Receptor Gene Variation is Associated with Maternal Bonding Among Women with Childhood Maltreatment Histories**

(Practice, Chronic-Dev/Int-Gen/Int, Lifespan, M, Industrialized)

**Bocknek, Erika, PhD<sup>1</sup>**; Raveau, Hasti, MA<sup>1</sup>; Hamilton, Lindsay, BA<sup>2</sup>; King, Anthony, PhD<sup>2</sup>; Muzik, Maria, MD<sup>2</sup>

<sup>1</sup>Wayne State University, Detroit, Michigan, USA

<sup>2</sup>University of Michigan, Dept of Psychiatry, Ann Arbor, Michigan, USA

Important information from gene-environment interactions is increasingly utilized to inform parenting research with particular genotype variations implicated in patterns of risk (Francis & Meaney, 1999; Thompson et al., 2011). Though abundant research demonstrates the role oxytocin plays in parenting outcomes (Gordon et al., 2010), less is known about oxytocin receptor gene variation in regards to parenting. The current study (N=108) examines the OXTR-rs53576, a genotype SNP associated in other research with prosocial behaviors (Tost et al., 2010), in women oversampled for histories of trauma in childhood (MACY study; PI: Muzik). MACY women were likely to

experience bonding impairment with their infants due to postpartum psychopathology and the childhood maltreatment history (Muzik et al., 2013). Genetic risk status was not significantly related to maternal psychopathology. However, women without the risk-identified allele variation in rs53576 had less impaired bonding with their infants at 6-months postpartum ( $\chi^2=5.80$ ,  $p=.02$ ). The 6-months postpartum time point is a critical point in the development of the parent-child relationship and the development of the child's attachment security. Findings suggest possible genotypic capacity within the oxytocin system for resilience among women at-risk for impairment in parenting that is unrelated to presence of psychopathology.

## **Symposium**

**Saturday, November 8**

**01:30 PM to 02:45 PM**

### **Sevilla - LONG-TERM EFFECTS OF CHILD TRAUMA TRACK**

#### **Child Maltreatment History and Parenting Sense of Competence**

(Practice, CPA-CSA-Depr, Adult, M, Industrialized)

**Katsonga-Phiri, Tiamo, BA<sup>1</sup>**; Martinez-Torteya, Cecilia, PhD<sup>1</sup>; Hamilton, Lindsay, BA<sup>2</sup>; Rosenblum, Katherine, PhD<sup>2</sup>; Muzik, Maria, MD<sup>2</sup>

<sup>1</sup>*DePaul University, Chicago, Illinois, USA*

<sup>2</sup>*University of Michigan, Dept of Psychiatry, Ann Arbor, Michigan, USA*

Research reports that women maltreated during childhood have a lower sense of parenting competence. However, individual differences characterize the parenting outcomes of child maltreatment survivors. Few studies have explored moderators, or factors that shape parenting sense of competency after childhood maltreatment. This study examines the effect of childhood maltreatment, maternal depression, and maternal resilience on parenting sense of competence. We hypothesize that depression and resilience factors will moderate the relationship between childhood maltreatment and parenting sense of competency. Participants were 131 women drawn from a longitudinal study on maternal trauma and perinatal outcomes. Linear regression models revealed a significant 3-way interaction between childhood maltreatment, depression, and resilience factors. Plots created following Cohen and Cohen showed that resilience factors were not significantly associated with parenting sense of competency when depressive symptoms and maltreatment history were both low or both high. However, they protected from negative outcomes for those with either high depression levels or high maltreatment histories. Findings highlight the importance of concurrent resilience factors and mental health among childhood maltreatment survivors as predictors of better parenting sense of competence.

**Symposium**  
**Saturday, November 8**  
**01:30 PM to 02:45 PM**  
**Merrick**

## **From Community Violence to Natural Disasters: How We Can Promote the Recovery of Children and Youth**

(Prevent, Nat/Dis, Child/Adol, M, Industrialized)

Mack, Amy, PsyD  
*SAMHSA DTAC, Fairfax, Virginia, USA*

This symposium will provide findings about how children and youth are impacted by community violence and natural disasters; methods for increasing their recovery; and understanding how state policy can support effective recovery. The importance of a developmental approach to disaster response will set the context for examining the overlooked mental health needs of children and youth after a disaster. Then findings are shared regarding what protective factors helped students recover from the Virginia Tech shootings, as well as, how embracing a public health approach on campus encouraged students to resume their everyday activities. Next, methods for promoting caregiver mental health to foster supportive child-caregiver attachment relationships post-disaster in both domestic and international communities will be highlighted. Lastly, having dealt with a multitude of community violence and disasters in 2012-2013 such as the Aurora theater shooting, wildfires, and flooding in Colorado, integration of public health and behavioral health policies shaped an effective community preparedness and response efforts which in turn, helped foster recovery.

**Symposium**  
**Saturday, November 8**  
**01:30 PM to 02:45 PM**  
**Merrick**

## **Through the Eyes of the Young Child: Importance of a Developmental Approach to Disaster Response**

(Practice, Complex-Dev/Int-Nat/Dis-Terror, Child/Adol, M, N/A)

Gurwitch, Robin, PhD  
*Duke University Medical Center, Durham, North Carolina, USA*

In the aftermath of disaster, children are often cited as a special population at high-risk for challenges. However, the label “children” covers a wide age range, with significant developmental differences within this population. After disaster, the very young child may be particularly vulnerable to mental health problems. To best understand how young children may react to a disaster, it is important to take a developmental perspective. Understanding the milestones and tasks in the development of young children is essential to better understanding their reactions when impacted by disasters. A developmental perspective also provides a framework for identifying how moderating factors such as exposure, separation, loss, and caregiver functioning can effect recovery. The post-disaster mental health needs of young children may go unmet as adults generally underestimate these needs. Recognizing and understanding the interaction between child development and mental health concerns after disaster allow adults to best respond to the needs of the youngest survivors. Through such a developmental approach, identification of appropriate interventions to increase recovery and resilience in this special population is possible. The developmental distinctions in reactions and factors impacting recovery and resilience in the young child will be the focus of this presentation.

**Symposium**  
**Saturday, November 8**  
**01:30 PM to 02:45 PM**  
**Merrick**

**Resilience in the Face of Interpersonal Mass Violence: Students' Reactions to Mass Interpersonal Violence**

(Prevent, Acc/Inj-Acute-Anx-Assess Dx, Child/Adol, M, Industrialized)

**Jones, Russell, PhD**  
*Virginia Polytechnic Institute and State University, Blacksburg, Virginia, USA*

It has been well established that mass violence in the form of bombings, mall shootings, and schools shootings can produce significant and long lasting negative consequences. However, there are also reports attesting to the resilience of survivors in these situations. This presentation will highlight many of the protective factors that enabled students to move forward with their everyday lives following the occurrence of the Virginia Tech Shootings. Additionally, the positive actions of Virginia Tech administrators, faculty, staff, students, and others in the immediate and short-term aftermath of the shootings, will be highlighted. These efforts will be discussed in the context of a public health prevention framework.

**Symposium**  
**Saturday, November 8**  
**01:30 PM to 02:45 PM**  
**Merrick**

**Public Policy, Planning and Response in Colorado – Improving Child and Adolescent Recovery.**

(Social, Comm/Vio-Nat/Dis-Pub Health-Train/Ed/Dis, Prof, M, Industrialized)

**Drennen, Curt, PsyD RN**  
*Colorado Department of Public Health and Environment, Denver, Colorado, USA*

Public Policy in disaster planning and response has a direct impact on the wellbeing of adults, children and families. While research provides direct understanding of the impact of disaster on the health of children, the dissemination of that knowledge can lag behind. Therefore, as government is tasked with community preparedness for both response and recovery processes, the role of education regarding the needs, vulnerabilities and reactions following disasters or community crisis events, is critical. This talk will focus on the role of Public Health and Public Behavioral Health preparedness efforts in impacting the recovery of communities and the ability to meet the post disaster needs of children and adolescents. Utilizing the system development processes of the State of Colorado, as well as experiences stemming from the 2012 -2013 wild fires, Aurora theater shooting and the historic 2013 floods, resilience and recovery development efforts will be discussed. Topics include training in Psychological First Aid, response coalition development in conjunction with Healthcare Coalitions, community planning, and response lessons learned.

**Symposium**  
**Saturday, November 8**  
**01:30 PM to 02:45 PM**  
**Merrick**

**Caregiver Mental Health & Child and Adolescent Resilience**

(Commun, Commun-Comm/Vio-Fam/Int-Nat/Dis, Child/Adol, M, Global)

**Fox, Judith, PhD**

*University of Denver, Denver, Colorado, USA*

The primary role of positive attachment relationships in psychological health throughout the life span has been clearly substantiated in the developmental, social and clinical psychology literature (Sroufe, 2005). These are critical relational ties between caretaker and child that provide such functions as safety and emotional security, protection, reduction of distress in fear-arousing situations, regulation of emotion, affiliation and comfort. In post-trauma and disaster contexts, child and adolescent resilience will be discussed as promoted by positive attachment relationships with caregivers (Betancourt & Khan, 2008). Research across a wide array of traumatic stressors suggests a relationship between caregiver psychological functioning and children's immediate and future psychological adaptation. The ways in which caregiver functioning is critical to promoting positive attachment relationships, family meaning-making, and connection to community supports will be discussed. Post-disaster, child mental health outcomes domestically and internationally are described as highly impacted by caregiver mental health, and caregiver mental health affects both the child's immediate and ongoing experience of support and protection. Intervention efforts focused on optimizing caregiver mental health and caregiver-child attachment relationships are discussed.

## **Panel Presentation**

**Saturday, November 8**

**01:30 PM to 02:45 PM**

**Gusman/Tuttle**

### **Secondary Traumatic Stress and Resilience for Trauma Therapists: a Developmental Perspective**

(Practice, Clin Res-Dev/Int-Self-Care, Child/Adol, I, Industrialized)

**Rogers, Karen, PhD<sup>1</sup>; Orliss, Micah, PhD<sup>2</sup>; Park, Elizabeth, PsyD<sup>2</sup>**

<sup>1</sup>*University of Southern California Keck School of Medicine, Los Angeles, California, USA*

<sup>2</sup>*Children's Hospital Los Angeles - University of Southern California, Los Angeles, California, USA*

Secondary Traumatic Stress (STS), emotional duress that results when an individual hears about the firsthand trauma experiences of another (Cieslak, et al. 2014) is a risk for trauma clinicians at all stages in their careers. Research literature suggests that early career clinicians may be most vulnerable to the impact of STS (Craig and Sprang, 2010). However, changes in life circumstances, adult development, and job parameters may bring about unexpected STS in experienced clinicians as well. The empirical literature about effective management of risk for STS identifies protective factors including peer support, and personal and organizational coping strategies (Cohen and Collens, 2012, Newell and MacNeill, 2010). More recent literature also identifies the potential for trauma clinicians to experience positive outcomes from indirect exposure to trauma. In this panel, presenters at different career stages as trauma clinicians will discuss the interface of science and practice in their personal experience of STS and vicarious resilience in their professional roles. Challenges and strategies for a trauma psychology fellow, an early career supervisor, and a 20+ year veteran of the field will be shared as examples of the practical implications of the literature on STS.

## **Workshop Presentation**

**Saturday, November 8**

**01:30 PM to 02:45 PM**

**Bayfront A - CHILD TRACK ONE**

### **Screening and Assessing Trauma in Infants and Young Children**

(Commun, Clinical Practice, Child/Adol, I, N/A)

**Grady, Jennifer, MSW<sup>1</sup>; Rosenblum, Katherine, PhD<sup>2</sup>; Paris, Ruth, PhD<sup>3</sup>; Norona, Carmen, MSW<sup>4</sup>**

<sup>1</sup>*National Center for Child Traumatic Stress, Durham, North Carolina, USA*

<sup>2</sup>*University of Michigan, Dept of Psychiatry, Ann Arbor, Michigan, USA*

<sup>3</sup>*Boston University, Boston, Massachusetts, USA*

<sup>4</sup>*Boston Medical Center, Boston, Massachusetts, USA*

How do we implement developmentally-appropriate, culturally sensitive screenings and assessments of traumatized infants and young children? NCTSN members have contributed to a deepening appreciation and awareness of the impact of trauma on 0-6, and consequently the need to identify sensitive, feasible, and effective screening and assessment tools. Those working with infants and young children have searched for useful and practical measures to guide our work and to demonstrate the efficacy of our trauma-informed interventions. We will begin by summarizing our findings of two NCTSN surveys of 0-6 screening and assessment practices. Followed by the facilitation of an interactive discussion: What are the key elements of a developmentally-appropriate trauma-informed assessment for very young children? How do we best engage and assess our clients at intake in order to develop effective treatment plans? Are existing tools culturally and/or linguistically sensitive and relevant for the populations we serve? Can we modify the instruments to make them more relevant or appropriate for our populations? It will highlight the work of NCTSN sites and emphasize the importance of developmentally-

appropriate, culturally-sensitive trauma informed assessment and evaluation. Participants will have the opportunity to learn about the variety of methods being employed to engage, screen and assess 0-6

## **Workshop Presentation**

**Saturday, November 8**

**01:30 PM to 02:45 PM**

**Bayfront B - CHILD TRACK TWO**

**Strategies to Empower and Engage Families to Stop the Cycle of Violence:**

**Challenges Faced in the Treatment of Child Physical Abuse**

(Practice, CPA-Clin Res-Clinical Practice-Fam/Int, Lifespan, M, N/A)

**Runyon, Melissa, PhD**

*Rowan University, Stratford, New Jersey, USA*

Combined Parent-Child Cognitive Behavioral Therapy (CPC-CBT; Runyon & Deblinger, 2013), an evidence-based therapy developed to meet the needs of families who are at-risk for child physical abuse (Runyon, Deblinger & Steer, 2010), focuses on healing children from trauma, enhancing positive parenting and parent-child interactions, reducing the risk of future abuse and strengthening family relationships. This workshop will offer clinicians strategies to engage and motivate caregivers who use physical maltreatment. The treatment developer (a CPC-CBT clinician and researcher) will present barriers to engagement and evidence-based strategies (Mary McKay) for overcoming these barriers. Key CPC-CBT strategies will be described for engaging families and addressing frequently encountered clinical challenges (e.g., lack of engagement/ willingness to change, defensiveness about how to parent the child, anger, and abuse minimization). Strategies include caregiver's disclosure of referral incident, a consequence review, validation of caregiver perspective, highlighting strengths based on cultural values and beliefs, and using the child's trauma narrative during the abuse clarification process to enhance parental empathy and responsibility. Audience participation will occur with the use of interactive exercises, brainstorming, role plays, small group problem-solving, and clinical examples.

## **Oral Paper Presentation**

**Saturday, November 8**

**01:30 PM to 02:45 PM**

**Brickell - MILITARY TRACK**

## **The Role of Childhood Trauma in Military Populations**

**Improving PTSD Treatment Outcomes for Veterans by Attending to Childhood Abuse: A Synthesis of two Studies**

(Practice, CPA-CSA-Clin Res-Mil/Vets, Adult, M, Industrialized)

**Whelan, John J., PhD, Cpsych**

*Private Practice, St. Halifax, Nova Scotia, Canada*

In the first study, data for 108 Canadian Forces veterans were reviewed to explore relationships between untreated developmental abuse and PTSD relapse. Responses to the Detailed Assessment of PTSD Scale and the Personality Assessment Inventory were analyzed for 57 previously treated veterans and 51 untreated veterans. PTSD relapse following exposure-based therapy was related to chronic substance abuse and untreated developmental abuse. These findings led to the development of the Trauma Relapse Prevention Group (TRPG), described in the second study.



The TRPG is an 8-week, outpatient, and developmentally-focused intervention focusing on cognitive and emotional processing of traumatic events across the lifespan aimed at expanding capacity for emotional tolerance and challenging long-held self-schemas. Analysis of the Posttraumatic Checklist (PCL-C), Brief Symptom Inventory (BSI), and the Quality of Life Inventory (QOLI), collected at baseline, six months, 12 months, and 3 years indicated improvements across the three domains. The program had a 96% retention rate. The results provide support for the program's developmental and relational focus and its emphasis on integration of emotional-somatic-cognitive functioning with active support from other veterans. Monthly follow-up sessions provide ongoing support and group cohesion outside of the treatment setting.

### **Oral Paper Presentation**

**Saturday, November 8**

**01:30 PM to 02:45 PM**

**Brickell - MILITARY TRACK**

### **Effects of Child Abuse on Combat-Related PTSD Diagnosis and Symptoms**

(Clin Res, Assess Dx-CPA-CSA-Mil/Vets, Adult, M, N/A)

**Reddy, Madhavi, PhD;** Shea, M. Tracie, PhD

*Alpert Medical School of Brown University, Providence, Rhode Island, USA*

Returning Iraq and Afghanistan war veterans are at increased risk for psychiatric distress including post-traumatic stress disorder (PTSD). Frequency and severity of combat exposure is often thought to be the precipitant for PTSD upon return home. However, combat veterans with PTSD often have a history of child abuse that may place them at increased risk for the development of PTSD after deployment. The present study examined the contribution of emotional, physical, and sexual abuse in childhood and combat trauma in adulthood to the development of PTSD after deployment in a sample of 190 Iraq and Afghanistan war veterans. Hierarchical logistic regression found that combat exposure and childhood sexual abuse significantly predicted a diagnosis of PTSD. The odds of being diagnosed with combat-related PTSD were 2.86 times higher if sexual abuse was experienced in childhood after controlling for severity of combat exposure. Additionally, childhood sexual abuse was significantly associated with avoidance/numbing symptoms but not re-experiencing or hyperarousal symptoms. Physical or emotional abuse was not significantly associated with specific symptoms of PTSD. These findings will be discussed in relation to theories of PTSD development and clinical implications will be presented.

### **Oral Paper Presentation**

**Saturday, November 8**

**01:30 PM to 02:45 PM**

**Brickell - MILITARY TRACK**

### **The Effects of Childhood Abuse and Combat Experiences on Mental Health Outcomes and Resilience in a Sample of Treatment-Seeking Service Members**

(Clin Res, CPA-CSA-Health-Mil/Vets, Adult, M, N/A)

**Bhakta, Jagruti, PhD;** Miggantz, Erin, PhD; Ram, Vasudha, MPH; Gerard, Steven, BA; Fesperman, Susan, MPH; Webb-Murphy, Jennifer, PhD, ABPP

*Naval Center for Combat and Operational Stress Control (NCCOSC), San Diego, California, USA*

While research has identified combat exposure (CE) as a risk factor for mental health problems in US service members, recent studies have examined the effects of pre-military factors on mental health such as childhood abuse (CA). CA is associated with negative mental health outcomes including depression, suicidal ideation (SI), PTSD and sleep disturbance. The combined impact of CA and CE is not well understood and warrants further

exploration. Data from the Navy's Psychological Health Pathways program were analyzed to examine the impact of CA, deployment status, and CE on patients' mental health ( $n=1,891$ ). ANOVA and  $t$ -tests revealed that service members with CA ( $n=690$ ) reported more PTSD(PCL-M), depression(PHQ-9), sleep disturbance(PSQI), disability(SDS), lower resilience(RSES) and more frequent SI(PHQ-9-item-9) than those without CA ( $n=1,201$ ,  $ps<.05$ ). Deployers with CA and CE ( $n=427$ ) reported higher PTSD symptoms ( $p<.01$ ), yet less frequently endorsed SI than deployers with only CA ( $n= 57$ ,  $p<.05$ ). Deployers with CA and CE also reported more depression symptoms than those with only CE ( $n=862$ ,  $p<.01$ ). Results suggest that CA is associated with depression and SI while CE is associated with PTSD and may protect against SI. Screening military recruits for CA is imperative in order to better identify and address mental illness and increase the readiness of service members.

## **Oral Paper Presentation**

**Saturday, November 8**

**01:30 PM to 02:45 PM**

**Brickell - MILITARY TRACK**

### **Childhood Trauma and PTSD Treatment Outcomes in Veterans**

(Practice, CPA-CSA-Clinical Practice-Mil/Vets, Adult, M, Industrialized)

**Miles, Shannon, PhD<sup>1</sup>; Thompson, Karin, PhD<sup>2</sup>**

<sup>1</sup>*Michael E. DeBakey VA Medical Center; Baylor College of Medicine, Houston, Texas, USA*

<sup>2</sup>*Michael E. DeBakey VA Medical Center, Houston, Texas, USA*

The US Department of Veterans Affairs (VA) has implemented broad training in evidence-based psychotherapy for PTSD in order to best serve veterans with military-related trauma. However, veterans seeking PTSD treatment experience an average of 4.7 lifetime traumas (Eftekhari, et al., 2014), allowing for the possibility that pre-military traumas affect treatment outcomes. Childhood trauma is an important consideration because it is associated with increased depressive symptoms, suicidal ideation (Youssef, et al., 2013), and emotional dysregulation (Cloitre, et al., 2009). We examined a PTSD clinic that provides cognitive processing therapy (CPT) and prolonged exposure (PE) as the treatments of choice for Veterans. Veterans ( $N=211$ ) chose individual CPT or PE (46%), group treatment (17%), non-trauma treatment (15%), or no treatment (22%). Of the veterans who completed individual CPT or PE 26% experienced childhood trauma, as compared to 19% of veterans who chose not to initiate CPT/PE and 60% veterans who dropped out of CPT/PE,  $\chi^2(2, N=119)=15.04$ ,  $p<.00$ . Childhood interpersonal traumas were the most common pre-military trauma for veterans who dropped out of CPT/PE. Veterans with childhood trauma may have difficulty remaining in trauma-focused psychotherapy and may benefit from interventions addressing resilience and emotion regulation in the context of trauma-focused treatment.

**Oral Paper Presentation**  
**Saturday, November 8**  
**01:30 PM to 02:45 PM**  
**Trade**

## **Global Studies on Traumatized Children**

### **Interpersonal Trauma In Kenyan Adolescents: A Culturally Grounded Model**

(Global, Chronic-Complex-Global, Child/Adol, I, E & S Africa)

**Friis, Elsa, Doctoral Student;** Puffer, Eve, PhD  
*Duke University, Durham, North Carolina, USA*

There is a growing recognition of the need for a developmentally appropriate diagnosis for children and adolescents with complex forms of post-traumatic dysregulation. Increasing evidence supports Developmental Trauma Disorder (Van der Kolk, 2005) may fill this gap (D'Andrea et al., 2012) and further scientific field-testing is warranted. However, research is also needed to evaluate the transcultural applicability of Developmental Trauma Disorder. The current study is a qualitative investigation to develop a culturally grounded model of interpersonal trauma in Kenyan adolescents. Fifteen focus groups were conducted in three ethnically diverse communities surrounding Eldoret, Kenya with adolescents ages 12 to 18 (n= 67) and caregivers (n=54). Focus Group participants identified community leaders and providers and three additional focus groups were conducted with these key informants (n=28). A grounded theory approach was used for data collection and analysis. From this investigation it is apparent that adolescents who experience chronic interpersonal trauma in these communities experience dysregulation symptoms not captured by the current diagnosis of PTSD. The impact of rampant poverty, martial conflict, caregiving norms, favoritism of children and HIV stigma are discussed. Deviations from DTD are discussed.

**Oral Paper Presentation**  
**Saturday, November 8**  
**01:30 PM to 02:45 PM**  
**Trade**

### **Age of Trauma Exposure and Risk of PTSD among Cambodian Genocide Survivors**

(Prevent, Comm/Vio-Dev/Int-Surv/Hist-Civil/War, Child/Adol, M, E Asia & Pac)

**Sonis, Jeffrey, MD MPH<sup>1</sup>;** Williams, Nathalie, PhD(c)<sup>2</sup>; Hean, Sokhom, PhD<sup>3</sup>; de Jong, Joop, PhD<sup>4</sup>; Gibson, James, PhD<sup>5</sup>

<sup>1</sup>*University of North Carolina at Chapel-Hill, Chapel Hill, North Carolina, USA*

<sup>2</sup>*University of Washington, Seattle, Washington, USA*

<sup>3</sup>*Center for Advanced Study, Phnom Penh, Cambodia*

<sup>4</sup>*Vrije Universiteit, Amsterdam, Netherlands*

<sup>5</sup>*Washington University in St Louis, St Louis, Missouri, USA*

There are conflicting data on the effect of age of exposure to trauma on adult mental health. Although some have reported that trauma exposure during childhood, compared to exposure during adolescence, is associated with higher risk of adult PTSD, others have reported opposite findings. The purpose of this presentation is to report the effects of age of exposure to trauma during the Khmer Rouge (KR) era on current adult PTSD and depression in a national cohort in Cambodia. We conducted a three-wave national longitudinal study in Cambodia to assess Cambodians' responses to the KR Tribunal between 2009 and 2012; the current analyses are part of that larger study. Current (one-month) PTSD was measured with the World Health Organization Composite International Diagnostic

Interview and depression was measured with the Hopkins Symptom Checklist-25. Age group during exposure to Khmer Rouge era trauma was characterized as childhood (4 – 10 years), young adolescence (11 – 14), older adolescence (14-17) and adulthood (18+). In this presentation, we will report the effect of age group during KR-trauma exposure, the severity of KR-trauma and the interaction between age group and severity of trauma on risk of current PTSD and depression. Findings will help to elucidate whether there is a “sensitive” time period of increased risk during childhood/adolescence.

## **Oral Paper Presentation**

**Saturday, November 8**

**01:30 PM to 02:45 PM**

**Trade**

### **Abuse and Neglect in Adolescents of Jammu, India: The Role of Gender, Family Structure, and Parental Education**

(Assess Dx, CPA-CSA-Global-Pub Health, Child/Adol, A, S Asia)

**Charak, Ruby, MA PhD Student;** Koot, Hans, PhD

*VU University, Amsterdam, North Holland, Netherlands*

Studies on child abuse and neglect from the developing nations are scarce and a reason for that is the lack of standardized measures. The present study aimed to assess the factor structure of the Childhood Trauma Questionnaire (CTQ; Bernstein & Fink, 1998), and used it to describe the prevalence of abuse and neglect in Indian adolescents, and its associations with gender, family structure (nuclear vs. joint), and level of parental education. Participants were 702 adolescents from Jammu, India in the age range of 13-17 years (41.5% female). We found acceptance for a four-factor intercorrelated model for the CTQ with emotional abuse, physical abuse, sexual abuse, and neglect (5 emotional neglect and 2 physical neglect items) factors following a confirmatory factor analysis [CFA; (Y-B  $\chi^2$  (203, N=702)=439.24, CFI/TLI=0.94/0.93, RMSEA=0.03, SRMR=0.04)]. Forty one to sixty one percent of adolescents reported maltreatment which is higher in comparison with CTQ based studies from the West. Analysis of CFA with covariates (MIMIC model) indicated that males and adolescents of less educated mothers' and from joint families reported higher maltreatment, and sexual abuse, respectively, while fathers' education level was not associated with maltreatment. Clinical and legislative implications of these findings are highlighted.

## **Oral Paper Presentation**

**Saturday, November 8**

**01:30 PM to 02:45 PM**

**Trade**

### **Influence of Age at Exposure to Violence on PTSD Symptom (PTSS) Emergence from Middle Childhood to Early Adulthood in Post-Genocide Rwanda**

(Prevent, Complex-Death-Grief-Civil/War, Child/Adol, M, E & S Africa)

**Neugebauer, Richard, PhD, MPH**

*Columbia University and New York State Psychiatric Institute, New York, New York, USA*

Studies examining the influence of age at time of exposure to violence on development of PTSD symptoms typically employ samples with narrow age ranges and subjects with widely varying time intervals between exposure and symptom measurement. In a national trauma survey (n=942), conducted in Rwanda approximately 18 months after the 1994 genocide subjects were randomly sampled from schools and categorized as : 8-10 (n= 8), 11-13 (n= 119), 14-16 (n= 470) and 17-19 (n=343) years of age at time of interview. Exposure to violence was measured with a Checklist; levels of DSM-IV PTSS with an expanded Impact of Events Scale. Results are reported as observed

means and adjusted differences in means between groups, (with the two youngest groups merged into ages 8-13). The mean level of PTSS in the overall sample was 43.8 (14.8 SD). Mean score among groups 6.5-11.5, >11.5-14.5 and >14.5-17.5 years of age at time of exposure were 39.8 (16.2), 44.4 (14.6) and 44.4 (14.2), respectively. In adjusted analyses using linear regression, means for the two older groups were significantly greater than the means for the youngest group, 3.7 (95% CI 1.1-6.3),  $p < .005$  and 4.2 (95% CI 1.5- 6.9)  $p < .002$ , respectively. The group under age 13 at time of exposure was significantly less symptomatic than older youth when assessed 18 months post-conflict.

## **Oral Paper Presentation**

**Saturday, November 8**

**01:30 PM to 02:45 PM**

**Flagler**

## **The Role of Schools, Communities and Web-Based Training after Trauma**

### **Can a Natural Disaster Increase the Risks of Suicide Attempts and Psychiatric Disorders in Children and Adolescents? A 5-Year Matched Cohort Study**

(Bio Med, Nat/Dis, Child/Adol, M, Industrialized)

**Arnberg, Filip, PhD<sup>1</sup>**; Gudmundsdottir, Ragnhildur, MSc<sup>2</sup>; Valdimarsdottir, Unnur, PhD<sup>3</sup>

<sup>1</sup>*Uppsala University, Uppsala, Sweden*

<sup>2</sup>*Center of Public Health Sciences, University of Iceland, Reykjavik, Iceland*

<sup>3</sup>*University of Iceland, Reykjavik, Iceland*

This presentation provides data from a study aimed to determine whether a tourist population of Swedish children and adolescents repatriated from the 2004 Southeast Asian tsunami experienced increased risks of suicide attempts and psychiatric disorders. We matched 3742 children and adolescents repatriated from Southeast Asia with 320,828 unexposed children on sex, age, and parental socioeconomic status. Data on psychiatric diagnoses and suicide attempts were retrieved through national patient registers. We used conditional Cox regression models and adjusted for pre-tsunami psychiatric disorders in the participants and their parents. We found no difference in the overall risk of psychiatric diagnoses between exposed and unexposed children during five years after the disaster. However, exposed children had a higher risk of suicide attempts with uncertain intent and of adjustment disorders, primarily during the first three months after the tsunami. Conversely, we noted a slightly lower risk of depressive and other anxiety disorders. In summary, these data clearly suggest that a disaster such as the tsunami can increase the risk of severe psychopathology in a pediatric population despite generally benign circumstances, and point to reckless or self-destructive behavior as a serious risk in young trauma survivors.

## **Oral Paper Presentation**

**Saturday, November 8**

**01:30 PM to 02:45 PM**

**Flagler**

### **An Evaluation of a School-Based Psychoeducational Program Teaching Adolescents to Cope with Traumatic Stressors**

(Clin Res, Clin Res-Commun-Prevent, Child/Adol, M, Industrialized)

**Holt, Samantha, MA Student;** Ghoul, Assia, BA; Hassan, Sarah, MA Student; Bonadio, Anthony, MA Student; Donnelly, William, PhD; Dubow, Eric, PhD  
*Bowling Green State University, Bowling Green, Ohio, USA*

The present study examined the efficacy of Coping 10.1, a school-based preventive intervention designed to provide psychoeducation about traumatic stress and promote adolescents' knowledge and utilization of adaptive coping and problem-solving skills. Evidence-based and trauma-informed practices were tailored to generate a 12-session curriculum designed to teach physical relaxation, positive distraction, emotional expression and regulation, social support, and cognitive coping. These skills were applied to six traumatic stressors: community violence, family violence, family mental illness and substance abuse, discrimination, poverty, and traumatic loss. Two hundred nineteen tenth grade students from a career-technical school were assigned to an immediate- (n = 169) or delayed-intervention group (n = 50). Students completed pre- and post- evaluations assessing their self-efficacy with implementing adaptive coping skills and the frequency with which they reported using targeted coping strategies. Students who received the program demonstrated significant pre-post increases in self-reported emotional expression, emotional regulation, positive distraction, and cognitive coping strategies. These results suggest that Coping 10.1 serves as an important step toward developing and empirically evaluating a universal standardized intervention for youth experiencing traumatic stressors.

## **Oral Paper Presentation**

**Saturday, November 8**

**01:30 PM to 02:45 PM**

**Flagler**

## **Evidence Based care for Trauma Arising from Abuse and Neglect in the Child and Family Services Sector in Australia.**

(Clin Res, CPA-CSA-Chronic-Comm/Int, Lifespan, M, Industrialized)

O'Donnell, Meaghan, PhD<sup>1</sup>; Lau, Winnie, PhD<sup>1</sup>; Nathan, Alkemade, PhD<sup>2</sup>; **Nursey, Jane, Senior Clinical Neuropsychologist<sup>3</sup>**; Mildon, Robyn, PhD<sup>4</sup>; Wade, Catherine, PhD<sup>4</sup>

<sup>1</sup>*Australian Centre for Posttraumatic Mental Health, University of Melbourne, Carlton, Victoria, Australia*

<sup>2</sup>*ACPMH, University of Melbourne, Melbourne, Victoria, Australia*

<sup>3</sup>*University of Melbourne, East Melbourne, Victoria, Australia*

<sup>4</sup>*Parenting Research Centre, East Melbourne, Victoria, Australia*

Children and young people accessing support through child and family service organisations in Australia have frequently been exposed to traumatic events such as abuse and neglect. However, the extent to which services deliver evidence based, trauma-informed care to their clients is unknown. This study aimed to 1) review the evidence on methods to improve outcomes for children exposed to trauma through abuse and neglect; 2) clarify the degree to which evidence based approaches were being used within the sector; and 3) identify factors that influence the uptake of evidence based approaches in the sector. A mixed methods approach was used including a rapid evidence assessment (REA) to review the literature on programs, service models, and systems of care targeted at improving outcomes for children subjected to abuse and neglect; a practitioner survey to identify approaches being used by practitioners in the sector and; consultations with organisational leaders to examine factors that influence the uptake of evidence based approaches. Ninety-six approaches were identified and rated according to categories of empirical support; 293 children and family service workers completed the on-line survey and 9 managers from the sector were interviewed. Study results will be presented and implications for trauma-informed care, policy development and practitioner training will be discussed.

**Oral Paper Presentation**  
**Saturday, November 8**  
**01:30 PM to 02:45 PM**  
**Flagler**

**A New Approach to Training and Education in the Treatment of Childhood and Complex Trauma within the Veterans Health Administration: Survey Results from an Exclusively Web-Based Training Initiative**

(Train/Ed/Dis, Chronic-Complex-Pub Health-Mil/Vets, Prof, M, Industrialized)

Garovoy, Natara, PhD, MPH<sup>1</sup>; Jackson, Christie, PhD<sup>2</sup>; Cloitre, Marylene, PhD<sup>3</sup>

<sup>1</sup>VA Palo Alto Health Care System, Menlo Park, California, USA

<sup>2</sup>VA, New York, New York, USA

<sup>3</sup>National Center for PTSD-Dissemination and Training Division, Menlo Park, California, USA

This paper addresses a new approach to meeting training needs of mental health providers within the Veterans Health Administration (VHA) to treat childhood and complex trauma among women veterans. The clinical issues related to complex trauma are relevant for women veterans who are at risk for cumulative trauma exposures, including early childhood and subsequent combat or military sexual trauma. This paper discusses an innovative, exclusively web-based training (didactic webinar + live web-based case consultation) in Skills Training in Affective and Interpersonal Regulation (STAIR) (Cloitre, Cohen, & Koenen, 2006) made available nationally for VHA mental health providers. Data from an ongoing assessment of the first 100 providers to participate in this training initiative will be presented. Results will include providers' reactions to the training method, the effectiveness of the web-based training environment, changes in perceived competency in treatment delivery, and the applicability of STAIR in VHA mental health providers' current clinical practices. This paper will conclude with a data-driven discussion of the usefulness and scalability of this new advancement in education and training, particularly as it relates to large health care systems, and systems with patient populations similarly at risk for cumulative trauma exposures.



# CONCURRENT SESSION 12

## Panel Presentation

Saturday, November 8

03:00 PM to 04:15 PM

## Chopin - SPANISH TRACK

*Presented in Spanish with simultaneous translation to English*

### **Un Enfoque Multidisciplinario del Tratamiento de Trauma para Refugiados y Desplazados Internos (A Multidisciplinary Approach to Address Trauma among Refugees and Internally Displaced Persons)**

(Global, Comm/Int-Global-Rights-Refugee, Lifespan, M, Global)

**Espinel, Zelde, MD, MA, MPH<sup>1</sup>; Shultz, James, PhD<sup>1</sup>; Espinola, Maria, PsyD<sup>2</sup>; Aboul-Hosn, Sara, PsyD<sup>3</sup>; Campbell, Jason, PhD<sup>4</sup>**

<sup>1</sup>*University of Miami Miller School of Medicine, Miami, Florida, USA*

<sup>2</sup>*Boston University School of Medicine, Boston, Massachusetts, USA*

<sup>3</sup>*VA Medical Center, New York, New York, USA*

<sup>4</sup>*Nova Southeastern University, Fort Lauderdale, Florida, USA*

Globally, an estimated 43.3 million people have been forcibly displaced due to armed conflict and human rights violations; the vast majority are children, women, and elderly adults. Refugees and internally displaced persons (IDPs) are disproportionately impacted by traumatic experiences including torture, war-related violence, and sexual assaults that precipitate expulsion from their homelands. Separated from home, possessions, and community, forced migrants experience profound and protracted loss. Thus, there is an urgent need to promote the healing of survivors through research-based interventions, to foster resilience in the affected communities, and to facilitate resolution of global conflicts. In this session, a culturally diverse and multidisciplinary panel will offer perspectives from the fields of psychiatry, psychology, and conflict resolution. The use of trauma signature (TSIG) analysis to examine childhood and lifespan trauma exposure and resilience in Latin American IDPs will be presented. An overview of recent randomized controlled trials conducted in a variety of international settings with diverse populations of forced migrants will be provided. Presenters will conclude with a discussion regarding the implications and applications of current research to public policy and global conflict resolution efforts to reduce population exposure to trauma.

**Symposium**  
**Saturday, November 8**  
**03:00 PM to 04:15 PM**  
**Versailles**

## **National Vietnam Veterans Longitudinal Study: Prospective Assessment of PTSD and Health Outcomes**

(Clin Res, Assess Dx-Health-Illness-Mil/Vets, Adult, M, Industrialized)

Keane, Terence, PhD  
*National Center for PTSD, VA Boston Healthcare System, Boston University School of Medicine, Boston, Massachusetts, USA*

This symposium will present findings from the National Vietnam Veterans Longitudinal Study (NVVLS), a 25 year follow-up study of service members who participated in the National Vietnam Veterans Readjustment Study in 1987-88. The participants for the follow-up include those who were deployed to the war and a comparison group who served during the war era but were not deployed. The NVVLS is a “community” (non-institutionalized) epidemiologic study using probability sampling, survey and clinical assessments, and a non-equivalent comparison group quasi-experimental design. Of the 1,839 living participants at the time of study implementation, a total of 1,450 (78.8%) participated in at least one of the survey components. Presentations will describe findings concerning mortality outcomes, subgroups at high risk for chronic and/or severe PTSD, and the long-term health outcomes and service utilization associated with warzone-related PTSD. The implications for future research to better understand the long-term course of PTSD and to promote clinical practices to meet the health care needs of Veterans will be discussed.

**Symposium**  
**Saturday, November 8**  
**03:00 PM to 04:15 PM**  
**Versailles**

## **Description of Methods and Design**

(Res Meth, Assess Dx-Clin Res-Health-Mil/Vets, Adult, M, Industrialized)

**Schlenger, William, PhD<sup>1</sup>**; Kulka, Richard, PhD<sup>2</sup>; Corry, Nida, PhD<sup>3</sup>; Marmar, Charles, MD<sup>4</sup>; Williams, Christianna, PhD<sup>1</sup>

<sup>1</sup>*Abt Associates, Inc., Durham, North Carolina, USA*

<sup>2</sup>*Independent Consultant, Raleigh, NC, North Carolina, USA*

<sup>3</sup>*Abt Associates, Inc., Bethesda, Maryland, USA*

<sup>4</sup>*New York University School of Medicine, New York, New York, USA*

This presentation will provide an overview of the National Vietnam Veterans Longitudinal Study (NVVLS) design and methods, including a description of the study components, instrumentation, and response rates. The NVVLS is the second assessment of a representative cohort of U.S. veterans who served during the Vietnam War era, either in Vietnam or elsewhere. The cohort was initially surveyed in the National Vietnam Veterans Readjustment Study in 1987 to assess the prevalence and effects of Post-Traumatic Stress Disorder (PTSD) and other postwar readjustment problems. The NVVLS sought to re-interview the cohort to assess the long-term course of PTSD and comorbidities. Data collection began July 3, 2012 and ended May 17, 2013, comprising three components: a mailed health survey, a telephone health survey, and, for a probability sample of theater Veterans, a clinical diagnostic telephone interview. Of the 1,839 living, eligible Veterans, 1,238 (67.3%) completed both survey components and 1,450 (78.8%) completed at least one survey. Over half (55%) of selected living veterans participated in the clinical

interview. Specific veteran subgroups were purposefully oversampled (e.g., women, wounded veterans) so that they could be studied with greater precision, and analysis weights were developed to remove bias introduced by the complex sampling procedures and non-response.

## **Symposium**

**Saturday, November 8**

**03:00 PM to 04:15 PM**

**Versailles**

### **Risk Factors for Post-Traumatic Stress Disorder**

(Clin Res, Assess Dx-Health-Mil/Vets, Adult, M, Industrialized)

**Henn-Haase, Clare, PsyD<sup>1</sup>**; Marmar, Charles, MD<sup>2</sup>; Kulka, Richard, PhD<sup>3</sup>; Schlenger, William, PhD<sup>4</sup>; Corry, Nida, PhD<sup>5</sup>; Qian, Meng, PhD<sup>1</sup>; Ho, Chia-Lin, PhD<sup>4</sup>; Shalev, Arie, MD<sup>6</sup>

<sup>1</sup>*New York University Langone Medical Center, Department of Psychiatry, New York, New York, USA*

<sup>2</sup>*New York University School of Medicine, New York, New York, USA*

<sup>3</sup>*Independent Consultant, Raleigh, NC, North Carolina, USA*

<sup>4</sup>*Abt Associates, Inc., Durham, North Carolina, USA*

<sup>5</sup>*Abt Associates, Inc., Bethesda, Maryland, USA*

<sup>6</sup>*Hadassah Hospital, Jerusalem, Jerusalem, Israel*

Studies have examined whether ability to cope with traumatic stress varies across the life span; however no study of a nationally representative sample of all who served has addressed the impact of risk factors for PTSD more than 40 years after warzone exposure. This presentation reports on key risk factors in a sample of 886 Vietnam theater veterans for current PTSD and worsening of PTSD symptoms between two measurement points of 25 years. Time 1 survey (NVVRS) was ascertained 15 years after the Vietnam War and Time 2 (NVVLS) was completed in 2013. The NVVLS weighted data are representative of the population of Vietnam Veterans living today. Risk factors were examined in relation to current PTSD and course outcomes at Time 2 (NVVLS) using the PCL-5M. The weighted prevalence was compared across groups and analyses indicate nearly double the risk of current PTSD for males; 1.5 to 3 times the rates of PTSD for Hispanic ethnicity; and nearly 4 times the rate of PTSD among Veterans with high warzone exposure. Being wounded or injured, killing in combat, younger age at time of entry into Vietnam and lower education level were significant risk factors for PTSD ( $p=.0001$ ,  $.0001$ ,  $.019$ , and  $.006$  respectively). Risk factors for chronic PTSD over 25-27 years and implications for targeting treatment and prevention will be discussed.

## **Symposium**

**Saturday, November 8**

**03:00 PM to 04:15 PM**

**Versailles**

### **Mortality Outcomes and Prospective Risk Modeling among Vietnam Theater Veterans**

(Clin Res, Chronic-Death-Health-Mil/Vets, Adult, M, Industrialized)

**Corry, Nida, PhD<sup>1</sup>**; Schlenger, William, PhD<sup>2</sup>; Williams, Christianna, PhD<sup>2</sup>; Kulka, Richard, PhD<sup>3</sup>; Mulvaney-Day, Norah, PhD<sup>4</sup>; Marmar, Charles, MD<sup>5</sup>

<sup>1</sup>*Abt Associates, Inc., Bethesda, Maryland, USA*

<sup>2</sup>*Abt Associates, Inc., Durham, North Carolina, USA*

<sup>3</sup>*Independent Consultant, Raleigh, NC, North Carolina, USA*

<sup>4</sup>*Abt Associates, Inc., Cambridge, Massachusetts, USA*

<sup>5</sup>*New York University School of Medicine, New York, New York, USA*

This presentation describes the relationship of PTSD and cohort characteristics to mortality outcomes over a 25 year follow-up period and provides the first prospective modeling of survival for a representative sample of war Veterans who were deployed to the war – ‘theater Veterans’ - and a comparison group who served during the war era but were not deployed – ‘era Veterans.’ Hierarchical Cox Proportional Hazard regression models examined the relationship of PTSD and warzone stress exposure to all-cause and specific causes of death. As of April 2011, the weighted mortality estimate among Vietnam War Veterans was 16.0% (95% CI: 13.1–18.9), and rates were comparable across era and theater veterans. The two leading causes of death were neoplasms and heart disease. Among theater veterans, men had a twofold age-adjusted increase in mortality compared to women and Black Veterans had an 85% increased risk of death compared to White Veterans. PTSD was associated with a doubling of the risk for death even after adjusting for demographic factors. High warzone stress exposure was also significantly related to an increased risk of death, after controlling for demographics, PTSD, and health comorbidities (HR = 1.60; CI, 1.05–2.45,  $p = .0278$ ). PTSD was significantly associated with mortality due to cancer and external causes, but not heart disease mortality.

## **Symposium**

**Saturday, November 8**

**03:00 PM to 04:15 PM**

**Versailles**

### **Post-Traumatic Stress Disorder, Chronic Health Conditions, and Health Service Utilization in Vietnam Veterans**

(Clin Res, Health-Illness-Mil/Vets, Adult, M, Industrialized)

**Mulvaney-Day, Norah, PhD<sup>1</sup>**; Schlenger, William, PhD<sup>2</sup>; Corry, Nida, PhD<sup>3</sup>; Williams, Christianna, PhD<sup>2</sup>; Ho, Chia-Lin, PhD<sup>2</sup>; Nagler, Caryn, MPH<sup>3</sup>; Mauch, Danna, PhD<sup>1</sup>; Fairbank, John, PhD<sup>4</sup>; Marmar, Charles, MD<sup>5</sup>

<sup>1</sup>*Abt Associates, Inc., Cambridge, Massachusetts, USA*

<sup>2</sup>*Abt Associates, Inc., Durham, North Carolina, USA*

<sup>3</sup>*Abt Associates, Inc., Bethesda, Maryland, USA*

<sup>4</sup>*Duke University School of Medicine, Durham, North Carolina, USA*

<sup>5</sup>*New York University School of Medicine, New York, New York, USA*

PTSD is associated with multiple health conditions including cardiovascular, inflammatory and metabolic disorders, cancer, and chronic pain, although methodological approaches to examine these linkages vary considerably across studies. This presentation will describe relationships between self-reported chronic physical health conditions and warzone-related PTSD, as well as service utilization patterns among Vietnam theater Veterans. On average, males reported 2.7 current and 5.4 lifetime health conditions and females reported an average of 2.4 current and 6.6 lifetime conditions and the lifetime prevalence of many conditions was substantial (e.g., hypertension, 61.0%). Male and female theater Veterans who had warzone-related PTSD at the time of the NVVLS reported higher numbers of lifetime and current chronic health conditions than did those without warzone-related PTSD. These findings consistently indicate robust relationships with PTSD for both male and female theater Veterans. Results also suggest that male and female theater veterans with PTSD were more likely to use outpatient VA services, and reported a greater number of outpatient visits, compared to those without PTSD. Almost 67% of male theater veterans with PTSD reported talking about behavioral health issues in an outpatient primary care visit within the last six months compared to only 11.2% without PTSD.

**Symposium**  
**Saturday, November 8**  
**03:00 PM to 04:15 PM**  
**Biscayne - BIOLOGY TRACK**

## **EEG Parameters and Neurofeedback Treatment of PTSD**

(Bio Med, Bio/Int, Adult, A, Global)

van der Kolk, Bessel, MD<sup>1</sup>; Lanius, Ruth, MD, PhD<sup>2</sup>

<sup>1</sup>*Trauma Center at Justice Resource Institute, Brookline, Massachusetts, USA*

<sup>2</sup>*University of Western Ontario, London, Ontario, Canada*

Spectral analyses of EEG recordings (qEEG) in PTSD suggest reduced posterior alpha activity; and in decreased frontal beta activity. Decreased posterior alpha is linked to anxious arousal that characterizes fear disorders in general; decreased frontal beta leads to decreased concentration and attention. In this symposium McFarlane and his colleagues will show that PTSD and TBI have different patterns of cortical activation. Lanius and her colleagues have shown that one session of neurofeedback can begin to change these EEG patterns. Neurofeedback (NF) aims at modulating or reshaping neural connectivity patterns in the CNS via operant conditioning. In NF training, EEG activity is recorded from scalp electrodes and fed back in real time to the subject in a readily understood, visual format (simple computer games). Using NF for treating ADHD has found a large effect size for impulsivity and a medium effect size for hyperactivity symptoms in children. This symposium will also present the data from a RCT that matched 20 treatment receiving adults with chronic PTSD with a waitlist control group and present the effects of NF on behavioral, neuropsychological and EEG parameters. We will examine to what degree normalization of activity in EEG spectral bands is associated with reductions in PTSD symptoms.

**Symposium**  
**Saturday, November 8**  
**03:00 PM to 04:15 PM**  
**Biscayne - BIOLOGY TRACK**

## **A Prospective Study of the Differential Impact of mTBI and PTSD on Cortical Arousal**

(Assess Dx, Bio Med-Bio/Int-Prevent-Mil/Vets, Adult, A, Global)

McFarlane, Alexander, MD<sup>1</sup>; Felmingham, Kim, PhD<sup>2</sup>; Lawrence, Andy, BA (Hons)<sup>3</sup>; Lawrence-Wood, Ellie, PhD<sup>3</sup>; Wise, Vikki, PhD<sup>3</sup>; Davy, Carol, PhD<sup>3</sup>; Bryant, Richard, PhD<sup>4</sup>

<sup>1</sup>*The University of Adelaide, Adelaide, South Australia, Australia*

<sup>2</sup>*University of Tasmania, Hobart, TAS, Australia*

<sup>3</sup>*Centre for Traumatic Stress Studies, Adelaide, SA, Australia*

<sup>4</sup>*University of New South Wales, Sydney, NSW, Australia*

One of the critical questions in military veterans is the overlap between PTSD and mTBI and the ability to differentiate these disorders neurophysiologically. This prospective study of soldiers who sustained an mTBI and were compared with individuals matched for age, prior combat exposure, prior mTBI and PTSD symptoms. PTSD was controlled for in the postdeployment analyses as well as comparing the mTBI group without mTBI and those in the top tertile of PTSD symptoms. Neurocognitive function was assessed using qEEG and the fearful faces paradigm. The results demonstrated loss of habituation in the mTBI on qEEG alpha eyes open in the mTBI group. The fearful faces paradigm showed that the mTBI group had a reduction in the early processing (N170) amplitude for both angry and neutral faces. The P300 amplitude was significantly increased to angry faces in the mTBI group but not in the controls. This implies greater bias towards threat processing in the PTSD group that is

different from mTBI. This paradigm highlights that these differences in response to the emotional valence in terms of conscious and unconscious processing between mTBI and PTSD may be able to differentiate the shifts in information processing in these two conditions. It is important that these differences are addressed in any clinical interventions such as neurofeedback that address these deficits.

## **Symposium**

**Saturday, November 8**

**03:00 PM to 04:15 PM**

**Biscayne - BIOLOGY TRACK**

### **Normalization of EEG Activity in Individuals with Chronic PTSD Following Neurofeedback Training**

(Clin Res, Bio Med-Chronic-Complex-Bio/Int, Adult, A, Industrialized)

**Gapen, Mark, PhD<sup>1</sup>**; Musicaro, Regina, BA<sup>2</sup>; van der Kolk, Bessel, MD<sup>3</sup>; Hamlin, Ed, PhD<sup>4</sup>

<sup>1</sup>*Community Services Institute, Inc., Springfield, Massachusetts, USA*

<sup>2</sup>*Justice Resource Institute, Brookline, Massachusetts, USA*

<sup>3</sup>*Trauma Center at Justice Resource Institute, Brookline, Massachusetts, USA*

<sup>4</sup>*Institute for Applied Neuroscience, Asheville, North Carolina, USA*

In Quantitative EEG's (qEEG) individuals' EEG activity is compared to a normative database yielding information about deviations of electrical patterns in an individuals' brain. These patterns have been shown to be relatively stable over time; however, several studies have shown shifts towards normalization after neurofeedback training, including changes measured by fMRI after a single session of training. We will present the results of pre-post qEEG recordings from 20 individuals with histories of chronic, treatment-resistant PTSD after 24 sessions of neurofeedback. Preliminary analyses suggest decreased posterior power in the alpha range with concomitant decreased beta power frontally at baseline, in line with the findings of Dr. McFarlane and other previous research. After 24 sessions of rewarding alpha activity and inhibiting high beta in the right posterior region, we expect to see significant normalization of the EEG including increased posterior spectral alpha power and reduced high beta power. At the time of this presentation at ISTSS we will have been able to test the hypothesis that the degree of normalization of the qEEG is negatively correlated with reported PTSD symptom levels.

## **Symposium**

**Saturday, November 8**

**03:00 PM to 04:15 PM**

**Biscayne - BIOLOGY TRACK**

### **A Randomized Controlled Trial of Neurofeedback for Chronic PTSD**

(Bio Med, Bio/Int, Adult, A, Global)

**van der Kolk, Bessel, MD<sup>1</sup>**; Spinazzola, Joseph, PhD<sup>1</sup>; Hodgdon, Hilary, PhD<sup>1</sup>; Musicaro, Regina, BA<sup>2</sup>; Suvak, Michael, PhD<sup>3</sup>

<sup>1</sup>*Trauma Center at Justice Resource Institute, Brookline, Massachusetts, USA*

<sup>2</sup>*Justice Resource Institute, Brookline, Massachusetts, USA*

<sup>3</sup>*Suffolk University, Boston, Massachusetts, USA*

40 adults between the ages of 32 to 64 were randomly assigned to receive 20 sessions of NF or serve as a waitlists (WL) controls. All met criteria for PTSD on the CAPS by blind raters. 100% experienced trauma prior to age 18, with mean 26.47 years since the index trauma. Measures: Stressful Life Events Screening Questionnaire (SLESQ), The Davidson Trauma Scale (DTS), CAPS; Inventory of Altered Self-Capacities (IASC), Webneuro and

quantitative EEG assessment. Participants received 20 sessions of NF training at T4-P4, employing standard inhibit frequencies (2-7 and 22-36 Hz) and a reward frequency of (12-15Hz). Participants were assessed @ beginning, @ 10 weeks, at end of study (20 weeks) and @ one month follow up. On growth curve analysis the CAPS scores dropped from 79.9 to 43.2 after NF, compared with WL 75.3- 68.8.  $d=1.79$  (95% CI); Smaller, but significant reductions were found in the dimensions of affect regulation (-0.52), tension reduction activities (-0.77), Affective instability (-0.46) (95% CI). The webneuro data are currently being analyzed and will also be presented at this symposium. These data suggest that neurofeedback is an effective treatment modality for individuals with chronic PTSD.

**Symposium**  
**Saturday, November 8**  
**03:00 PM to 04:15 PM**  
**Windsor/Sandringham**

## **Treatment for Comorbid PTSD and Substance Use Disorders: Next Steps to Building the Evidence Base**

(Clin Res, Sub/Abuse, Adult, M, N/A)

Norman, Sonya, PhD  
*National Center for PTSD, San Diego, California, USA*

Comorbidity of posttraumatic stress disorder and substance use disorders (PTSD/SUD) is common and is associated with a host of negative consequences including greater likelihood of relapse, functional impairment, health and legal problems, and suicidality. We will present results of a Cochrane Review evaluating research on concurrent treatment for PTSD/SUD. Findings support the use of individual trauma focused cognitive-behavioral interventions over other types of therapies. However, the studies included in the review faced methodological challenges such as recruiting and retaining patients with PTSD/SUD. We will then present current studies aimed to move the field forward. These include a randomized clinical trial of a cognitive-behavioral intervention offered to patients in intensive outpatient treatment, a program of research on Concurrent Treatment of PTSD and Substance Use Disorders using Prolonged Exposure (COPE) with PTSD/SUD outpatients, and a pilot study of prolonged exposure therapy with Veterans in residential substance use treatment. The speakers will focus on how they are addressing limitations of prior research, how each study will add to the understanding of trauma focused cognitive-behavioral PTSD/SUD interventions, and the range of PTSD/SUD patients who can benefit from these treatments.

**Symposium**  
**Saturday, November 8**  
**03:00 PM to 04:15 PM**  
**Windsor/Sandringham**

## **CBT for PTSD in Veterans with Co-Occurring PTSD and Substance Use Disorders: A Preliminary Examination**

(Clin Res, Clin Res-Sub/Abuse, Adult, M, Industrialized)

**Hammen, Jessica, PhD<sup>1</sup>**; McGovern, Mark, PhD<sup>2</sup>; Possemato, Kyle, PhD<sup>3</sup>; Hammel, John, MD<sup>4</sup>; Lantinga, Larry, PhD<sup>3</sup>; Schwartzberg, Rebecca, PhD<sup>5</sup>

<sup>1</sup>VA National Center for PTSD/White River Junction VA Medical Center, White River Junction, Vermont, USA

<sup>2</sup>Dartmouth Medical School, Lebanon, New Hampshire, USA

<sup>3</sup>Syracuse Veterans Affairs Medical Center, Syracuse, New York, USA



<sup>4</sup>*Department of Veteran Affairs, White River Junction, Vermont, USA*

<sup>5</sup>*James A. Haley VA Medical Center, Tampa, Florida, USA*

During the past 10 years, the number of veterans with comorbid substance use disorders (SUD) and PTSD in VA care has increased over three-fold; in 2012, the prevalence of PTSD among veterans receiving specialized SUD care was 32%. These patients may have complicated clinical presentations, poorer treatment prognoses, and can be a challenge to treat. Yet few treatments have been developed for patients with co-occurring PTSD and SUD. We are currently conducting a randomized clinical trial to evaluate the effectiveness of a cognitive behavioral therapy for PTSD in patients with current SUD. The treatment consists of 3 components: (1) Patient education about PTSD and its relation to substance use and treatment; (2) Breathing retraining: A behavioral anxiety reduction skill; and (3) Cognitive restructuring: A functional analysis of the link among emotions, cognitions and situations. The treatment is flexible in its ability to both address the psychological effects of any traumatic event, and to accommodate to a broad range of individual differences. We will describe the intervention, share data from studies in non-veteran populations, and present on baseline findings from the controlled trial.

## **Symposium**

**Saturday, November 8**

**03:00 PM to 04:15 PM**

**Windsor/Sandringham**

## **Psychological Interventions for PTSD and Comorbid Substance Use Disorder: A Cochrane Review**

(Clin Res, Clin Res-Sub/Abuse, Lifespan, M, Industrialized)

**Roberts, Neil, DPsych(Clin)<sup>1</sup>**; Roberts, Pamela, DPsych(Clin)<sup>1</sup>; Jones, Neil, MSc<sup>1</sup>; Bisson, Jonathan, MD<sup>2</sup>

<sup>1</sup>*Cardiff and Vale University Health Board, Cardiff, United Kingdom*

<sup>2</sup>*Cardiff University School of Medicine & Cardiff and Vale University Health Board, Cardiff, Wales, United Kingdom*

Comorbidity between PTSD and SUD is common. Individuals with both disorders have been found to have a more severe clinical profile than those with either disorder alone. Comorbidity is associated with poorer recruitment and retention in treatment programmes, poorer treatment adherence and poorer treatment outcomes. There is little consensus about the most appropriate treatment pathways for individuals with this comorbidity or whether standard treatment interventions for PTSD are helpful or harmful. We will present the findings from a recent systematic review of randomized controlled trials that have evaluated psychological interventions aimed at treating this comorbidity, or have included a significant sub-group of participants with comorbidity. We identified 14 RCTs, evaluating a number of treatment approaches that met our pre specified inclusion criteria. In meta-analyses we found evidence to support use of individual trauma focused cognitive-behavioural interventions delivered in conjunction with SUD treatments. We found little evidence to support the use of non-trauma focused individual or group based interventions. We will describe these studies, summarise treatment outcomes and discuss methodological issues associated with them. Discussion will focus on implications of these findings and challenges for future research.

**Symposium**  
**Saturday, November 8**  
**03:00 PM to 04:15 PM**  
**Windsor/Sandringham**

**Concurrent Treatment of PTSD and Substance Use Disorders Using Prolonged Exposure: The COPE Treatment**

(Clin Res, CSA-Clin Res-Sub/Abuse-Mil/Vets, Adult, M, N/A)

**Back, Sudie, PhD;** Killeen, Therese, PhD, RN

*Medical University of South Carolina, Charleston, South Carolina, USA*

Post-traumatic stress disorder (PTSD) and substance use disorders (SUD) are debilitating and relapsing disorders that frequently co-occur. Substantial gaps in the treatment of PTSD/SUD exist and consensus regarding ideal treatment practices is lacking. To help address this important gap in the literature, we developed an integrated, cognitive-behavioral therapy for PTSD/SUD. The intervention, called 'Concurrent Treatment of PTSD and Substance Use Disorders using Prolonged Exposure' (COPE), represented a synthesis of theory-based and empirically-supported treatments for PTSD (prolonged exposure) and SUD (relapse prevention). COPE is comprised of 12, 90-minute individual sessions. In previous studies in the U.S., Australia and Sweden, COPE has demonstrated safety, feasibility and efficacy in significantly reducing PTSD symptoms, SUD severity, as well as associated mental health problems (e.g., depression, general anxiety) among civilians and Veterans. We will review the treatment components and outcome data available. Acknowledgments: Funding for this work is provided by NIDA grant R01 DA030143 (SEB).

**Symposium**  
**Saturday, November 8**  
**03:00 PM to 04:15 PM**  
**Windsor/Sandringham**

**Integrating Prolonged Exposure Therapy for PTSD in a Substance Abuse Residential Rehabilitation Treatment Program (SARRTP)**

(Clin Res, Sub/Abuse, Adult, M, Industrialized)

**Norman, Sonya, PhD<sup>1</sup>;** Davis, Brittany, PhD<sup>2</sup>; Colvonen, Peter, PhD<sup>3</sup>; Myers, Ursula, MS PhD Student<sup>2</sup>; Trim, Ryan, PhD<sup>3</sup>; Robinson, Shannon, MD<sup>3</sup>

<sup>1</sup>*National Center for PTSD, San Diego, California, USA*

<sup>2</sup>*VA San Diego Healthcare System, San Diego, California, USA*

<sup>3</sup>*University of California, San Diego and VA San Diego Healthcare System, San Diego, California, USA*

Recent studies show that prolonged exposure therapy (PE) is effective in reducing PTSD symptoms among individuals with comorbid SUD/PTSD. However, concerns that PE will lead to negative clinical outcomes like dropout and relapse remain a barrier to high-risk individuals, such as those warranting residential SUD care, being offered PE. Study therapists conducted PE (3x/week, up to 12 sessions) with 6 Veterans admitted to the Substance Abuse Residential Rehabilitation Treatment Program in the San Diego VA Hospital. Participants completed the PTSD Symptom Checklist (PCL) at admission (baseline), at discharge from the 4-6 week program (post-treatment), and 3-months after discharge (follow-up). Baseline Mean PCL scores (63.3, SD=15.5) decreased markedly at post-treatment (mean=39.2, SD=23.5); in comparison, 14 consented patients with SUD/PTSD in the same program who were not treated with PE had mean baseline score of 68.7 (SD=13.4) and showed smaller reductions at post-treatment (mean=54.7, SD=9.6). Among those with follow-up data, PE veterans (n=5) continued to show decreases (mean=36.0, SD=16.7). Mean PCL of Veterans who did not receive PE (n=6) increased (55.7, SD=11.9). This preliminary data provides initial support regarding the effectiveness of PE in residential SUD care, and suggests there may be enduring improvements following discharge. Data collection is ongoing.

**Symposium**  
**Saturday, November 8**  
**03:00 PM to 04:15 PM**  
**Bayfront B - CHILD TRACK TWO**

## **Toward a Comprehensive Understanding of Mental Health Outcomes in Children and Adolescents with Histories of Maltreatment and Family Violence**

(Practice, Assess Dx-Dev/Int-Prevent-Res Meth, Child/Adol, M, N/A)

Romano, Elisa, PhD, Cpsych  
*University of Ottawa, Ottawa, Ontario, Canada*

Researchers from the university-based Children's Well-Being Lab will present on (1) mental health outcomes (e.g., emotional, behavioral, and trauma) associated with childhood maltreatment and family violence (i.e., corporal punishment) and (2) multi-level variables (e.g., socio-demographic, child, parent, family) influencing these outcomes. Presentations will examine this topic using samples of maltreated children and adolescents living in either biological or substitute caregiver homes to highlight mental health functioning between these two populations. Mental health outcomes will also be examined across childhood and adolescence as a way to account for developmental differences. Finally, presentations will showcase various rigorous methodologies that can be applied to advance understanding of mental health outcomes in children and adolescents who have experienced maltreatment and family violence, including longitudinal analyses that identify developmental pathways, person-centered (latent class) analyses, and systematic review methods. Results indicate that different forms of childhood maltreatment and family violence are associated with impaired mental health and that a number of variables are implicated in this association, such as household size, child characteristics, parenting practices, and who is reporting on children's mental well-being.

**Symposium**  
**Saturday, November 8**  
**03:00 PM to 04:15 PM**  
**Bayfront B - CHILD TRACK TWO**

## **Longer-Term Mental Health Consequences of Early Corporal Punishment in a Representative Sample of Canadian Children**

(Clin Res, Aggress-Anx-CPA-Depr, Child/Adol, M, Industrialized)

Frechette, Sabrina, PhD Candidate; Romano, Elisa, PhD, Cpsych  
*University of Ottawa, Ottawa, Ontario, Canada*

Corporal punishment (CP) is controversial because some believe it represents a form of family violence whereas others argue that it is an effective form of discipline to correct children's misbehavior. To advance research on CP-related mental health effects, we used data from a Canadian representative study to examine the impact of CP at 2-3 years (1994-1996) on physical aggression, depression, anxiety, and prosocial behaviors at 8-9 years (2000-2002;  $N=3,363$ ) and 14-15 years (2006-2008;  $N=2,640$ ). Preliminary analyses indicated that around 45% of children experienced CP at 2-3 years. After controlling for initial levels of problem behaviors, linear regressions suggested that CP was significantly associated, at both time points, with higher physical aggression ( $\beta = 0.12$ ;  $\beta = 0.13$ ), lower prosocial behaviors ( $\beta = -0.26$ ;  $\beta = -0.29$ ), and lower anxiety ( $\beta = -0.09$ ;  $\beta = -0.10$ ). There was an association between CP and depression at 8-9 years ( $\beta = 0.06$ ), but it became insignificant after controlling for initial depression level. Further analyses on CP outcomes will account for the CP over time, co-occurring disciplinary strategies and potential

moderating effects of contextual factors (e.g., socio-demographics, child temperament, parent mental health, social support). Findings will help inform the debate surrounding CP and encourage continuing education efforts to promote positive discipline.

## **Symposium**

**Saturday, November 8**

**03:00 PM to 04:15 PM**

**Bayfront B - CHILD TRACK TWO**

### **Behavioral Pathways and Predictors among Maltreated Children in Child Welfare**

(Prevent, CPA-Res Meth, Child/Adol, M, N/A)

**Bell, Tessa, Doctoral Student;** Romano, Elisa, PhD, Cpsych; Flynn, Robert, PhD

*University of Ottawa, Ottawa, Ontario, Canada*

Children in out-of-home care have experienced a multitude of adversities, often resulting in compromised functioning across various domains. Data from the Ontario Looking After Children project, which involves annual data collection on the functioning of children in substitute care, were used to estimate behavioral pathways (i.e., conduct, emotional, prosocial) over a 4-year period in 313 5-9 year old children. Findings indicated that 35.7% and 41.4% followed moderate to high problem pathways for conduct and emotional behaviors, respectively, while 10.3% exhibited moderately low levels of prosocial behavior over time. Additionally, time-stable (e.g., sex) and time-varying (e.g., foster parenting practices) predictors of these pathways were investigated. Findings indicated that fewer internal developmental assets, greater number of children in the home, child receiving treatment, and less frequent positive parenting were significantly associated with greater difficulties on all outcomes over time. Findings should be interpreted within a context where children in out-of-home care might have varying levels of functioning across other domains (e.g., educational). Predictors were static and dynamic and cut across various contexts, emphasizing the importance of considering child functioning within an ecological model, which posits that many factors influence behavioral outcomes.

## **Symposium**

**Saturday, November 8**

**03:00 PM to 04:15 PM**

**Bayfront B - CHILD TRACK TWO**

### **Trauma Profiles and Correlates among Maltreated Adolescents in Child Welfare**

(Res Meth, Assess Dx-CPA-CSA-Clin Res, Child/Adol, M, Industrialized)

**Lyons, Jennifer, PhD Candidate<sup>1</sup>;** Weegar, Kelly, PhD Candidate<sup>1</sup>; Romano, Elisa, PhD, Cpsych<sup>1</sup>; Wekerle, Christine, PhD<sup>2</sup>

<sup>1</sup>*University of Ottawa, Ottawa, Ontario, Canada*

<sup>2</sup>*McMaster University, Hamilton, Ontario, Canada*

Childhood maltreatment is a significant risk factor for a range of psychological difficulties in adolescence, such as post-traumatic stress, depression, and anxiety. Studies on the effects of maltreatment have typically relied on variable-centered analyses which, while informative, do not capture the heterogeneity of mental health difficulties within individuals. The current study used a person-centered approach to identify trauma-related profiles of 479 13-17 year old maltreated adolescents involved with the Canadian child welfare system. Preliminary findings using data from the clinical subscales of the Trauma Symptom Checklist for Children (i.e., depression, anxiety, anger, post-traumatic stress, dissociation, and sexual concerns) suggest at least two profiles; 19 adolescents (4%) scored high on all subscales (i.e., 1 SD over the mean), while 338 adolescents (70.6%) did not score high on any of the subscales.

The remaining 122 adolescents (25.4%) scored high on some of the subscales, with high scores on the anger subscale being the most prevalent. Latent class analysis will be used to verify these profiles and logistic regression will explore correlates, including adolescent, placement, and maltreatment-related factors. Findings will be important for informing psychological assessment practices, as well as tailored interventions, for maltreated adolescents in care.

## **Symposium**

**Saturday, November 8**

**03:00 PM to 04:15 PM**

**Bayfront B - CHILD TRACK TWO**

### **Mental Health Outcomes in Children with Maltreatment Histories: A Systematic Review of Cross-Informant Correspondence**

(Assess Dx, Clinical Practice-Health-Res Meth, Child/Adol, M, N/A)

**Romano, Elisa, PhD, Cpsych<sup>1</sup>**; Weegar, Kelly, PhD Candidate<sup>1</sup>; Babchishin, Lyzon, PhD Candidate<sup>1</sup>; Saini, Michael, PhD<sup>2</sup>

<sup>1</sup>*University of Ottawa, Ottawa, Ontario, Canada*

<sup>2</sup>*University of Toronto, Toronto, Ontario, Canada*

The types and severity of mental health difficulties often reported in maltreated children are a function of the individual who is providing this information. Current research on the level of cross-informant correspondence for maltreatment-related mental health outcomes and on variables that can influence correspondence level is limited. We systematically reviewed existing research through a search of 13 electronic databases. A multi-step screening process of the 5,772 identified quantitative studies resulted in a final sample of 28 studies which collected maltreatment-related data primarily through standardized instruments (e.g., Child Behavior Checklist) from 13 informant pairs on 13 outcomes. There appears to be greater cross-informant correspondence for internalizing (compared to externalizing) behaviors and for child-caregiver pairs (compared to child-teacher and caregiver-teacher pairs). Preliminary results also indicate differences in correspondence as a function of both outcome and informant pair. There appears to be greater correspondence on externalizing behaviors for caregiver-child pairs than for caregiver-teacher pairs (median effect sizes=0.71 and 0.58, respectively). Findings can inform assessment practices in cases of childhood maltreatment, which frequently involve the completion of standardized instruments by children themselves and by significant others.

## **Panel Presentation**

**Saturday, November 8**

**03:00 PM to 04:15 PM**

### **Sevilla - LONG-TERM EFFECTS OF CHILD TRAUMA TRACK**

#### **Theoretical Approaches to Long-term Impact of Childhood Trauma**

(Res Meth, CPA-Res Meth, Lifespan, M, Global)

**Benight, Charles, PhD<sup>1</sup>; Hobfoll, Stevan, PhD<sup>2</sup>; Pyszczynski, Tom, PhD<sup>1</sup>; Silver, Roxane, PhD<sup>3</sup>; La Greca, Annette, PhD<sup>4</sup>**

<sup>1</sup>*University of Colorado at Colorado Springs, Colorado Springs, Colorado, USA*

<sup>2</sup>*Rush Medical College, Chicago, Illinois, USA*

<sup>3</sup>*University of California, Irvine, Irvine, California, USA*

<sup>4</sup>*University of Miami, Coral Gables, Florida, USA*

The long term consequences of childhood trauma must be conceptualized from a comprehensive theory of human adaptation to maximize individual and community intervention effectiveness. The purpose of this panel is to provide a rich discussion with the audience concerning 4 primary theoretical approaches to trauma adaptation. Dr. Stevan Hobfoll will introduce resource passageways and resource caravans related to long term adaptation following childhood trauma. Dr. Pyszczynski will discuss anxiety buffer disruption theory and how trauma can interfere with normal anxiety control mechanisms. Dr. Benight will introduce self-regulation threshold shift theory an extension of social cognitive theory and relate how developmental processes across the lifespan will be affected. Finally, Dr. Roxane Cohen Silver will discuss the acute and long-term consequences of epidemiological risk and resilience factors following trauma exposure across the lifespan. Each presenter will also address the 2 most important theoretical research questions to be answered in the future. Dr. Annette La Greca will evaluate commonalities and differences among these approaches related to the long-term impact of childhood trauma.

## **Panel Presentation**

**Saturday, November 8**

**03:00 PM to 04:15 PM**

### **Brickell - MILITARY TRACK**

#### **Military Culture: Core Competencies for Healthcare Professionals**

(CulDiv, Assess Dx-Cul Div-Mil/Vets, Lifespan, I, Industrialized)

**Brim, William, PsyD<sup>1</sup>; Watson, Patricia, PhD<sup>2</sup>; Kudler, Harold, MD<sup>3</sup>; Ermold, Jenna, PhD<sup>4</sup>; Nash, William, MD<sup>5</sup>; Westphal, Richard, RN PhD<sup>6</sup>**

<sup>1</sup>*Center for Deployment Psychology, Uniformed Services University of the Health Sciences, Bethesda, Maryland, USA*

<sup>2</sup>*National Center for PTSD, Executive Division, White River Junction, Vermont, USA*

<sup>3</sup>*VISN 6 MIRECC and Duke University Medical Center, Chapel Hill, North Carolina, USA*

<sup>4</sup>*Center for Deployment Psychology, Rockville, Maryland, USA*

<sup>5</sup>*Boston VA Research Institute, Boston, Massachusetts, USA*

<sup>6</sup>*Richard Westphal Consulting, Gordonsville, Virginia, USA*

This panel will feature a recently released integrated VA/DOD online course which seeks to increase the cultural competence of those who work with Service members, Veterans, and their families. The focus will be on presenting the core competencies developed for the course regarding how to improve assessment and treatment planning for those patients with trauma-related conditions who are or have been in the military. Participants will be educated about the military culture and how that culture may affect the self and world views of their clients and therefore the patient/provider relationship. The goal of this panel is to educate providers interacting with traumatized Service members, Veterans and their families about aspects of the military culture such as military ethos and core values,



stressors associated with military life, and resources and tools that are available to patients and their providers working together to address these issues. This panel aims to increase understanding of the various ways that the impact of military culture can differ across Service members, Veterans, and their families. The panel will include videotapes of interviews with Service members, Veterans, family members and healthcare providers.

## **Workshop Presentation**

**Saturday, November 8**

**03:00 PM to 04:15 PM**

**Bayfront A - CHILD TRACK ONE**

### **Using Implementation Science to Advance Child Well-Being: Advances in Screening for Trauma and Behavioral Health Needs**

(Train/Ed/Dis, Assess Dx-Complex, Child/Adol, M, Industrialized)

**Conradi, Lisa, PsyD<sup>1</sup>; Tullberg, Erika, MPH<sup>2</sup>; Berliner, Lucy, MSW<sup>3</sup>**

<sup>1</sup>*Chadwick Center for Children and Families, Rady Children's Hospital – San Diego, San Diego, California, USA*

<sup>2</sup>*New York University Langone Medical Center, New York, New York, USA*

<sup>3</sup>*University of Washington/Harborview Medical Center, Seattle, Washington, USA*

Early identification through screening for trauma and behavioral health needs is critical in ensuring that children are referred for the appropriate assessment and treatment to address their unique needs. The process of implementing approaches for screening in child welfare for trauma and behavioral health needs is a complex task with multiple considerations and challenges inherent in this work. This presentation will highlight key client and caseworker level and system-level considerations for the implementation of a screening approach in child welfare. System-level considerations include the selection of appropriate screening tools with strong psychometric properties, training staff on the administration and scoring of tools, and ensuring that the results from the tool are used to inform case planning efforts. Client and caseworker level considerations include overcoming resistance to completing the tools and integrating the process into their existing workflow. The presenters will highlight these considerations, then present examples from three states (Washington, New York, and California) that are working on implementing a screening process into their child welfare systems. This presentation will highlight activities within an implementation science framework, exploring characteristics of the program, clients, and the development and implementation process.

## **Case Study Presentation**

**Saturday, November 8**

**03:00 PM to 04:15 PM**

**Flagler**

### **Educational First Aid: School-Based Crisis Intervention Dealing with High-Intensity Media Coverage of War, Terror and Catastrophes**

(Prevent, Affect/Int-QoL-Social, Child/Adol, I, Industrialized)

**Schultz, Jon-Håkon, PhD<sup>1</sup>; Langballe, Åse, PhD<sup>2</sup>**

<sup>1</sup>*Norwegian Center for Violence and Traumatic Stress Studies (NKVTS), Oslo, Norway*

<sup>2</sup>*Norwegian Centre for Traumatic Stress Studies, Oslo, Norway*

**Abstract:** In the context of crisis and disasters, school-aged children are a vulnerable group with fewer coping resources than adults. The school is a key arena for preventive interventions and teachers can be given a key role in large-scale school-based interventions following a man-made or natural disaster. The objective of the presentation is to describe a practical example of designing a school-based population-level intervention. The preventive measures



were delivered as a national communication strategy between teachers and pupils aged 6–19 years concerning the terror attack on 22 July 2011 in Norway. The strategy is based on principles from international research and Norwegian teachers' experiences of dealing with the 2003 Iraq War and the 2004/2005 Asian tsunami catastrophe. The presentation contributes to the discussion of defining the teacher's role in school-based crisis interventions and dealing with high-intensity media coverage of war, terror and catastrophes. The presentation provides educational and psychological perspectives on how teachers can take an active role in helping their pupils to deal with such events through two approaches: the therapeutic approach, to restore calm and feelings of safety, and the educational approach, to foster reflection and deeper understanding.

Key words: teacher role, school-based interventions, crisis and terror.

## **Oral Paper Presentation**

**Saturday, November 8**

**03:00 PM to 04:15 PM**

**Merrick**

## **Short- and Long-Term Effects of Disasters on Children and Adults**

### **Trajectories of PTSD Symptoms of Adolescents Following Wenchuan Earthquake: A Latent Growth Mixture Model Analysis**

(Assess Dx, Nat/Dis, Child/Adol, I, E Asia & Pac)

**Yuanyuan, An, PhD, PsyD<sup>1</sup>; Nan, Lin, PsyD Candidate<sup>2</sup>**

<sup>1</sup>*Nanjing Normal University, Nanjing, Jiangsu, China*

<sup>2</sup>*Fu-Jen Catholic University, Taipei, Republic of Taiwan*

The 2008 Wenchuan earthquake is the most serious natural disaster in China during the recent three decades given its enormous consequences. Data were collected at four time points: 1 year(T1), 1.5 years (T2), 2 years(T3) and 2.5 years(T4) after the earthquake from several middle and high schools located in the counties of Wenchuan and Mao which were most severely affected by the earthquake. Latent growth mixture modeling identified trajectories of PTSD was constructed and tested with matched data from 234 students. We distinguished the heterogeneous types of people with PTSD and compared the between-group differences of the sub-types in different risk factors (grade; degree of exposure; personal characteristics). Three latent classes were identified for PTSD symptoms: chronic distress (n=36), recovered (n=153), and resilience (n=45). Moreover, real-estate loss, neuroticism and openness could strongly predict long-term outcomes. High real-estate loss and high neuroticism predicted high and stable PTSD. High grade and Openness showed more impacts on resilience. Besides, avoidance and negative abreact can reciprocally predict PTSD in different time.

## **Oral Paper Presentation**

**Saturday, November 8**

**03:00 PM to 04:15 PM**

**Merrick**

### **Children Exposed to a Natural Disaster - Psychological Consequences Eight Years Post Disaster**

(Clin Res, Acute-Health-Nat/Dis, Lifespan, A, Industrialized)

**Adebäck, Petra, Doctoral Student; Michélsen, Hans, PhD, Cpsych; Nilsson, Doris, PhD; Schulman, Abbe, MD PhD**

The aim of this study is to obtain knowledge about the psychological consequences eight years after exposure to a natural disaster during childhood and adolescence. Many families from Sweden were on vacation in South East Asia during the tsunami 2004. Children, or their closest family members, experienced exposure to the tsunami wave, separation from loved ones, fear of dying or loss of family members during the disaster. 627 children between the ages of 10 and 15 years, living in Stockholm county Sweden, were registered upon return to Swedish airports. In 2013, 255 of these children (43%) now between 18 and 23 years of age responded to a questionnaire. In addition to background factors, type of exposure and social support after the disaster, psychological stress (General Health Questionnaire - GHQ) and posttraumatic stress symptoms (Impact of Event Scale) eight years post disaster were investigated. Furthermore a comparison of psychological stress (GHQ) with a matched population-based sample was analysed. The results indicate that combinations of exposures during childhood and adolescence in 2004 (hit by the wave, fear of dying, fear that someone in the family would die, separation from parents during the disaster, loss of loved ones) was associated with psychological distress and posttraumatic stress symptoms present eight years post disaster.

### **Oral Paper Presentation**

**Saturday, November 8**

**03:00 PM to 04:15 PM**

**Merrick**

### **And What about the Children? The Federal Disaster Response Data on Behavioral Health Services to Children**

(Commun, Nat/Dis, Child/Adol, M, Industrialized)

Bellamy, Nikki, PhD<sup>1</sup>; **Naturale, April, PhD, MSSW<sup>2</sup>**; Liu, Julie, MA<sup>1</sup>; Uekawa, Kaz, PhD<sup>3</sup>

<sup>1</sup>*SAMHSA, Rockville, Maryland, USA*

<sup>2</sup>*ICF International, Fairfax, Virginia, USA*

<sup>3</sup>*SAMHSA Disaster Technical Assistance Center, Fairfax, Virginia, USA*

How has the increase in disasters in the U.S. over the past decade affected our children? The Federal Emergency Management Agency (FEMA) implements the Crisis Counseling Assistance and Training Program (CCP) to the United States and its territories following a presidentially declared disaster. The Substance Abuse and Mental Health Services Administration (SAMHSA) works with FEMA through an interagency agreement to provide technical assistance, consultation, and training for state and local mental health personnel; grant administration; and program oversight. The mission of the CCP is to assist individuals and communities in recovering from the effects of natural and human-caused disasters through the provision of community-based outreach and psychoeducational services. This presentation will review the findings from data analyses collected nationally across numerous U.S. disasters post Hurricane Katrina. Authors will explore several key factors of service delivery looking at the domain of behavioral health responses, event reactions by disaster type (e.g. tornado, flood, and hurricane), event reactions by risk category (personal injury, home damage, and family missing/dead) and of the modality by which services occurred in various settings with a focus on children in the 0-17 age range.

### **Oral Paper Presentation**

**Saturday, November 8**

**03:00 PM to 04:15 PM**

**Merrick**

### **Meta-Analysis of Long-Term Effects of Disasters on Mental Health and PTSD**

(Global, Health-Nat/Dis-Tech/Dis, Adult, M, C & E Europe & Indep)

**Ajdukovic, Dean, PhD**

*University of Zagreb, Zagreb, Croatia*

This presentation provides the meta-analysis of long-term psychological effects of critical events, defined as single, sudden, with clear beginning and ending, resulting in major disruption of community functions, natural or human-made, requiring mobilization of major efforts. Wars and armed conflicts except terrorism were excluded. Long-term was any period longer than 6 months. The primary studies included journal articles, chapters, dissertations, conference papers or unpublished reports produced between 1980 and 2013. Literature search included databases PsycINFO, SocINDEX, Medline, Web of Science, Scopus, Academic Search Complete, and PILOTS with 1,036 documents identified. The eligible studies used either cross-sectional or prospective research designs. The number of studies enabled meta-analysis of four outcomes in the affected groups: General mental health was poorer at 12 months and 6.6 years post-disaster; post-traumatic stress symptoms remained higher at 8.4 years; 3 years post-disaster odds for prevalence of PTSD diagnoses were 9:1; depression symptoms were moderately and significantly higher only beyond 18 months indicating a possible delayed depression response; 11 years post-disaster odds for depression diagnoses were 5:1. Individuals affected by disasters have worse long-term mental health outcomes compared to the non-affected or to the pre-disaster period.

## **Oral Paper Presentation**

**Saturday, November 8**

**03:00 PM to 04:15 PM**

**Trade**

## **Parent Interventions and Global Studies on Child Trauma**

### **Cambodians' Responses to the Khmer Rouge Tribunal: A National Longitudinal Study**

(Clin Res, Rights-Social-Torture-Civil/War, Adult, I, E Asia & Pac)

**Sonis, Jeffrey, MD MPH<sup>1</sup>**; Gibson, James, PhD<sup>2</sup>; de Jong, Joop, PhD<sup>3</sup>; Hean, Sokhom, PhD<sup>4</sup>

<sup>1</sup>*University of North Carolina at Chapel-Hill, Chapel Hill, North Carolina, USA*

<sup>2</sup>*Washington University in St Louis, St Louis, Missouri, USA*

<sup>3</sup>*Vrije Universiteit, Amsterdam, Netherlands*

<sup>4</sup>*Center for Advanced Study, Phnom Penh, Cambodia*

Many post-conflict societies have implemented justice mechanisms, such as human rights tribunals, to deal with legacies of violence and human rights violations. But what effect do these tribunals have on attitudes and mental health of survivors of human rights violations? The purpose of this presentation is to present the findings of three waves of a national longitudinal study of Cambodians' responses to the jointly sponsored (United Nations / Cambodia) Khmer Rouge (KR) Tribunal. The first wave (N=1,800; response rate 89%) was conducted in 2009, prior to the start of the first trial, of "Comrade Duch", director of the most infamous prison for enemies of the state. The second wave (response rate 94%) was conducted in 2010, shortly after the Tribunal sentenced Duch to 35 years in prison for complicity with over 12,000 deaths. The third wave (response rate 92%) was conducted in 2012, after the Tribunal Supreme Court changed his sentence to life in prison. We will report within-individual changes over the three waves in: 1) PTSD diagnosis and severity; 2) depression severity; 3) desire for revenge; 4) perceived justice for KR atrocities. We also report between-individual predictors of changes in attitudes and mental health. These findings can help post-conflict societies address key questions in reconstruction: does justice heal? If so, how? If not, why not?

**Oral Paper Presentation**  
**Saturday, November 8**  
**03:00 PM to 04:15 PM**  
**Trade**

**Relations between PTSD and Distress Dimensions in an Indian Child/Adolescent Sample Following the 2008 Mumbai Terrorist Attacks**

(Assess Dx, Cul Div-Ethnic-Terror, Child/Adol, M, S Asia)

**Contractor, Ateka, MA<sup>1</sup>**; Mehta, Panna, MA<sup>2</sup>; Tamburrino, Marijo, MD<sup>1</sup>; Hovey, Joseph, PhD<sup>1</sup>; Tiamiyu, Mojisola, PhD<sup>1</sup>; Elhai, Jon, PhD<sup>1</sup>

<sup>1</sup>*University of Toledo, Toledo, Ohio, USA*

<sup>2</sup>*Mithibai College, Mumbai, Maharashtra, India*

We assessed relations between PTSD factors and external measures of emotional distress in 818 Indian children/adolescents exposed to the 2008 Mumbai (India) terrorist attacks. PTSD and distress were measured by the UCLA PTSD Reaction Index and Brief Symptom Inventory-18 (BSI-18) (somatization, depression, anxiety) respectively. We assessed if (1) all BSI-18's factors related more to PTSD's dysphoria than other PTSD factors, and (2) if PTSD's dysphoria related more to somatization than depression/anxiety, and more to depression than to anxiety. Confirmatory Factor Analyses indicated a well-fitting PTSD dysphoria model, S-B  $\chi^2$  (df = 161, N = 818) = 362.64,  $p < .001$ , CFI = .95, TLI = .94, RMSEA and SRMR = .04; and adequately-fitting BSI-18 three-factor model, S-B  $\chi^2$  (df = 132, N = 818) = 292.96,  $p < .001$ , CFI = .93, TLI = .92, RMSEA and SRMR = .04. Wald test results indicated that PTSD's dysphoria related more to depression [Wald  $\chi^2$  (1, N = 818) = 10.56,  $p = .001$ ] and somatization [Wald  $\chi^2$  (1, N = 818) = 7.03,  $p = .008$ ] than PTSD's avoidance; PTSD's dysphoria probably does not capture all of PTSD's distress. PTSD's dysphoria related more to depression than anxiety, Wald  $\chi^2$  (1, N = 818) = 19.51, and somatization, Wald  $\chi^2$  (1, N = 818) = 16.39,  $p < .001$ ; a possible PTSD-depression comorbidity mechanism. Subsequent cultural, clinical and theoretical implications are discussed.

**Oral Paper Presentation**  
**Saturday, November 8**  
**03:00 PM to 04:15 PM**  
**Trade**

**The Parents Make the Difference Program in Liberia: Results From a Randomized Controlled Trial**

(Global, CPA-Commun-Fam/Int-Prevent, Lifespan, M, W & C Africa)

Puffer, Eve, PhD<sup>1</sup>; Green, Eric, PhD<sup>1</sup>; **Chase, Rhea, PhD<sup>2</sup>**; Sim, Amanda, MA<sup>3</sup>; Rolland, Eduardo, MA<sup>3</sup>; Boone, Laura, MA<sup>3</sup>

<sup>1</sup>*Duke University, Durham, North Carolina, USA*

<sup>2</sup>*Duke University Medical Center, Durham, North Carolina, USA*

<sup>3</sup>*International Rescue Committee, New York, New York, USA*

A large body of research supports the use of behavioral parent training programs to reduce abusive parenting practices and improve parent-child relationships, but the majority of this research has been conducted in high income countries. Parents Make the Difference is a brief parenting intervention delivered by lay facilitators in rural, post-conflict Liberia. A sample of 270 children ages 3 to 7 and their caregivers were randomized into either an immediate treatment (IT) group that received a 10-session parent training intervention or a wait-list control (WL) condition. Compared to the WL group, caregivers in the IT condition reported less use of harsh parenting strategies ( $p < .001$ ) and a higher ratio of positive to negative discipline strategies ( $p < .001$ ). Prevalence of "beating" children

decreased by more than half. Children of caregivers in the IT group also reported more positive interactions with their caregivers ( $p < .01$ ). Indicators of feasibility and acceptability were positive, with high attendance and satisfaction ratings. Results suggest the Parents Make the Difference program offers a promising approach to prevent child maltreatment and promote positive parent-child interactions in low-resource post-conflict settings.

## **Oral Paper Presentation**

**Saturday, November 8**

**03:00 PM to 04:15 PM**

**Trade**

### **Child-Parent Psychotherapy Examined in a Perinatal Sample: Depression, Post-Traumatic Stress Symptoms and Child-Rearing Attitudes**

(Prevent, CPA-DV-Fam/Int, Adult, I, Industrialized)

**Lavi, Iris, PhD<sup>1</sup>**; Gard, Arianna, BA<sup>2</sup>; Hagan, Melissa, PhD<sup>3</sup>; Van Horn, Patricia, PhD<sup>3</sup>; Lieberman, Alicia, PhD<sup>4</sup>

<sup>1</sup>*University of California, Berkeley, Berkeley, California, USA*

<sup>2</sup>*University of Michigan, Ann Arbor, Michigan, USA*

<sup>3</sup>*UCSF Department of Psychiatry, San Francisco, California, USA*

<sup>4</sup>*University of California, San Francisco - San Francisco General Hospital, San Francisco, California, USA*

As a way of addressing the effects of childhood trauma on current parenting ability, the study examines perinatal psychotherapy which aims to enable usage of the person's strength and capacities to generate healing and empowerment. This pilot study examined effects of Perinatal Child-Parent Psychotherapy (P-CPP) on depression, PTSD and child-rearing attitudes among pregnant women with a history of childhood maltreatment and current intimate partner violence. The psychotherapy addresses childhood trauma with the aim of preventing intergenerational transmission of distress. Pregnant women ( $n = 64$ ) entered treatment during the third trimester of their pregnancy (Mean gestational age = 39.20 weeks) and completed measures at pre- and post-treatment, which took place when the infant was roughly 6 months old. Decreases in depression and PTSD and increases in positive child-rearing attitudes were apparent when comparing pre- and post-assessments. Women with low maternal-fetal attachment demonstrated the greatest improvement in outcomes compared to women with high attachment. Intervention dosage impacted child-rearing attitudes: women who received longer treatment demonstrated greatest improvement. P-CPP, an adaptation of an evidence-based treatment for traumatized mother-child dyads, can be effective for pregnant women. P-CPP warrants examination in a larger, randomized efficacy trial.

**Oral Paper Presentation**  
**Saturday, November 8**  
**03:00 PM to 04:15 PM**  
**Gusman/Tuttle**

## **The Role of Parents in Child Trauma**

### **Parental Grief, Depression, and Anxiety as Predictors of Mother-Reported Child Grief in Bereaved U.S. Military Families**

(Assess Dx, Death-Grief, Lifespan, M, Industrialized)

*Ortiz, Claudio, PhD<sup>1</sup>, Fisher, Joscelyn, PhD<sup>1</sup>, Zhou, Jing, MS<sup>1</sup>, Kaplow, Julie, PhD, ABPP<sup>2</sup>, Layne, Christopher, PhD<sup>3</sup>, Cozza, Stephen, MD<sup>1</sup>*

<sup>1</sup>*Center for the Study of Traumatic Stress, Uniformed Services University of the Health Sciences, Bethesda, Maryland, USA*

<sup>2</sup>*University of Michigan Medical School, Ann Arbor, Michigan, USA*

<sup>3</sup>*UCLA - National Center for Child Traumatic Stress, Los Angeles, California, USA*

The death of a parent profoundly impacts children. Although some predictors of child grief outcomes following parental death have been suggested, few empirical studies have examined these predictors, particularly roles that surviving parents' own grief and psychological functioning may play as predictors. Surviving parents' mental health may affect children's grief through multiple pathways: 1) Bereaved children rely on surviving adult caregivers for support and guidance, 2) Parents may model adaptive and/or maladaptive grieving for children. 3) Parents' mental health may influence parenting behavior in ways that affect child grief. We examined relations between mothers' self-reported mental health and their observational reports of children's grief reactions using 12 items derived from the Multidimensional Grief Reactions Scale (Layne, Kaplow, Pynoos, 2011) in 198 bereaved US military families. Preliminary results show that mothers' grief, depression, and anxiety differentially predict their perceptions of adaptive versus maladaptive child grief. We discuss implications for the valid assessment of adaptive and maladaptive grief reactions in the context of surviving caregivers' mental wellbeing, which may bias parent reports of child adjustment. Findings highlight the need for examination of concordance between parent and child reports in assessment of child grief.

**Oral Paper Presentation**  
**Saturday, November 8**  
**03:00 PM to 04:15 PM**  
**Gusman/Tuttle**

### **Maternal Trauma Exposure and PTSD as Predictors of Emotional Availability and Children's Adjustment**

(Clin Res, CPA-Complex-Fam/Int, Lifespan, I, N/A)

*Samuelson, Kristin, PhD; Wilson, Christina, PhD; Padron, Elena, PhD; Lee, Suellen, PhD*

*California School of Professional Psychology at Alliant International University, San Francisco, California, USA*

Maternal trauma exposure is a risk factor for negative child adjustment, but it is unclear whether this association is mediated by parent-child relationship difficulties or by other sequelae of trauma, such as PTSD. Limitations within this field of research include overreliance on self-report measures of parenting, emphasis on parenting behaviors rather than on more nuanced relational constructs, and use of single-category measurements of trauma exposure. To address these questions and limitations, we examined associations between maternal cumulative trauma exposure,

PTSD symptom severity, observer-rated emotional availability (Biringen, 2008), and children's adjustment in a sample of 52 mothers with severe childhood and adult interpersonal trauma histories, and their school-age children. Cumulative trauma exposure, but not PTSD, predicted lower levels of sensitivity, and higher levels of intrusiveness and hostility. This finding suggests that parent-child psychotherapy may be beneficial for trauma-exposed families even when PTSD symptoms are not present. In contrast, maternal PTSD, but not cumulative trauma exposure or emotional availability, predicted children's internalizing and externalizing behaviors and emotion regulation. This finding underscores the importance of PTSD treatment for symptomatic mothers, and that the benefits of therapy could extend to child outcomes.

## **Oral Paper Presentation**

**Saturday, November 8**

**03:00 PM to 04:15 PM**

**Gusman/Tuttle**

### **The Effect of Maternal Trauma on Child Attachment Security: The Indirect Effects of PTSD Symptoms and Atypical Parenting Behaviors**

(Prevent, Complex-Cul Div-DV-Prevent, Lifespan, M, Industrialized)

**Riggs, Jessica, MS PhD Student;** Harris, Katherine, MS; Rouleau, Erica, BA; Pitzen, Jerrica, BA; Rivas, Mayra, Undergraduate; Huth-Bocks, Alissa, PhD  
*Eastern Michigan University, Ypsilanti, Michigan, USA*

The intergenerational transmission of trauma is a known risk to the mother-child relationship. The present study examined associations between maternal traumatic experiences during childhood, PTSD symptoms, and parenting behaviors and child attachment among 120 diverse, economically disadvantaged women and their 2-year-old children. Participants came from a longitudinal study of a community sample of women, starting at pregnancy through 2 years postpartum. Direct and indirect effects of potentially traumatic experiences on child attachment outcomes were examined using the PROCESS procedure (Hayes, 2013). Results indicate that traumatic experiences indirectly influenced child security and attachment disorganization through its effects on maternal PTSD symptoms of hypervigilance and observer-rated atypical parenting behaviors (unstandardized effect = -.0030 for security and .0050 for disorganized behavior), as evidenced by a bias-corrected bootstrap 95% confidence interval (.0011 to .0170 and -.0074 to -.0007, respectively). Findings highlight the need for trauma-informed interventions targeted toward at-risk mothers, to ameliorate the effects of maternal traumatic experiences on parenting behaviors, and subsequent child attachment security

## **Oral Paper Presentation**

**Saturday, November 8**

**03:00 PM to 04:15 PM**

**Gusman/Tuttle**

### **The Norway 2011 Terror Attack: Parents' Experiences and Post-Traumatic Stress Reactions**

(Clin Res, Acute-Assess Dx-Comm/Vio-Fam/Int, Lifespan, M, Industrialized)

**Dyb, Grete, MD PhD<sup>1</sup>;** Jensen, Tine, PhD<sup>2</sup>; Thoresen, Siri, PhD<sup>1</sup>

<sup>1</sup>*Norwegian Center for Violence and Traumatic Stress Studies (NKVTS), Oslo, Norway*

<sup>2</sup>*University of Oslo, Oslo, Norway*

Although children and youth in many countries have been exposed to terrorist attacks, few studies have examined how parents may be affected by the trauma of their child. On July 22nd 2011, Norway experienced a shooting attack



at the Utoya Island outside Oslo, a summer camp for the Norwegian Labor Youth Party. At the time of the attack 495 youth and young adults were on the island, and the perpetrator killed 69 people, and 56 were hospitalized for severe injuries. The aim of this study was to investigate parents' experiences and levels of posttraumatic stress reactions. 463 parents participated in the study. They were all parents or stepparents of youth survivors who had been highly exposed to danger and losses in the terror attack. Their children were in life danger during more than 90 minutes, parents watched the attack live on TV, talked to their children on their cell phones during the shooting, and for hours they lacked information on who survived. This presentation will include results on parents' experiences and levels of posttraumatic stress reactions four-five months post terror. PTSD levels will be compared to results from a concurrent study in the general population. Predictors of levels of distress such as gender, ethnic minority, levels of trauma exposure, and loss of someone close will be explored.

# CONCURRENT SESSION 13

## Symposium

Saturday, November 8

04:30 PM to 05:45 PM

Biscayne - BIOLOGY TRACK

## Sexual Functioning and PTSD: Competing Biology and Phenomenology

(Bio Med, Health-Illness-Bio/Int-Mil/Vets, Adult, I, Industrialized)

Lehrner, Amy, PhD<sup>1</sup>; van der Kolk, Bessel, MD<sup>2</sup>

<sup>1</sup>*J. J. Peters Veterans Affairs Medical Center, Bronx, New York, USA*

<sup>2</sup>*Trauma Center at Justice Resource Institute, Brookline, Massachusetts, USA*

Sexual dysfunction in PTSD was initially understood as a consequence of sexual abuse and trauma. Increasingly, however, sexual dysfunction has been associated with non-sexual trauma, such as combat exposure, accidents, and assaults, and it has been observed that PTSD may mediate this relationship. Many PTSD symptoms, such as irritability, anhedonia, and emotional numbing, may contribute to problems with sexual functioning and intimacy. It is also notable that the neurochemistry and neuroendocrinology of PTSD and sexual behavior are similar. However, it is unknown whether problems in sexual function are a secondary consequence of PTSD symptoms or whether PTSD pathophysiology directly disrupts relevant biological pathways involved in sexual desire and function. This symposium presents three papers that will review the prevalence of sexual dysfunction in PTSD (Dr. Cohen), present a model suggesting that the biological alterations associated with PTSD may directly impact biological systems critical for sex (Dr. Yehuda), and present preliminary data linking neuroendocrine correlates of PTSD with sexual dysfunction in combat veterans (Dr. Lehrner). Dr. Bessel Van der Kolk will be the discussant.

## Symposium

Saturday, November 8

04:30 PM to 05:45 PM

Biscayne - BIOLOGY TRACK

## Sexual Dysfunction in Male Iraq and Afghanistan War Veterans: Association with Post-Traumatic Stress Disorder and Other Combat-Related Mental Health Disorders

(Clin Res, Health-Illness-Mil/Vets, Adult, I, Industrialized)

Cohen, Beth, MD, MAS<sup>1</sup>; Breyer, Benjamin, MD<sup>2</sup>; Bertenthal, Daniel, MPH<sup>3</sup>; Rosen, Raymond, PhD<sup>4</sup>; Neylan, Thomas, MD<sup>1</sup>; **Seal, Karen, MD MPH<sup>5</sup>**

<sup>1</sup>*University of California, San Francisco and San Francisco VAMC, San Francisco, California, USA*

<sup>2</sup>*UCSF-San Francisco General Hospital, San Francisco, California, USA*

<sup>3</sup>*San Francisco VA Medical Center (VAMC-SF), San Francisco, California, USA*

<sup>4</sup>*New England Research Institutes, Inc., Watertown, Massachusetts, USA*

<sup>5</sup>*San Francisco VA Medical Center and UCSF, San Francisco, California, USA*

Mental illness, including PTSD with or without psychiatric medications, can increase the risk for male sexual dysfunction, threatening quality of life. We sought to determine the prevalence and correlates of sexual dysfunction among male Iraq and Afghanistan veterans. We performed a retrospective cohort study of 405,275 male Iraq and Afghanistan veterans who were new users of VA healthcare from 10/7/2001 to 9/30/2009. We determined the

independent association of mental health diagnoses and sexual dysfunction after adjusting for sociodemographic and military service characteristics, comorbidities, and medications. Veterans with PTSD were more likely to have a sexual dysfunction diagnosis, be prescribed medications for sexual dysfunction, or both (10.6%), compared with veterans having a mental diagnosis other than PTSD (7.2%), or no mental health diagnosis (2.3%). In a fully adjusted model, PTSD increased the risk of sexual dysfunction by more than threefold (adjusted risk ratio 3.61, 95% CI 3.48–3.75). Veterans with mental health disorders, particularly PTSD, were at the highest risk of sexual dysfunction when prescribed psychiatric medications (adjusted risk ratio 4.59, 95% CI 4.41–4.77). Among returning veterans, mental health disorders, particularly PTSD, increased the risk of sexual dysfunction independent of the use of psychiatric medication.

## **Symposium**

**Saturday, November 8**

**04:30 PM to 05:45 PM**

**Biscayne - BIOLOGY TRACK**

### **Biology of PTSD and Sexual Dysfunction**

(Bio Med, Health-Illness-Bio/Int, Adult, I, N/A)

**Yehuda, Rachel, PhD<sup>1</sup>**; Rosenbaum, Talli, MSc<sup>2</sup>

<sup>1</sup>*J. J. Peters Veterans Affairs Medical Center; Mount Sinai School of Medicine, Bronx, New York, USA*

<sup>2</sup>*Private Practice, Bet Shemesh, Kanion Naimi, Israel*

PTSD has been associated with sexual dysfunction, regardless of trauma type. Notably, neuroendocrine processes in PTSD and sexual behavior are similar. This paper presents a model suggesting that PTSD pathophysiology may directly impact sexual functioning. Desire and sexual activity require a balance between neural mechanisms of arousal and inhibitory processes associated with a perception of safety and security. In PTSD, these inhibitory processes are not easily engaged and neurochemical mechanisms of arousal may be directed towards fear and anxiety. For example, yohimbe is a selective pre-synaptic antagonist of alpha-2 adrenergic receptors that increases norepinephrine and is used as an over-the-counter supplement used for erectile dysfunction. In PTSD, use of yohimbe can cause panic and flashback. If the biology of PTSD primes the individual to associate arousal with threat, impairs his or her ability to downregulate or contain the fear response, and impedes inhibitory neurobiological processes required for sexual activity, the biological cards may be stacked against sexual function and intimacy in PTSD. This presentation will specifically review distinct components of sexual dysfunction in PTSD (e.g., desire, performance) and their associations with endocrine markers including catecholamines, gonadal steroids, and hormones that are implicated in PTSD and sexual function.

## **Symposium**

**Saturday, November 8**

**04:30 PM to 05:45 PM**

**Biscayne - BIOLOGY TRACK**

### **PTSD and Sexual Dysfunction in Combat Veterans: Psychological and Neuroendocrine Correlates**

(Bio Med, Health-Bio/Int-Mil/Vets, Adult, I, Industrialized)

**Lehrner, Amy, PhD**

*J. J. Peters Veterans Affairs Medical Center, Bronx, New York, USA*

PTSD may impact sexual intimacy and intimate relationships in many ways. Symptoms such as anhedonia, emotional numbing, and irritability may contribute to problems with sexual intimacy by affecting sexual interest, desire, arousal, consummation, and satisfaction. Veterans may avoid sexual intimacy to minimize feelings of arousal or vulnerability that trigger flashbacks or intrusive memories, or due to a lack of desire for their partner associated with PTSD related anhedonia or emotional disconnection. In other cases, veterans may experience desire and arousal, but have difficulty with performance. Preliminary data on sexual dysfunction, PTSD symptoms, and neuroendocrine markers from two studies of combat veterans will be presented. For example, in a sample of 147 male OEF/OIF combat veterans, PTSD symptom severity was highly correlated with sexual problems and disinterest in the previous two weeks ( $r=.540$ ,  $n=71$ ,  $p<.0001$ ). In veterans with PTSD, loss of sexual interest or pleasure was negatively correlated with DHEA ( $r=-.253$ ,  $df=66$ ,  $p=.038$ , controlling for age and BMI) and with cortisol decline following ingestion of dexamethasone ( $r=-.286$ ,  $df=62$ ,  $p=.022$ , controlling for age, BMI, and dexamethasone levels). In a separate study of combat veterans with PTSD, difficulty achieving orgasm was associated with urinary NE ( $r=.319$ ,  $df=44$ ,  $p=.031$ ), controlling for BMI and age.

## **Symposium**

**Saturday, November 8**

**04:30 PM to 05:45 PM**

**Sevilla - LONG-TERM EFFECTS OF CHILD TRAUMA TRACK**

## **Measuring Multigenerational Legacies of Trauma**

(Global, Chronic-Death-Fam/Int-Surv/Hist, Lifespan, M, N/A)

Rockefeller, Richard, MD (*in Memoriam*)

*Rockefeller Brothers Fund, New York, New York, USA*

This symposium will present the state of the field of multigenerational legacies of trauma and propose both conceptual and research agenda to move it forward. It will first review the extant literature regarding the effects on offspring of parental PTSD. It will then present the conceptual bases, development and validation of a new instrument that assess the child of survivor's view of his/her parents and upbringing (post-trauma adaptational styles), the child of survivor's views on him/herself (reparative adaptational impacts), and a four-generational history and demographic factors. This symposium will conclude with examining the relationships between these two bodies of data and future applicability of the new measure.

## **Symposium**

**Saturday, November 8**

**04:30 PM to 05:45 PM**

**Sevilla - LONG-TERM EFFECTS OF CHILD TRAUMA TRACK**

## **Offspring Effects of Parental PTSD: A Review of the Literature**

(Clin Res, Gen/Int-Fam/Int, Lifespan, M, N/A)

**Leen-Feldner, Ellen, PhD<sup>1</sup>**; Feldner, Matthew, PhD<sup>1</sup>; Amstadter, Ananda, PhD<sup>2</sup>

<sup>1</sup>*University of Arkansas, Fayetteville, Fayetteville, Arkansas, USA*

<sup>2</sup>*Virginia Institute for Psychiatric and Behavioral Genetics, VCU, Richmond, Virginia, USA*

The current presentation provides an integrative review of the diverse research literature examining the sequelae of parental post-traumatic stress among offspring. Based on findings from more than 100 studies, it can be concluded that parental symptoms of post-traumatic stress confer unique risk on offspring, including elevated rates of internalizing-type problems, general behavioral problems, and altered hypothalamic-pituitary-adrenal axis

functioning. Putative processes of intergenerational transmission, including genetic/epigenetic factors, as well as parenting behaviors and contextual factors will be discussed. These conclusions will be situated within the methodological strengths and challenges of the existing research base with an eye on how to continue to advance our understanding of this important area of research.

## **Symposium**

**Saturday, November 8**

**04:30 PM to 05:45 PM**

**Sevilla - LONG-TERM EFFECTS OF CHILD TRAUMA TRACK**

### **Developing a Measure of Multigenerational Legacies of Trauma**

(Assess Dx, Fam/Int-Global-Refugee-Civil/War, Lifespan, M, Global)

**Danieli, Yael, PhD**

*Director of the Group Project for Holocaust Survivors and their Children, New York, New York, USA*

This paper will present the theoretical framework for the concepts underpinning the (differing) post-trauma family adaptational styles included in Danieli's typology and the dual need to both develop a valid empirical measure of multigenerational transmission of trauma and explore the validity of the typology. It will describe the process of developing and constructing a multidimensional three-part self report measure of multigenerational legacies of trauma both in English and in Hebrew. Part I assesses the child of survivor's view of his/her parents and upbringing, separately for mother and for father; Part II assesses the child of survivor's view on him/her self; and Part III is a comprehensive four-generational history and demographic report of life before, during and after the trauma, including the adult child's own family. The description of the developing and validating the questionnaire will critically reflect upon particular dilemmas that arose in the process. In discussing the framework, in order to add a highly needed clarity to the discourse in the field of multigenerational legacies of trauma, the paper will also map the conceptual distinction between pathways and mechanisms of transmission.

## **Symposium**

**Saturday, November 8**

**04:30 PM to 05:45 PM**

**Sevilla - LONG-TERM EFFECTS OF CHILD TRAUMA TRACK**

### **Assessment of Family Adaptational Styles and their Impacts on Adult Children of Holocaust Survivors**

(Assess Dx, Surv/Hist, Adult, M, N/A)

**Norris, Fran, PhD**

*Dartmouth Medical School; National Center for PTSD, White River Junction, Vermont, USA*

The current study describes the development of a three-part self-report measure of multigenerational legacies of trauma. Via a web survey available in English and Hebrew, data were collected from 482 adult children of Holocaust survivors on their experiences while growing up with their parents (Part I, 70 questions) and on their own characteristics and behaviors (Part II, 58 questions). Exploratory factor analyses of Part I data identified theoretically meaningful sets of items that conformed well to Danieli's typology of victim, numb, and fighter style families. Exploratory factor analyses of Part II data yielded two higher-order factors, Reparative Adaptational Impacts and Admiration of Parent's Resilience. Scales created on the basis of these results showed satisfactory-to-excellent internal consistencies in both English and Hebrew. Reparative adaptational impacts were significantly related to clinician assessments of PTSD, depression, anxiety, and global functioning ( $n = 191$ ). Family adaptational styles predicted severity of reparative impacts, with the intensity of victim style, especially mother's victim style, having

the strongest effect. Overall, results indicate that these scales of family adaptational styles and offspring's reparative adaptational impacts are reliable, valid, and ready to be used in further research on the multigenerational legacies of trauma.

## **Symposium**

**Saturday, November 8**

**04:30 PM to 05:45 PM**

**Sevilla - LONG-TERM EFFECTS OF CHILD TRAUMA TRACK**

### **Future Applications of the Measures of the Multigenerational Legacies of Trauma**

(Global, Assess Dx-Fam/Int-Surv/Hist, Lifespan, M, Industrialized)

**Engdahl, Brian, PhD**

*Department of Veterans Affairs Medical Center, Minneapolis, Minnesota, USA*

These new instruments assess the child of survivor's view of his/her parents and upbringing (post-trauma adaptational styles), the child of survivor's views on him/herself (reparative adaptational impacts), and tie them to a four-generational history and demographic factor measure. We examine the relationships between these two bodies of data and future applicability of the new measures. They hold great promise for applicability to millions of people exposed to trauma and their descendants. Not only will there be further applications within the North American context (i.e., families of veterans, 9/11 survivors and first responders, etc.), but within indigenous peoples, survivors of domestic violence, various post-trauma refugees, etc. There has been strong interest around the world in translating and using the instruments; English and Hebrew versions are already available and versions in other languages are forthcoming. This should lead to exciting cross-cultural comparisons and confirm and elaborate Danieli's distinction between pathways of transmission and mechanisms of transmission of trauma's impact.

**Symposium**  
**Saturday, November 8**  
**04:30 PM to 05:45 PM**  
**Trade**

## **Terrorism and Child Mental Health: The Impact of the Boston Marathon Bombings**

(Bio Med, Comm/Vio-Dev/Int-Terror, Child/Adol, M, Industrialized)

McLaughlin, Katie , PhD  
*Harvard Medical School/Children's Hospital Boston, Boston, Massachusetts, USA*

On April 15th, 2013, two bombs were detonated near the finish line of the Boston Marathon, killing 3 and critically injuring hundreds. The attack marked the beginning of an intense week for Boston-area families. Bags abandoned by fleeing spectators were treated as potential explosives and false rumors spread about live bombs throughout the city. Three days after the attack, a manhunt for the perpetrators resulted in an unprecedented lockdown that required residents of Boston and surrounding communities to remain indoors. The public transportation system, educational institutions, local government offices, and most businesses were closed. Although direct exposure to the attack was limited to spectators at the finish line, hundreds of thousands of Boston residents watched the manhunt unfold live on television. This symposium examines the impact of these events on children's mental health and adjustment. We examine the impact of the bombings and the ensuing inter-agency manhunt and lockdown of the city, including the degree of media exposure to these events, on child mental health. Using prospective data collected before the attack occurred, we identify neurobiological and psychosocial factors that predict the onset of PTSD symptoms related to these events. Finally, we explore the role of teachers in identifying children at risk for psychopathology following mass trauma.

**Symposium**  
**Saturday, November 8**  
**04:30 PM to 05:45 PM**  
**Trade**

## **Amygdala Response to Negative Emotional Stimuli Predicts PTSD Symptom Onset following a Terrorist Attack**

(Bio Med, Comm/Vio-Dev/Int-Bio/Int-Terror, Child/Adol, M, Industrialized)

McLaughlin, Katie, PhD<sup>1</sup>; Sheridan, Margaret, PhD<sup>2</sup>  
<sup>1</sup>*University of Washington, Seattle, Washington, USA*  
<sup>2</sup>*Harvard Medical School/Children's Hospital Boston, Boston, Massachusetts, USA*

**OBJECTIVE:** Individuals with PTSD exhibit heightened amygdala reactivity and atypical activation patterns in the medial prefrontal cortex (mPFC) in response to emotional stimuli. It is unknown whether these aspects of neural function are risk factors for PTSD or consequences of trauma exposure. We investigated this issue following the terrorist attacks at the 2013 Boston Marathon and the ensuing manhunt and lockdown of the city. **METHODS:** A sample of adolescents who previously participated in a neuroimaging study completed a survey assessing PTSD symptoms related to the attack. We examined blood oxygen-level dependent (BOLD) response to viewing and actively down-regulating emotional responses to negative stimuli as prospective predictors of PTSD symptom onset. **RESULTS:** Increased BOLD signal to negative emotional stimuli in the left amygdala was associated with PTSD symptoms following the attack. Reduced bilateral hippocampal activation during attempts to down-regulate emotional responses to negative stimuli was also associated with greater PTSD symptoms. Associations of



amygdala reactivity with PTSD symptoms were robust to controls for pre-existing psychopathology and prior trauma exposure. **CONCLUSIONS:** Amygdala reactivity to negative emotional information represents a neurobiological marker of vulnerability to traumatic stress and, potentially, a risk factor for PTSD.

## **Symposium**

**Saturday, November 8**

**04:30 PM to 05:45 PM**

**Trade**

### **Media Exposure and Sympathetic Nervous System Reactivity Predict PTSD Symptoms after the Boston Marathon Bombings**

(Bio Med, Anx-Comm/Vio-Journalism-Terror, Child/Adol, M, Industrialized)

Busso, Daniel, MA MSc<sup>1</sup>; McLaughlin, Katie, PhD<sup>2</sup>; **Sheridan, Margaret, PhD<sup>3</sup>**

<sup>1</sup>*Harvard University, Cambridge, Massachusetts, USA*

<sup>2</sup>*University of Washington, Seattle, Washington, USA*

<sup>3</sup>*Harvard Medical School/Children's Hospital Boston, Boston, Massachusetts, USA*

Terrorist attacks have been shown to precipitate post-traumatic stress disorder (PTSD) symptomatology, particularly among youths with high exposure to media coverage. Media exposure may be particularly likely to trigger PTSD symptoms in youths with high physiological reactivity to stress or with prior psychopathology or exposure to violence. We examined the interplay between media exposure, pre-attack psychopathology, autonomic nervous system (ANS) reactivity, and prior violence exposure in predicting PTSD symptom onset following the terrorist attack at the 2013 Boston Marathon. A sample of 78 adolescents completed a survey assessing media exposure to the event and PTSD symptoms. All respondents participated in a study assessing psychopathology, and in a subset (N=44), sympathetic and parasympathetic reactivity to a laboratory-based stressor, prior to the attack. We examined the associations of media exposure and pre-attack ANS reactivity, psychopathology and violence exposure with onset of PTSD symptoms related to the bombings. Media exposure, pre-attack psychopathology, and violence exposure were associated with PTSD symptoms. Moreover, media exposure interacted with sympathetic reactivity to predict PTSD symptom onset, such that adolescents with lower levels of sympathetic reactivity developed PTSD symptoms only following high exposure to media coverage of the attack.

## **Symposium**

**Saturday, November 8**

**04:30 PM to 05:45 PM**

**Trade**

### **Teacher Crisis Response Following the Boston Marathon Attack and Manhunt**

(Commun, Commun-Terror, Child/Adol, M, Industrialized)

**Green, Jennifer, PhD<sup>1</sup>**; Holt, Melissa, PhD<sup>1</sup>; Kwong, Lana, MPH<sup>2</sup>; Reid, Gerald, PhD<sup>1</sup>; Xuan, Ziming, ScD<sup>3</sup>; Comer, Jonathan, PhD<sup>4</sup>

<sup>1</sup>*Boston University, Boston, Massachusetts, USA*

<sup>2</sup>*Boston Medical Center, Boston, Massachusetts, USA*

<sup>3</sup>*Boston University School of Public Health, Boston, Massachusetts, USA*

<sup>4</sup>*Florida International University, Miami, Florida, USA*

Schools provide key mental health services following mass crisis events, such as the Boston Marathon bombing. Teachers, in particular, can offer important supports and mental health service referrals. We examine teachers' perception of students' psychological symptoms and the types of supports that schools and teachers provided following the Boston Marathon bombing and subsequent manhunt. Boston-area K-12 teachers (N=188) in

communities with varying levels of exposure to events completed a web-based survey 2-5 months post-attack. Teachers reported on students' exposure to the bombings and manhunt, students' psychological functioning, and the types of supports that they and their schools provided students. Teacher reports of student exposure to the bombings and manhunt were significantly and uniquely associated with greater student psychological distress. Further, almost half indicated their school had no formal policy for responding to the crisis, 45% reported no training to address events, and even the most common classroom-based support strategy - reassuring students of their safety - was provided by only 75% of teachers. Student exposure to the manhunt, but not bombing, was significantly associated with greater provision of supports. Understanding the complex role that teachers play following a crisis can improve school-based response plans and youth outcomes.

## **Symposium**

**Saturday, November 8**

**04:30 PM to 05:45 PM**

## **Trade**

### **Post-Traumatic Stress and Psychosocial Functioning among Area Youth Following the 2013 Boston Marathon Bombing**

(Clin Res, Health-Pub Health-Terror, Child/Adol, M, Industrialized)

**Comer, Jonathan, PhD<sup>1</sup>**; Dantowitz, Annie, MA<sup>2</sup>; Chou, Tommy, MA<sup>3</sup>; Carpenter, Aubrey, MA<sup>2</sup>; Elkins, R., MA<sup>2</sup>; Kerns, Caroline, MA<sup>2</sup>; Green, Jennifer, PhD<sup>2</sup>

<sup>1</sup>*Florida International University, Miami, Florida, USA*

<sup>2</sup>*Boston University, Boston, Massachusetts, USA*

<sup>3</sup>*Oakland University, Miami, Florida, USA*

Minimal research has examined reactions to terrorism of the scope of the Marathon attack, and the extraordinary postattack interagency manhunt and shelter-in-place made for a truly unprecedented experience in its own right for area families. In the present study, Boston-area caretakers (N=460) reported in the first 6 post-attack months on child experiences during the attack week, as well as children's PTSD symptoms, emotional symptoms, conduct problems, hyperactivity/inattention, peer problems, and overall difficulties. There was considerable heterogeneity across youth outcomes. Roughly 11% of youth attending the Marathon showed likely PTSD, whereas only 2% of Boston youth not attending the Marathon showed likely PTSD. Attack and manhunt experiences each uniquely predicted 9% of PTSD symptom variance, with manhunt exposures more robustly associated than attack-related exposures with outcomes. Attack experiences predicting PTSD were child saw dead bodies or injured people or knew someone killed/injured. Manhunt experiences predicting PTSD were: child knew the slain MIT officer, heard manhunt-related gunshots/explosions, had officer enter/search home, and saw manhunt-related blood. Clinical efforts must maintain a broadened focus beyond simply youth present at the blasts, and must also include youth exposed to the intense interagency pursuit and manhunt.

## **Panel Presentation**

**Saturday, November 8**

**04:30 PM to 05:45 PM**

### **Bayfront A - CHILD TRACK ONE**

#### **Post-Traumatic Growth: An Ecological Developmental Approach to Pediatric Post-Trauma Adaptation**

(Practice, Acc/Inj-Clinical Practice-Fam/Int-QoL, Child/Adol, M, Industrialized)

**Nelson, Lara, MD<sup>1</sup>; Kilmer, Ryan, PhD<sup>2</sup>; Gil-Rivas, Virginia, PhD<sup>2</sup>; Gold, Jeffrey, PhD<sup>1</sup>**

<sup>1</sup>*Children's Hospital Los Angeles - University of Southern California, Los Angeles, California, USA*

<sup>2</sup>*University of North Carolina at Charlotte, Charlotte, North Carolina, USA*

Applying a bio-psycho-social model of post-traumatic stress disorder (PTSD), panelists will discuss the biological, psychological, behavioral, and social aspects of PTSD following exposure to potentially traumatic medical events. Specifically, we will focus on the unique child and caregiver post-traumatic responses, as well as the parent-child interactions following potentially traumatic medical events. Panelists will highlight: a) the significant relations among pre-, peri-, and post-trauma symptoms and PTSD in children on the pediatric intensive care unit (PICU); b) the potential importance of the interaction between children and parents in early recovery following pediatric injury; c) critical biological, physiological, and behavioral markers for the development of PTSD in children and their parents with medical trauma; and d) clinical implications for children and youth who have experienced pediatric medical trauma. The discussion will highlight the importance of a bio-psycho-social model of assessment and intervention, the salience of family-centered care, and strategies for early detection and intervention. The panelists will include recommendations for future research and clinical practice.

## **Panel Presentation**

**Saturday, November 8**

**04:30 PM to 05:45 PM**

### **Gusman/Tuttle**

#### **Bringing it Home: The Application of Trauma Focused Therapy in Home-Based Settings**

(Practice, Commun-Complex-Train/Ed/Dis, Child/Adol, M, Industrialized)

**Wozniak, Jessica, PsyD<sup>1</sup>; Griffin, Jessica, PsyD<sup>2</sup>; Sarvet, Barry, MD<sup>1</sup>; Black-Pond, Constance, LCSW<sup>3</sup>**

<sup>1</sup>*Baystate Medical Center, Springfield, Massachusetts, USA*

<sup>2</sup>*University of Massachusetts Medical School, Worcester, Massachusetts, USA*

<sup>3</sup>*Western Michigan University, Kalamazoo, Michigan, USA*

Working with families in their homes increases engagement and creates space to be able to process traumatic experiences. Across the country, states are moving towards home-based service models as in-home therapy has proven successful in meeting the needs of families who have complex needs. These efforts have led to greater sustainability of trauma-informed practices, specifically Trauma-Focused Cognitive-Behavioral Therapy. The objective for this session is to provide participants information related to the application of TF-CBT in the home setting. Benefits and barriers to implementing TF-CBT within home-based settings will be discussed. A national TF-CBT trainer will provide an in-depth discussion of the application of the TF-CBT model within home-based settings. Panelists will discuss: 1) Involvement of paraprofessionals; 2) Ways in which home-based clinicians are supported in implementation efforts (e.g., additional training and review of audio-taped sessions; 3) Qualitative and quantitative data from implementation efforts; 4) Audiotaped excerpts of TF-CBT sessions within the home; 5) Managing home-based crises. Utilizing TF-CBT in the home-based setting has provided traumatized children and families, who would otherwise be unable to access TF-CBT, evidence-based trauma treatment.

## **Workshop Presentation**

**Saturday, November 8**

**04:30 PM to 05:45 PM**

### **Bayfront B - CHILD TRACK TWO**

#### **A Life Span Approach to Expert Assessment of Adults Reporting Childhood Sexualized Assault (CSA): Using Developmental Psychopathology, Attachment and Risk/Resilience to Assess Impacts of CSA**

(Assess Dx, Acute-CPA-CSA-Complex, Lifespan, M, N/A)

**Barnes, Rosemary, PhD; Josefowitz, Nina, PhD**

*Private Practice, Toronto, Ontario, Canada*

Adult survivors of childhood sexualized assault (CSA) often sue for damages in civil court. Two psychologists experienced in expert assessment will explain how to incorporate a life span approach based on developmental psychopathology and attachment theory into expert mental health assessment of such adult plaintiffs (Barnes & Josefowitz, 2014a, 2014b). Though CSA increases risk for multiple psychological difficulties, no single condition, syndrome, or set of difficulties is reliably associated with CSA. For each plaintiff, data on pre-assault risk, resilience and function can be used to estimate a “but-for-the-assault” developmental trajectory which can then be compared to the plaintiff’s actual developmental trajectory. This analysis, combined with an assessment of the severity and meaning of the assault, can assist in determining whether and how CSA contributed to later life psychological difficulties. We discuss how to evaluate potentially complicating factors e.g., the plaintiff’s exposure to previous and/or subsequent trauma or maltreatment. Using studies by Coates and Wade (2004, 2007), we also explain how language can either obfuscate or clarify accounts of CSA and how to use language to provide courts with accurate descriptions. We will provide a case example, and workshop participants will have an opportunity to apply the approaches.

## **Media Presentation**

**Saturday, November 8**

**04:30 PM to 05:45 PM**

### **Flagler**

#### **Staying Strong: How Schools Build Resilience in Military Families - A Documentary**

(Commun, Commun-Mil/Vets, Child/Adol, I, Industrialized)

**Ohye, Bonnie, PhD<sup>1</sup>; Kelly, Hope, BA<sup>1</sup>; Bui, Eric, MD PhD<sup>2</sup>**

<sup>1</sup>*Massachusetts General Hospital, Boston, Massachusetts, USA*

<sup>2</sup>*Massachusetts General Hospital, Harvard Medical School, Boston, Massachusetts, USA*

“Staying Strong: How Schools Build Resilience in Military Families” is a 26-minute documentary that portrays the life experience of the children in two military families, and the exemplary efforts of their school community to protect the emotional health of these students and their families, throughout the stresses of deployment and reintegration. This film covers specific resilience-building classroom practices and promotes the model of school-based resilience promotion team, with advocacy and support from the principal and superintendent. We have presented the film to 196 educators from 13 civilian elementary schools in 2012. Surveys (n=163) showed promising results including significant pre-post increase in understanding the family stresses associated with a parental deployment (54.6% vs. 95.7%,  $p<0.001$ ), and in ability to initiate a conversation with a military connected parent regarding concerns about their child while the other parent is deployed (68.7% vs. 97.6%,  $p<0.001$ ). In addition, educators also reported increased preparedness to implement specific activities in their classroom to promote resilience among military-connected children (41.7% vs. 87.1%,  $p<0.01$ ). The film is free online

([www.stayingstrong.org](http://www.stayingstrong.org)), and is now a component of a larger resilience intervention targeting military-connected children currently being developed and tested.

## **Oral Paper Presentation**

**Saturday, November 8**

**04:30 PM to 05:45 PM**

**Versailles**

## **DSM-5 and proposed ICD-11 PTSD criteria**

### **Evidence of Symptom Profiles Consistent with Post-Traumatic Stress Disorder and Complex Post-Traumatic Stress Disorder in Different Trauma Samples**

(Assess Dx, Clin Res-Complex-Rape, Adult, M, Industrialized)

**Elklit, Ask, MSc<sup>1</sup>**; Shevlin, Mark, PhD<sup>2</sup>; Hyland, Philip, MA PhD Student<sup>3</sup>

<sup>1</sup>*University of Southern Denmark, Odense, Denmark*

<sup>2</sup>*University of Ulster, Derry, United Kingdom*

<sup>3</sup>*University of Ulster, Magee Campus, L'Derry, Northern Ireland, United Kingdom*

The ICD-11 proposes two related stress and trauma related disorders, PTSD and Complex-PTSD (C-PTSD). A diagnosis of C-PTSD requires that in addition to the PTSD symptoms, an individual must also endorse symptoms in three major domains: (1) affective dysregulation, (2) negative self-concepts, and (3) interpersonal problems. This study aimed to determine if the naturally occurring distribution of symptoms in three groups of traumatised individuals (bereavement, sexual victimization, physical assault) were consistent with the ICD-11 PTSD and C-PTSD specification. The study also investigated whether these groups differed on a range of other psychological problems. Latent class analyses consistently found that a 3-class solution was best. The classes were 'PTSD only', 'Complex PTSD', and 'Low PTSD/CPTSD'. These classes differed significantly on scores on measures of depression, anxiety, dissociation, sleep disturbances, somatization, interpersonal sensitivity, and aggression. The 'Complex PTSD' class in the three samples scored highest on all the variables, with the 'PTSD only' class scoring lower and the 'Low PTSD/CPTSD' class the lowest. This study provides evidence to support the diagnostic structure of CPTSD, and indicated that CPTSD is associated with a broad range of other psychological problems.

## **Oral Paper Presentation**

**Saturday, November 8**

**04:30 PM to 05:45 PM**

**Versailles**

### **PTSD Prevalence in U.S. Combat Infantry Soldiers: DSM-5 versus DSM-IV-TR Definitions, and Calibration of PTSD Checklist-5 (PCL-5)**

(Assess Dx, Assess Dx-Clinical Practice-Pub Health-Mil/Vets, Adult, M, Industrialized)

**Hoge, Charles, MD<sup>1</sup>**; Wilk, Joshua, PhD<sup>1</sup>; Riviere, Lyndon, PhD<sup>1</sup>; Weathers, Frank, PhD<sup>2</sup>

<sup>1</sup>*Walter Reed Army Institute of Research (WRAIR), Silver Spring, Maryland, USA*

<sup>2</sup>*Auburn University, Auburn, Alabama, USA*

**Background.** It is unknown how the new DSM-5 PTSD definition will affect prevalence. Updated evaluation instruments lack validation. **Methods.** A new 20-item PCL-5 was compared with the original 17-item PCL-S in 1,822 infantry soldiers, including soldiers who deployed to Iraq or Afghanistan. Soldiers alternately received either

of two surveys that were identical except for the order of the PCL versions. Results. PTSD prevalence was 12.9% by DSM-IV-TR and 12.3% by DSM-5 (kappa 0.67). However, of 221 soldiers who met DSM-IV-TR criteria, 67 (30.3%) failed to meet DSM-5 criteria, and 59 soldiers only met DSM-5 criteria. PCL-5 cutoff scores from 15 to 38 performed similarly to PCL-S cutoffs of 30 to 50. A PCL-5 score of 33 provided optimal agreement with the new definition; lower cutoffs (20-30) can be considered for screening in certain clinical settings, and higher cutoffs (37-38) are necessary for population prevalence estimates. The two definitions showed nearly identical association with other psychiatric disorders and impairment. Conclusions. The PCL-5 is equivalent to the validated PCL-S. However, the new PTSD definition does not appear to have greater clinical utility than the previous definition. Clinicians need to consider how to manage discordant outcomes, particularly for service members and veterans with PTSD who no longer meet criteria under DSM-5.

## **Oral Paper Presentation**

**Saturday, November 8**

**04:30 PM to 05:45 PM**

**Versailles**

### **PTSD in ICD-11: A Comparison of the Proposed ICD-11 and DSM-5 Diagnostic Criteria in a Sample of Young Survivors of a Catastrophic Shooting**

(Assess Dx, Acute-Terror, Child/Adol, M, Industrialized)

**Hafstad, Gertrud, PhD;** Dyb, Grete, MD PhD; Thoresen, Siri, PhD

*Norwegian Center for Violence and Traumatic Stress Studies (NKVTS), Oslo, Norway*

The development of DSM-5 and ICD-11 has led to revision of diagnostic criteria for post-traumatic stress disorder (PTSD). Whereas the DSM-5 revision includes an additional symptom cluster and four new symptom criteria for PTSD, the proposal for the ICD-11 diagnosis places a greater focus on core symptoms, and thus a reduction in diagnostic criteria. We empirically investigate these proposals and their implications for prevalence figures. Participants were 255 adolescents who survived the catastrophic shooting at Utøya, Norway in 2011. In the attack, 69 people were killed. We used the UCLA PTSD Reaction Index to measure symptoms of PTSD according to the DSM-IV (Pynoos & Steinberg, 2011, and added 11 items to assess the new DSM-5 criteria. The six core PTSD symptoms proposed in the ICD-11 were operationalized as a subset of the DSM-5 B-D criteria, as suggested by the ICD-11 work group. We conducted the assessments through face-to-face interviews 4-6 months (T1) and 15-18 months (T2) after the shooting. Overall prevalence of PTSD at T1 and T2 according to DSM-5 and ICD-11 are presented, and concordance and discrepancies between the diagnostic systems will be evaluated. The data presented may provide input to the ongoing ICD-11 process.

## **Oral Paper Presentation**

**Saturday, November 8**

**04:30 PM to 05:45 PM**

**Versailles**

### **An Evaluation of ICD-11 PTSD and Complex PTSD Criteria in a Sample of Adult Survivors of Childhood Institutional Abuse**

(Assess Dx, CPA-CSA-Chronic-Surv/Hist, Older, M, Industrialized)

**Lueger-Schuster, Brigitte, PhD;** Knefel, Matthias, MS PhD Student

*University of Vienna, Vienna, Vienna, Austria*

The WHO recently launched the proposal for the 11<sup>th</sup> version of the International Classification of Diseases (ICD-11) that will define post-traumatic stress disorder (PTSD), and complex post-traumatic stress disorder (CPTSD). We applied the proposed criteria for PTSD and CPTSD, compared the prevalence to the ICD-10 PTSD prevalence.



We compiled a list of symptoms for CPTSD based on subthreshold PTSD to include a wider group of individuals. To evaluate the appropriateness of the ICD-11 proposal, we applied the criteria of PTSD and CPTSD deriving from the PCL-C and the BSI-scales to a sample of N = 229 adult survivors of childhood institutional abuse. We evaluated the construct validity of CPTSD, using confirmatory factor analysis (CFA). More individuals fulfilled the criteria for PTSD according to ICD-10 (52.8%) than to the ICD-11 proposal (17% for PTSD only; 38.4% if combined with complex PTSD). The new version of PTSD neutralized the gender effects. The prevalence for CPTSD was 21.4%, women had a significantly higher rate of CPTSD than men (40.4% and 15.8%, resp.). Those survivors who were diagnosed with CPTSD suffered longer from institutional abuse. CFA showed a strong model fit. CPTSD is a highly relevant classification for individuals with complex trauma history, but surprisingly effects of gender were apparent. Further research should thus address gender effects.

## **Oral Paper Presentation**

**Saturday, November 8**

**04:30 PM to 05:45 PM**

**Brickell - MILITARY TRACK**

## **Treatment of Soldiers and Veterans**

### **Effectiveness of Post-Deployment Early Intervention for U.S. Army Mortuary Affairs Soldiers: Results from Four Years**

(Prevent, Mil/Vets, Adult, M, N/A)

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U.S. Army mortuary affairs soldiers (MA) report high rates of post-traumatic stress disorder (PTSD), depression, personal and family stress, and functional impairment post deployment. We present data from four years (10 cohorts) of the TEAM (Troop Education for Army Morale) study, an innovative educational intervention designed to foster adaptive functioning and reduce distress, stigma, and barriers to care. Based on evidence informed principles of Psychological First Aid (safety, calming, self-efficacy, hope/optimism, connectedness), TEAM is delivered through workshops, handouts, a website and phone line. Soldiers and spouses learn skills for self-care, supporting others (buddy care, spouse support), and promoting health care utilization. MA soldiers, randomized to TEAM or a no intervention control group, completed questionnaires approximately 1, 2, 3, 4, 7 and 10 months post deployment. Results include the impact of the intervention on symptoms of PTSD and depression, quality of life, personal functioning, social interactions, morale, and the helpfulness of specific components of TEAM (e.g., managing stress, reducing arousal). These data increase our knowledge of PFA-based early interventions. Implications include tailoring TEAM's components to high risk groups including other military populations, first responders, disaster workers, and others exposed to the dead.

## **Oral Paper Presentation**

**Saturday, November 8**

**04:30 PM to 05:45 PM**

**Brickell - MILITARY TRACK**



## **Predicting the Efficacy of Recommended Treatments for Veterans with PTSD: A Meta-Regression Analysis**

(Clin Res, Chronic-Clin Res-Mil/Vets, Adult, M, Industrialized)

**Haagen, Joris, PhD Candidate<sup>1</sup>**; Smid, Geert, MD, PhD<sup>2</sup>; Knipscheer, Jeroen, MD, PhD<sup>1</sup>; Kleber, Rolf, PhD<sup>1</sup>

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<sup>2</sup>*Centrum 45, Arq Research, Diemen, Netherlands*

PTSD places an on-going financial and individual burden on the health-care system. It is imperative to provide effective treatment. However, meta-analyses show that veterans receive less benefit from treatment than other PTSD populations (e.g., Goodson's et al., 2011). This presentation provides data of the first meta-analysis to identify PTSD treatment predictors for traumatized veterans, using data from first-choice intervention studies. A systematic literature search identified 38 eligible studies. Interventions that offer group therapy fare worse compared to interventions that consist of—or incorporate—individual psychotherapy. EMDR and Stress Management Therapy are less effective than Exposure Therapy and Cognitive Processing Therapy. Interventions using a non-random treatment allocation, and increases in the number of received sessions and pretreatment symptom severity, predicted larger PTSD treatment improvements. Comorbid substance abuse or dependence had a negative effect on treatment outcome. After using multivariate regression analysis, only pretreatment symptom severity and a group modality remained significant predictors. The model accounted for 42.3% of the variance in PTSD treatment effect size. The meta-analysis highlights several important predictive patient and therapy characteristics that will be discussed alongside their clinical and guideline implications.

### **Oral Paper Presentation**

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**04:30 PM to 05:45 PM**

**Brickell - MILITARY TRACK**

## **Preliminary Results from a Randomized Trial of Prolonged Exposure and Virtual Reality Exposure for Active Duty Soldiers with PTSD**

(Clin Res, Clin Res-Tech-Mil/Vets, Adult, M, Industrialized)

**Reger, Greg, PhD<sup>1</sup>**; Koenen-Woods, Patricia, PsyD<sup>1</sup>; Zetocha, Kimberlee, PhD<sup>1</sup>; Holloway, Kevin, PhD<sup>1</sup>; Rothbaum, Barbara, PhD, ABPP<sup>2</sup>; Difede, JoAnn, PhD<sup>3</sup>

<sup>1</sup>*National Center for Telehealth & Technology, Defense Centers of Excellence for Psychological Health and Traumatic Brain Injury, Tacoma, Washington, USA*

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<sup>3</sup>*New York Presbyterian Hospital/Weill Medical College of Cornell University, New York, New York, USA*

Prolonged exposure (PE) is one of the most researched psychotherapies for PTSD. Virtual reality exposure (VRE) has demonstrated growing support as an innovative method for activating the trauma memory during exposure. However, there is limited research on the effectiveness of either treatment with active duty military personnel and there are no head-to-head clinical trials. Soldiers with PTSD from deployments to Iraq or Afghanistan (N = 162) were randomized to either 10 sessions of PE or VRE or were assigned to a minimal attention wait list. All assessments were conducted by a psychologist blind to treatment group. External, independent treatment fidelity review was conducted for both treatments. Service members were assessed before randomization, after 5 sessions, at post-treatment, and 3- and 6-months post-treatment. PTSD was assessed with the Clinician Administered PTSD Scale (CAPS). Soldiers also completed the PTSD Checklist, the Beck Depression Inventory-II, and the Beck Anxiety Inventory. At this time, data for the 162 Soldiers were recently unblinded and analysis has begun. Preliminary results will be available and presented at the meeting. Results will be discussed in the context of previous literature on the efficacy of exposure therapy and the extent to which results extend previous findings to active duty military populations with combat-related trauma.

**Oral Paper Presentation**  
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**Brickell - MILITARY TRACK**

**Successful use of Stellate Ganglion Block in the Treatment of Severe PTSD from Combat and Childhood Adversity: a Case Report.**

(Practice, Chronic-Clinical Practice-Bio/Int-Mil/Vets, Adult, M, Industrialized)

**Best, Sasha, PhD;** Fernandes, Colin, MD; Kixmiller, Jeffrey, PhD; Frederick, Debbie, RN, NP  
*VA Northern California Healthcare System, Martinez, California, USA*

This case report describes improvement in PTSD symptom severity and associated functioning following stellate ganglion block (SGB) in a combat-exposed veteran with history of significant chronic childhood adverse events and impaired interpersonal functioning. SGB is a pain-management procedure that has been investigated for efficacy reducing symptoms of PTSD. It is unknown whether symptom relief is global, or may relate to selective improvements in re-experiencing, avoidance, or hypervigilance; and unknown whether patients with complex PTSD from combat and repeated developmental adversity may also benefit from the procedure. PTSD symptoms decreased by 33% following the first SGB, with particular reductions in re-experiencing and hyperarousal symptoms. Reductions were again seen following a second SGB (14%) with consistent benefit for re-experiencing symptoms. In addition, opiate pain medication and benzodiazepine use was reduced, associated severe depression was significantly decreased, and perceived quality of life increased across all domains surveyed. This case supports the promising clinical use of SGB to augment psychotherapy and pharmacotherapies in the treatment of severe PTSD from combat exposure and childhood adverse events. Future controlled studies are needed to confirm this finding, and to further investigate the mechanisms related to symptom relief.

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**Windsor/Sandringham**

## **The Role of Childhood Trauma for Substance Abuse, Self-Harm, Suicidal Behavior and Health Problems**

### **Post-Traumatic Stress Disorder Symptoms and Deliberate Self-Harm: A Moderated Mediation Model of Emotion Dysregulation and Childhood Trauma in African American Adults**

(Clin Res, Affect/Int-CPA-CSA-Cul Div, Adult, M, Industrialized)

**Weiss, Nicole, PhD<sup>1</sup>**; Tull, Matthew, PhD<sup>2</sup>; Gratz, Kim, PhD<sup>2</sup>; Sullivan, Tami, PhD<sup>1</sup>

<sup>1</sup>*Yale University School of Medicine, New Haven, Connecticut, USA*

<sup>2</sup>*University of Mississippi Medical Center, Jackson, Mississippi, USA*

Post-traumatic stress disorder (PTSD) is associated with elevated rates of deliberate self-harm (DSH). Emotion dysregulation is theorized to play a central role in the pathogenesis of DSH; thus, greater emotion dysregulation among individuals with PTSD may account for the PTSD-DSH association. These relations may be pronounced among individuals with a history of childhood trauma. Indeed, childhood trauma is thought to interfere with the development of emotion regulation skills and is associated with higher rates of PTSD and DSH. The present study examined (a) a mediational pathway from PTSD symptoms, to emotion dysregulation, to DSH; and (b) the moderating role of adult vs. childhood trauma. Trauma-exposed African American adults (N=227) completed validated measures of trauma exposure, PTSD symptoms, emotion dysregulation, and DSH, and were classified based on age at the time of their index trauma (adult [n=78] vs. childhood [n=149]). Multigroup path analysis provided support for moderated mediation, such that a significant indirect effect of PTSD to DSH through emotion dysregulation was found only for the childhood trauma group. Findings highlight the role of childhood trauma in emotion dysregulation and its consequences (e.g., DSH), suggesting the potential utility of treatments targeting emotion dysregulation in reducing DSH among individuals with PTSD.

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### **An Exploration of the Relationship between Specific Types of Abuse (Verbal, Physical, Sexual, or Witnessed Abuse) and Different Forms of Suicidal Behaviours**

(Clin Res, CPA-CSA-DV-Health, Child/Adol, A, Industrialized)

**Mossige, Svein, PhD, PsyD**

*University of Oslo, Oslo, Norway*

There is an established link between childhood abuse and suicidality during adolescence and early adulthood. However existing research has not produced clear and consistent understandings about the relationship between specific types of abuse and particular aspects of suicidality. Further, there is not a clear understanding about the role of contextual factors such as the family's socioeconomic situation. The present study draws on data from a Norwegian national youth survey of 6979 respondents in their final year of school. The data analysed relate to

respondents' reports of experiencing verbal, physical, or sexual abuse from peers or parents, or witnessing a parent being abused. These reports are analysed in relation to respondents' reports of suicidal ideation, suicide attempting, and self-injury. Important findings: Violence experienced during childhood had more effect on suicidal behaviour than violence experienced at a later age. Peer bullying had a stronger effect on young people's suicidal behaviours than sexual abuse or physical violence. The results are raising awareness about the long-term effects of verbal, physical, sexual, and witnessed violence, especially when experienced early in life. Interventions that work beyond the individual and the family, addressing peer groups and the wider community, are important for reducing suicidality among youth.

## **Oral Paper Presentation**

**Saturday, November 8**

**04:30 PM to 05:45 PM**

**Windsor/Sandringham**

### **Gender-Specific Profiles of Adverse Childhood Experiences, Past Year Mental and Substance Use Disorders, and their Associations among a National Sample of Adults in the United States**

(Clin Res, CPA-CSA-Neglect-Res Meth, Adult, A, Industrialized)

**Cavanaugh, Courtenay, PhD<sup>1</sup>**; Petras, Hanno, PhD<sup>2</sup>; Martins, Silvia, MD PhD<sup>3</sup>

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Post-traumatic stress disorder co-occurs with other mental and substance use disorders (MSUDs) and has been linked with adverse childhood experiences (ACEs), which also co-occur. This study used latent class analysis (LCA) and dual LCA regression to identify 1) profiles of ten ACEs and ten past year MSUDs including post-traumatic stress disorder, and 2) associated profiles of ACEs and MSUDs among a national sample of adults (N=34,652) in the United States. Analyses were conducted separately for females and males given gender differences in ACEs and MSUDs. The supported LCA models for both genders included 4 profiles of ACEs and 3 profiles of MSUDs, which were characterized by the following probabilities: high multiple ACEs (ACEs 1), high parental substance abuse (ACEs 2), high childhood physical abuse (ACEs 3), and low ACEs (ACEs 4), high multiple MSUDs for females and low MSUDs except alcohol use disorders for males (MSUDs 1), moderate-to-high major depressive episode (MSUDs 2), and low MSUDs (MSUDs 3). When compared to members in the low ACEs and MSUDs profiles, members in the higher ACEs profiles had 3.71-89.75 greater odds of also being in the higher MSUDs profiles. However, more than one third of members in the high multiple ACEs profiles were also in the low MSUDs profiles. Findings suggest both risk and resilience for recent MSUDs among adults nationally affected by ACEs.

## **Oral Paper Presentation**

**Saturday, November 8**

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**Windsor/Sandringham**

### **Trauma Exposure and Post-Traumatic Stress Disorder Predict Onset of Cardiovascular Events in Women**

(Bio Med, Bio Med-Health-Pub Health, Adult, M, Industrialized)

**Sumner, Jennifer, PhD<sup>1</sup>**; Kubzansky, Laura, PhD MPH<sup>2</sup>; Roberts, Andrea, PhD<sup>2</sup>; Elkind, Mitchell, MD, MS<sup>3</sup>; Rimm, Eric, ScD<sup>2</sup>; Koenen, Karestan, PhD<sup>4</sup>

<sup>1</sup>*Columbia University, Mailman School of Public Health, New York, New York, USA*

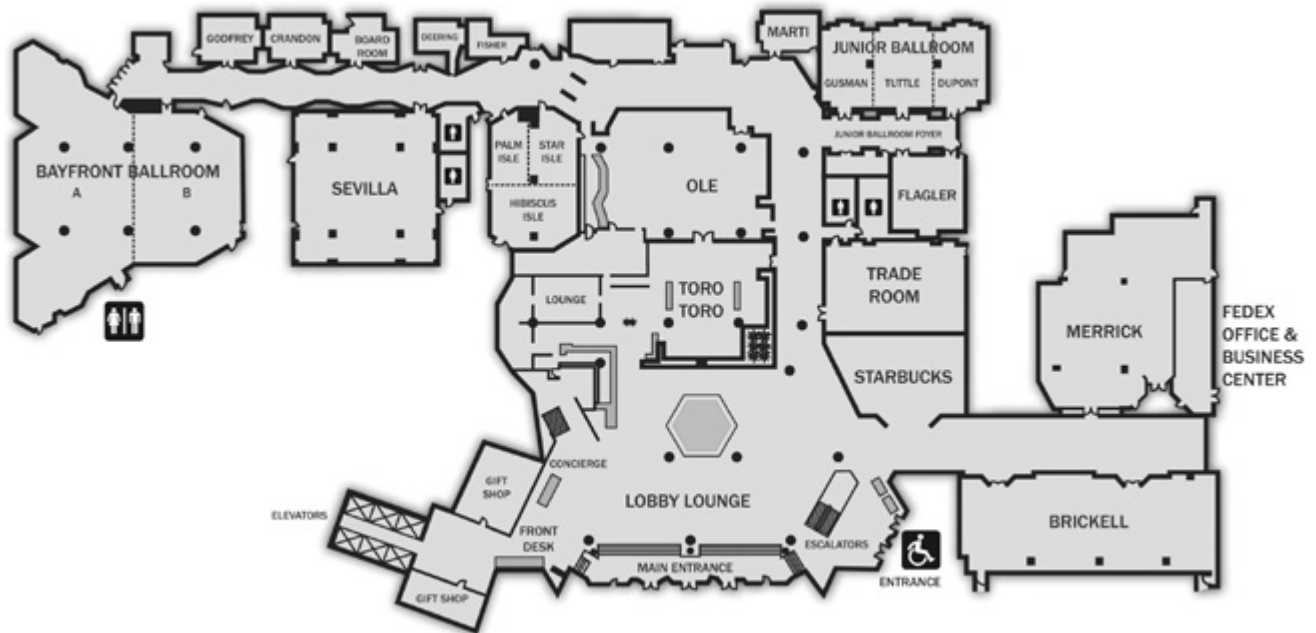
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<sup>4</sup>*Columbia University School of Public Health, New York, New York, USA*

Cardiovascular disease (CVD) is the leading cause of death in women. Stress has been hypothesized as a risk factor for CVD, and post-traumatic stress disorder (PTSD) is a common and debilitating disorder that occurs twice as frequently in women than in men. Despite support for associations between PTSD and CVD, little work has been done in women. We examined lifetime trauma exposure and probable PTSD as predictors of CVD over a 20-year follow-up in 49,585 women in the Nurses' Health Study II. Proportional hazards models estimated hazard ratios (HRs) for CVD events (n=531) that included onsets of myocardial infarction (n=266) and stroke (n=265) confirmed by additional information or medical record review. Compared to no trauma exposure, trauma exposure (HR=1.33) and probable PTSD (HR=1.53) were associated with increased risk of CVD events when adjusting for age, family history, and early childhood factors. After adjusting for adult health behaviors and medical risk factors, the hazard ratio was 1.26 for trauma exposure and 1.31 for probable PTSD. Health behaviors and health conditions accounted for 19% and 36% of the trauma exposure-CVD risk and probable PTSD-CVD risk associations. Predictive relationships were stronger for self-reported vs. medical record-confirmed CVD. Findings suggest that trauma exposure and PTSD present potential targets for CVD prevention and intervention.

## InterContinental Miami Downtown Lobby Level



## InterContinental Miami Downtown Level 2 - Mezzanine

