

ON BECOMING EMOTIONALLY REGULATED

Neuroception, Integration of Mind-Body, Music and Emotion,
Attachement and Bonding , Oxytocin and Vasopressin

24-27 JUNE 2013 IN VU UNIVERSITY in AMSTERDAM

Three inspiring and internationally wellknown scientists will present plenary talks on June 24 and share their knowledge and insights in full day workshops on June 26 and 27. June 25 will focus on the important link between music and emotion.

Dr. Stephen Porges, Professor of Psychiatry at the University of North Carolina, will discuss the principles of the Polyvagal Theory and how the theory leads to a new understanding of the neurophysiological mechanisms involved in maintaining mental health and regulating emotion. **Dr. Sue Carter**, Professor Psychiatry at the University of North Carolina, will discuss the importance of oxytocin in social behavior, bonding, and as a potential endogenous antidote of stress and anxiety. **Bessel van der Kolk** will share his knowledge about integration in mind, body and social connection and explain how the body releases trauma by digestion, assimilation and processing.

The conference will provide a forum to discuss the role of neural, hormonal, and autonomic processes as mechanisms mediating mental health and emotional challenges and how these neurobiological indices may provide insights into diagnoses, treatments, and outcomes of several psychiatric disorders and psychological challenges. In workshops you will learn the process of mindfulness, somatic experience, HRV-biofeedback and EFT.



Organizing partners: Netherland Centre Stressmanagement, Innovational and Educational Centre HartFocus, European Society for Trauma and Dissociation, RINO Educational Centre and Dutch Society Music Therapy.

INFORMATION and SIGNING UP: INFO@HARTFOCUS.NL

WEBSITE: [WWW.HARTFOCUS.NL/SYMPOSIUM2013\(nl\)_](http://WWW.HARTFOCUS.NL/SYMPOSIUM2013(nl)_)

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PROGRAM:

Monday June 24: KEYS OF EMOTION REGULATION AND PROCESSING.

- 9.30-10.00: Opening by **Prof Rutger Jan van der Gaag**, chairman of Royal Dutch Medical Association (KNMG), former chairman of Netherland Psychiatry Association (NVvP), professor clinical Child and Adolescent psychiatry, advisor Papageno.
- 10.00-11.00: **Prof Stephen Porges: The Polyvagal Theory: Demystifying the link between social behaviour and health** . What is neuroception and what mental health problems are the effect of “faulty”neuroception?. How neuroception can help coping with stress, anxiety, PTSD and autism. How we can use facial expression, vocal intonation and gesture in clinical treatment
- 11.00-11.30: break
- 11.30-12.30: **Prof Sue Carter: The Healing Power of Love: An Oxytocin Hypothesis**
How oxytocin is involved in regulating stress, treatment of depression and trauma? How oxytocin and vasopressin act as “neuromodulators” within the theoretical context of the Polyvagal Theory, the neurobiology of social bonding and love?
- 12.30-13.30: lunch
- 13.30-13.45: HeartFocus movement exercises
- 13.45-15.00: **Prof Bessel van der Kolk: clinical implications of neuroscience research in PTSD.**
trauma and processing, digestion and assimilation of emotion .
- 15.00-15.30: break
- 15.30-16.45: **workshops :**
1. Drs Joke Hellemans, UvAMind: Mindfulness en emotieregulatie in gezinnen
 2. Drs Berry Aarnoudse: introductie in Emotionally Focused Family Therapy
 3. Dr Annemiek van Dijke, klinisch neuropsycholoog. Does childhood trauma-related dysfunctional emotion regulation present differently across the lifespan?
 4. Drs Kees Blase, HartFocus: HartRitmeVariatie-patroon lezen tijdens traumaverwerkings processen

16.45-17.45: **Ellert Nijenhuis: Trauma-related dissociation of the personality.** Clinical implications of research and MRI scanning of processing of the emotional brain and prefrontal cortex.

Tuesday June 25: MUSIC AND EMOTION

9.30-9.45 : musical introduction

9.45-11.00 : **Prof Stephen Porges: Music as therapy: Exploring the common mechanisms mediating autonomic regulation, vocalizations, and listening**

11.00-11.30 : break

11.30-12.10 : **Erik Scherder, Professor Clinical Neuropsychology VU University : Music, cognitive research and aging .**

12.10-12.30: **Ellen Schuring, soprano: Afstemmen. Voice (re-)connection :** building social bond and self-esteem by singing with autistic and handicapped children

12.30-13.30: break

13.30-13.50: **Mathieu Pater , muziektherapeut: Music and Autism**

13.50-14.45: **Kees Blase, medical physicist : HRV research with Music, Loving Kindness and Trauma treatment, neurological effects of musictherapy with I-pods.**

14.45-15.15: **drs Monique van Bruggen: state of the art research in Music therapy**

15.15-15.45: break

15.45-17.00: workshops

1. workshop Jantje van der Wurf, Stichting Papageno: Muziek Therapie en autisme (Dutch)

2. workshop Ellen Schuring, Afstemmen: over het ont-dekken van de stem bij gehandicapte kinderen (Dutch spoken)

3. workshop Albert Berman, Chairman of Dutch Society of MusicTherapy (English)

4. workshop Merlijn Twaalfhoven, composer, just back from traumahealing in Libanon/ Syrie by Music listening and playing. (Dutch/English)

17.00-17.20: interview with conductor Jaap van Zweden, and Aaltje, founders of Papageno, Papageno helps autistic children with music.

17.20-17.30: musical ending

18.30-21.30: Network Diner with professionals and keynotespeakers that have signed in.

The Polyvagal Theory provides a new perspective to explore how autonomic nervous system function relates to social behavior, emotional regulation, and health. The theory provides insights into symptoms observed in several behavioral, psychiatric, and physical disorders. The Polyvagal Theory links the evolution of the autonomic nervous system to affective experience, emotional expression, facial gestures, vocal communication, and contingent social behavior. The theory, by being informed by the phylogeny of the autonomic nervous system, expands our understanding of normal and atypical behavior, mental health (e.g., coping with stress and novelty), and psychiatric disorders (e.g., autism, anxiety disorders, PTSD). The theory emphasizes that the core deficit in behavioral and affective regulation that is associated with several psychiatric disorders, especially disorders diagnosed in children, is related to neural regulation of the autonomic nervous system. By incorporating a developmental perspective, the theory explains how typical and atypical maturation and regulation of autonomic function forms the neural “platform” upon which social behavior and the development of safe trusting relationships are based. The theory explains how the nervous system evaluates risk in the environment, without awareness and often independent of a cognitive narrative, through a process labeled “neuroception.” Neuroception attempts to support adaptive behaviors by matching autonomic state with the neuroceptive state of risk (i.e., safe social environment, danger, and life threat). Abuse and trauma may reset neuroception to protect the individual from others when there is no “real” danger resulting in defensive and often aggressive responses to friends and caregivers. The presentation will have four objectives: 1) to provide an explicit statement of the Polyvagal Theory, 2) to illustrate how a Polyvagal perspective provides insights into the clinical assessment and treatment of several clinical conditions, 3) to describe a face-heart connection that defines a social engagement system that links our bodily feelings with facial expression, vocal intonation, and gesture, and 4) to describe how “faulty” neuroception is associated with mental health problems.

Stephen W. Porges, Ph.D. is Professor of Psychiatry at the University of North Carolina and Research Professor of Psychology at Northeastern University. He is Professor Emeriti at the University of Illinois at Chicago where he directed the Brain-Body Center and *the University of Maryland where he chaired the Department of Human Development. He is the former President of the Federation of Behavioral, Psychological and Cognitive Sciences and the Society for Psychophysiological Research. He is a fellow of Division 6 and 7 of the American Psychological Association and a Charter Fellow of the Association for Psychological Science. He is a former recipient of a Research Scientist Development Award from the National Institute of Mental Health. He is the originator of the Polyvagal Theory. Professor Porges has authored “**The Polyvagal Theory: Neurophysiological Foundations of Emotions, Attachment, Communication, and Self-Regulation**” (Norton, 2011). A version is available in German "**Die Polyvagal-Theorie: Neurophysiologische Grundlagen der Therapie** (Junfermann Verlag, 2010) and is currently writing **Clinical Applications of the Polyvagal Theory: The Transformative Power of Feeling Safe** (Norton, 2014).*

C. Sue Carter, PhD: Dr. Carter is Professor of Psychiatry at the University of North Carolina and Research Professor of Psychology at Northeastern University. She is Professor Emerita of Psychiatry at the University of Illinois at Chicago and has formerly held the position of Distinguished University Professor of Biology at the University of Maryland and prior to that was Professor in the Departments of Ecology, Ethology and Evolution and in Psychology at the University of Illinois, Urbana-Champaign. Dr. Carter is past president of the International Behavioral Neuroscience Society and holds fellow status in that Society and in the American Association for the Advancement of Science. She is a former recipient of a Research Scientist Award from the National Institute of Mental Health. She has authored over 275 publications, including editorship of 5 books. The most recent of these is *Attachment and Bonding: A New Synthesis* (MIT Press). Dr. Carter discovered and documented the important role of oxytocin and vasopressin in social bond formation. Her most recent work focuses on the developmental consequences of oxytocin, including perinatal exposure to synthetic oxytocin, and the protective role of this peptide in the regulation of behavioral and autonomic reactivity to stressful experiences.

Bessel van der Kolk, M.D., is a clinical psychiatrist who has studied the impact and resolution of trauma on children and adults for the past 30 years. His research has ranged from developmental impact of trauma to neuroimaging and from memory processes to the use of neurofeedback, EMDR and theater groups in PTSD. He is professor of psychiatry at Boston University School of Medicine and medical director of the Trauma Center in Boston, where he also serves as Director of the National Center for Child Traumatic Stress Complex Trauma Network. He is past president of the International Society for Traumatic Stress Studies. He has taught at universities and hospitals throughout the world. He is author of over a hundred scientific articles, author of *Psychological Trauma* and co-editor of *Traumatic Stress*.

Ellert R.S. Nijenhuis, Ph.D., is a psychologist, psychotherapist, and researcher. He received his Ph.D. with the highest honors for the book *Somatoform dissociation: Phenomena, measurement, and theoretical issues*. In 1998 the International Society for the Study of Trauma and Dissociation (ISSTD) granted him the Morton Prince Award for Scientific Excellence; in 2000 the Pierre Janet Writing Award; in 2002 the status of Fellow, and in 2005 the David Caul Memorial Award. He works at the Top Referent Trauma Center of Mental Health Care Drenthe, Assen, The Netherlands. His empirical and experimental research addresses the psychology and psychobiology of chronic traumatization and dissociation. In 2004 Queen Beatrix from the Netherlands appointed him Knight in the Order of the Dutch Lion for his outstanding contributions to the study and treatment of chronically traumatized individuals. With Onno van der Hart and Kathy Steele, he wrote *The haunted self: Structural dissociation and the treatment of chronic traumatization*. The authors were awarded ISSTD's Media Award for this book that has now been translated in many different languages.



Joke Hellemans, UvAMind, University of Amsterdam, clinical psychologist and mindfulness trainer

Berry Aarnoudse, psychotherapist, system therapist, internationally certified EFT trainer and organiser EFT network

Annemiek van Dijke, PhD, clinical neuropsychologist,

Kees Blase, HartFocus, medical physicist, adult education and HRV-specialist

Wednesday June 26 9.30-17.00: Prof Stephen Porges:

Neuroception and the Polyvagal Theory: Neural mechanisms mediating social behavior, emotional regulation, and health

Intensive with breaks: 11.00-11.15; lunch 12.30-13.30 and 15.00-15.30



The workshop will discuss more deeply the Polyvagal Theory presented in the plenary talk. The Polyvagal Theory describes how a connection emerged in the brain between the nerves that control the heart and the face. This face-heart connection provided the structures for the “social engagement system” that links our bodily feelings with facial expression, vocal intonation, and gesture. Additionally, the workshop will explore how faulty neuroception can have an impact on autonomic regulation and social behavior and how understanding the features that trigger different neuroceptive states (safety, danger, and life threat) can be used as a strategy of treatment by triggering neuroceptive states of safety.

The outline below provides a summary of the topics that will be discussed in the workshop.

The Polyvagal Theory

- Evolutionary changes and adaptive functions in the autonomic nervous system
- The discovery of the three neural platforms that provide the neurophysiological bases for social engagement, flight/fight, and shutdown behaviours.

Social Engagement System and Psychiatric and Behavioral disorders

- A description of the “face-heart” connection that forms a functional social engagement system
- How facial expressions, vocalizations, and gestures are regulated by neural mechanisms involved in regulating our autonomic nervous system

Neuroception: Detecting and Evaluating Risk

- How social and physical environments trigger changes in physiological state
- Adaptive physiological reactions may result in maladaptive behaviors

Demystifying Biobehavioral responses to Trauma and Abuse

- Flight/fight and immobilization defense strategies
- Adaptive function of immobilization and the associated clinical difficulties

Applying the Polyvagal Theory in Clinical Settings

- The importance of symbiotic regulation
- Strategies to explain disruption and repair of symbiotic regulation
- Identifying social cues that disrupt or repair defensive reactions
- The clinical consequence of treatments models that trigger the social engagement system

Wednesday 26 June: 9.30-17.00: prof Bessel van der Kolk

Trauma, Memory, and the Restoration of the Self

Intensive with breaks: 11.00-11.15; lunch 12.30-13.30 and 15.00-15.30



This workshop explores people’s basic rhythms within themselves and with their surroundings, and how these are disturbed by trauma and failures in attachment. Because of altered biological systems, traumatized people continue to be trapped by their history and react to their current lives in a myriad of ways as a replay of the past. Because most experience is automatically processed in primitive, unconscious, levels in the brain, insight and understanding has only a limited influence on people’s control over these processes. In this workshop you will become acquainted with the latest neuroscience research on the effects of trauma on thinking, feeling and learning, and explore how we can affect disturbed rhythms by yoga, mindfulness meditation, touch, role play and movement. We will look at the capacity of EMDR, yoga, theater work, and neurofeedback to help people

deal with traumatic past experiences and reestablish the capacity to be fully alive in the present.

**Thursday June 27: 9.30-17.00: Prof Stephen Porges part II:
Music as therapy: Exploring the common mechanisms mediating
vocalizations, listening, and autonomic regulation**

Intensive with breaks: 11.00-11.15; lunch 12.30-13.30 and 15.00-15.30

The workshop will focus on how and why music therapy would be helpful in supporting mental health and trauma treatment. The study of music is informed by the Polyvagal Theory. From a Polyvagal perspective, we learn that music is intertwined with emotions, affect regulation, physiological state regulation, and interpersonal social behaviour. From this perspective involvement in all aspects of music is not passive and is more than the mechanics of listening or singing or playing a musical instrument. Music therapy involves active interactions among three features 1.therapist 2.client and 3 music. The workshop will focus on the principles incorporated in the Listening Project and the lessons learned through preliminary clinical trials and research. The Listening Project is an acoustic intervention, based on the Polyvagal Theory, designed to promote social engagement behaviors in individuals with problems in social interaction and communication. Specific acoustic frequency bands elicit different emotional experiences which are paralleled by adaptive physiological states.

The Listening Project is targeted at improving auditory processing and reducing hypersensitivity to sounds by “exercising” the neural regulation of the middle ear muscles.

Thursday June 27: 9.30-17.00:

**Prof Sue Carter/Miranda Olf: Oxytocin and woundhealing: Oxytocin
pathways in health, social behavior, mental illness and PTSD.**

Intensive with breaks: 11.00-11.15; lunch 12.30-13.30 and 15.00-15.30



This workshop does not only give the behavioral neuroscience of oxytocine, but also the impact it can have in practice of wound healing, stressmanagement and prevention.

The workshop will provide a critical discussion of the clinical applications of oxytocin. Several clinically relevant issues will be discussed including:

- 1.Is there sufficient scientific justification for the use of oxytocin in clinical settings as a treatment for stress, PTSD or autism?
- 2.Is oxytocin involved in the regulation and normalization of autonomic function and

emotion regulation?

3. Do antidepressants (and other medications involved in the management of mental health) dampen influence the function of oxytocin?

The workshop will elaborate on the ideas and hypotheses presented the plenary talk. The concept of oxytocin as a hormone of love and compassion will be discussed as well as the role oxytocin plays in stress reactivity and wound healing. Dr. Carter will discuss her research monitoring and manipulating oxytocin in mammalian species and her recent work studying oxytocin in various psychiatric disorders including autism, schizophrenia, and Williams syndrome. Moreover, she will discuss how environmental factors and early experience through epigenetic mechanisms can change the function of oxytocin receptors and retune oxytocin pathways.

4. Prof Miranda Olff (Amsterdam Medical Center, University of Amsterdam) will present her research on PTSD in relation to oxytocin.

