



Proceedings of the 4th Yoga Therapy Conference

"The Science of Human Connection"

Amsterdam, May 10-11, 2019

The Yoga Therapy Conference "The Science of Human Connection" on May 10 + 11 2019 in Amsterdam hosted 230 participants from 27 countries. Our hand-picked invited speakers shared their research, expertise and personal stories. We talked about the neurophysiological basis of love, emotional safety and trauma; connection and relationship in yoga therapy; and the ways to integrate yoga therapy in health care systems worldwide.

We would like to thank everyone who joined us in Amsterdam! We hope that this short report will be an inspiration for future collaborations, and a source of information for those who could not attend the conference.

Network Yoga Therapy Team

May 11, 2019

Day 1 / May 10th

In the spirit of yoga and connection, before diving into the hard science, Day 1 moderator Salmaan Sana guided the audience into an exploration of connection and self-care: "Can you introduce yourself to another person in the room without saying your name, job title and role?", "What do you see and how do you feel when staring into someone else's eyes?"

Keynote Lecture: Steven Porges: Love, trust, and trauma: insights from the polyvagal theory. Steven Porges is professor of psychiatry at the University of North Carolina, Distinguished University Scientist at Indiana University where he is the founding director of the Traumatic Stress Research Consortium. His research explains how subconscious memories of trauma or love guide social interactions and how neural exercise such as yoga may rewire the neural responses and promote healing.

Abstract: *The presentation explains how our biological imperative is reflected in the quality of our social interactions, ability to trust another, and to experience intimacy. Polyvagal theory will be used to explain how human responses to trauma are devastating and compromise subsequent social behavior and emotion regulation. Understanding the mechanisms underlying the "hardwired" response to life threat, may demystify these debilitating consequences. The polyvagal theory provides a plausible explanation of how trauma disrupts homeostatic physiological processes and social behavior and how treatments providing neural exercises such as yoga might remediate these problems.*

Suggested reading:

[Stephen Porges's Website](#)

[Traumatic stress research consortium](#)

[Who is Stephen Porges and why is his theory connected to yoga?](#)

[How can we cultivate human connection in yoga?](#)

Lecture: Yoga Therapy and Polyvagal Theory. Marlysa Sullivan is a physical therapist, yoga therapist and assistant professor at Maryland University of Integrative Health. Building on Stephen's lecture, Marlysa guided the audience through the overlapping principles of the neurophysiology of human behaviour and the yogic philosophy and concepts.

Abstract: *how does yoga therapy help to cultivate qualities such as connection, compassion, equanimity and joy? What are the "active ingredients" through which yoga can catalyze these qualities? Are these naturally emerging and/or how do we focus the practice for the cultivation of these qualities? In this session we will explore the philosophical foundation of yoga through concepts such as dharma, yama and niyama and gunas. These ideas will be related to current scientific thought regarding mind-body practices to utilize both top-down neurocognitive and bottom-up neurophysiological processes for regulation and resilience of the system for optimal health and well-being. In particular, the relationship between yoga therapy foundational principles and polyvagal theory will be elucidated. Through both lecture and experiential practices we will delve into ethical inquiry through the yamas and niyamas, meditation, breathing practices and movement. The potential for yoga to facilitate a natural emergence of connection, compassion, equanimity and joy will be explored. The participant will have the opportunity to consider yoga therapy's explanatory framework based on its*

philosophical foundations and its integration with current scientific thought for the promotion of healthy physical, psychological and behavioral states in optimal well-being.

Suggested reading:

[Finding your purpose and meaning through yoga therapy – an interview with Marlysa Sullivan](#)

[Yoga therapy and polyvagal theory: the convergence of traditional wisdom and contemporary neuroscience for self-regulation and resilience](#)

Practice: Leigh Blashky: Connection through your true nature. Leigh Blashky guided a nurturing meditation and challenged yoga teachers and therapist with questions that should support each practice. Leigh was the Founder of the Australian Institute of Yoga Therapy. He is an IAYT Certified Yoga Therapist, Certified iRest Teacher and certification supervisor and has over 40 years' experience as a Yoga and meditation teacher. Leigh is passionate about sharing the non-dual teachings that underpin iRest and is the Associate Director – Australasia for the iRest Institute.

Abstract: *Amidst the busyness of establishing oneself as a yoga therapist it is important that yoga therapists regularly take pause for some self-inquiry into what their underlying motivations or intentions are for being a yoga therapy professional. Questions such as: What is it we truly offer as a yoga therapist? Who is the therapist? Are we present in our practice of yoga therapy? How do we show up as a yoga therapist? This is an important touch-stone for professionals to re-visit from time to time to help 'keep the yoga in the yoga therapist'. This can be supported by an ongoing commitment to a type of svadhyaya, whereby the yoga therapist goes 'within' to sit with her/his essential nature, to distil her/his core values and purpose that inform the practitioner's sankalpa for their life as a yoga therapist. In this session leigh will guide attendees into a self-inquiry relating to their deepest motivations and purpose related to their true nature, along with an inquiry into what it means to be a 'yoga' therapist. As well as being a 'led' meditation, it will also encourage attendees to incorporate a similar self-reflection into their life as a regular part of their role as a yoga therapist.*

Inspirational talk: Anneke Lucas: Forgiveness and bypass in trauma healing. Anneke Lucas is the founder of the non-profit organisation Liberation Prison Yoga, bringing yoga and empowerment programs to prisons. As a survivor of child sex trafficking and extreme violence, she is also an advocate for sex trafficking survivors and a public speaker. Anneke talked about her personal experience: a trauma-liberation journey through the practice of letting go.

Abstract: *Anneke Lucas addresses the possibility of forgiveness after trauma, the purpose and healing made possible by letting go, the conditions that need to be present before the healing can be completed through forgiveness, and the dangers of forgiving perpetrators too early in the healing process.*

Special session: Cracking the Code: Bridge-builders shared their stories of bringing yoga therapy into healthcare settings and institutions. Heather Mason (Yoga in Healthcare Alliance, UK), Keishin Kimura (Japan Yoga Yherapy society), Anneke Lucas (Liberation Prison Yoga, US), Stephanie Lopez (iRest Institute, US), Lara Benusis (IAYT, US), Tina Kai (Denmark), Yvonne van Helvoirt (NL)

Each national health system has its specificities and the modalities to approach it might differ, though there are some common "code" for cracking the system:

- *Go where you're wanted and with what people need;*
- *Get funds and grants;*
- *Use research and evidence-based information;*
- *Be authentic and stand with your principles;*
- *Learn to speak the language of healthcare professionals*
- *Identify gaps to fill*
- *Be vulnerable and connect.*

Day 2 / May 11th

Anneke Sips opened the day sharing her experience in bringing yoga therapy to patients in psychiatry in The Netherlands. Awareness, courage and self-leadership are Anneke's keywords. Willemijn Noordhoff took over as the Day 2 moderator.

Keynote Lecture: Oxytocin and the human connection The second day of the conference opened with the lifetime scientific research of **dr. Sue Carter**, focused on the science of love and social bonds. Prof. Dr Sue Carter is a biologist and behavioral neurobiologist, Director of the Kinsey Institute and Rudy Professor of Biology at Indiana University. She is an internationally recognized expert in behavioral neuroendocrinology and one of the pioneers of research in oxytocin.

Abstract: *without loving relationships, humans fail to flourish, even if all of their basic needs are met. People without social support are at risk for various forms of illness. A life without social bonds and attachments is not fully lived, why and how does this happen? Part of the answer lies in knowledge of the neurobiological functions of oxytocin and the related, but more ancient neuropeptide, vasopressin. Oxytocin and vasopressin function together as components of a dynamic, and at times, sexually dimorphic system. Oxytocin was once considered "only a female reproductive hormone." We now understand that oxytocin has a critical role in both males and females in mammalian social behaviors, parenting, and the capacity to cope with stress, as well as physical and behavioral development. Oxytocin and its receptors are found in the brain, autonomic nervous system, immune system, bones and gut, helping to integrate the functions of these systems with positive (or negative) experiences. Oxytocin epigenetically tunes the developing nervous system and seems to serve as a physiological and emotional metaphor for safety. In contrast, vasopressin plays a critical role in active defense, vigilance, fear and anxiety, and is in part regulated by androgens. This presentation will explain how interactions between oxytocin and vasopressin contribute to the health benefits of social connections across the life-span.*

Suggested reading:

[Oxytocin pathways and the evolution of human behavior. 2014](#)
[The oxytocin-vasopressin pathway in the context of love and fear. 2017](#)
[The monogamy paradox: what do love and sex have to do with it? 2018.](#)
[Early nurture epigenetically tunes the oxytocin receptor. 2019.](#)

Lecture: Putting into Practice the Skills of Establishing Therapeutic Relationships. On the wave of investigating your role as yoga therapist, **Dr. Lisa Kaley-Isley** examined the dynamics of the therapeutic relationships, and their impact on the healing process. Lisa is a clinical psychologist, yoga teacher, IAYT certified yoga therapist, and yoga educator. She is committed to the conscientious development of yoga therapy as a profession that empowers personal healing.

Abstract: *From the beginning of life, the need and desire for connection are essential to our survival and ability to thrive. They are also vital elements in our ability to heal. The therapeutic relationship serves a special*

function in our society as an intimate relationship whose primary purpose is to promote healing. The relationship itself forms part of the space in which growth and transformation will unfold for both therapist and client, and both will participate in the creation of it. Learning how to hold this space for another person requires knowledge, skill, and experience. Whatever the therapeutic modality, the person brings their entire self and history to the encounter in which they ask for help, and this will influence how they share information and accept guidance. Learning how to establish, maintain, and end a therapeutic relationship is a key skill which all yoga therapists and health professionals need to develop. As more and more people around the world turn to yoga as a way to heal and grow their bodies, minds, and spiritual connection, yoga teachers also need to learn how to positively manage their relationships with their students. In this time together, we will explore some of the essential ingredients that enable and promote a nurturing connection.

Lecture: Dr. Theo Wildcroft: Consent, contact and context: what moving together can teach us about healing relationships. Theo talked about her work as a yoga teacher with survivors of profound traumas, where consent is a key element in the healing process. Theo is a yoga teacher and scholar at the forefront of the movement for trauma sensitivity, diversity and inclusion. She blogs and writes articles on yoga, social justice and hope.

Abstract: *from #metooinyoga, to multiple scandals, to the rise in 'trauma-informed yoga' and the use of 'assist chips' or 'consent cards' in class, we are experiencing a revolution in how we relate to each other in both the teaching and therapeutic practice of yoga. This is of vital and immediate importance for yoga therapists. This lecture will touch on theo's doctoral research, and her personal history as a survivor of complex relational trauma, to show how it informs her work sharing yoga with some of the most vulnerable populations, including children with profound and multiple disabilities. Together we will explore cutting edge theories of movement and consciousness, and practices of interpersonal contact. This will build to an inspirational picture of relationship and of consent as an ongoing and profound practice rather than a preliminary to the work.*

Suggested reading:

[True consent is justice in action](#)

Lecture: Svastha yoga and holistic wellbeing. Ganesh Mohan, son of A. G. Mohan and Indra Mohan, was trained from childhood in yoga and other related traditional studies. He is a doctor, having trained in both modern medicine and ayurveda. He is the co-author of "Yoga therapy, Krishnamacharya, and yoga reminder". He directs the Svastha yoga therapy and teacher training programs as well as other trainings internationally. Ganesh talked about yogic approach to holistic well-being.

Abstract: *The principle of Svastha yoga is practicing yoga in the way that leads each individual to well-being. It is not about a particular style of practice. Svastha integrates the ancient wisdom of yoga and ayurveda with modern science and medicine to offer accessible, insightful, and sustainable skills for your well-being and self-care.*

Suggested reading:

[Yoga therapy, tapas and self practice: a conversation with Ganesh Mohan](#)

YTC 2019 Posters

For the first time in the Yoga Therapy conference, a call for contributions was launched, resulting in number of abstracts submitted of which 9 were presented at the Conference.

Study-Design to investigate on the effect of a 10-week yoga course with the focus on "Yamas and Niyamas" to stress response and cool down reactions in medical professionals, nursing staff and teachers

Yvonne Beerenbrock, Carolin Klisch, Yvonne Beerenbrock, Arndt Büssing.

Witten/Herdecke University, Professorship Quality of Life, Spirituality and Coping, Germany

Yvonne Beerenbrock works as a research assistant and doctoral student at the Chair of Quality of Life, Spirituality and Coping at the University of Witten-Herdecke (Faculty of Medicine, Chair of Medical Theory, Integrative and Anthroposophical Medicine). She is a health educator (2nd state examination in biology and health), health economist (M.A., University of Kaiserslautern), molecular biologist (B.Sc., University of Applied Sciences CUNY - Central University of New York), naturopathic doctor, nurse for intensive medicine and anaesthesia, yoga teacher with more than 2000 hours of education and training. She studies yoga philosophy with Dr. Katy Poole (University of California).

Yoga and Recovery from Psychiatric Illnesses

Milou Vervaart, *The Netherlands*

Milou works as a peer worker in a clinic for addiction and psychiatry in Amsterdam, and is also the Yoga Therapy Conference volunteer. She just completed an 800h yoga teacher training.

Yoga decreases glucose metabolism in midbrain, limbic and motor areas, related to years of experience: a simultaneous [18F]FDG PET-MR study

June van Aalst¹, Jenny Ceccarini¹, Stefan Sunaert², Koen Van Laere¹

1 Nuclear Medicine and Molecular Imaging, Department of Imaging and Pathology, KU Leuven, Belgium

2 Translational MRI, Department of Imaging and Pathology, KU Leuven, Belgium

June van Aalst was born in Belgium, in 1992. Her interest in yoga started at the age of 14. She received her master degree in biomedical sciences from the KU Leuven university, Belgium, in 2016. Since then she is enrolled in the PhD program biomedical sciences at the Department of Imaging and Pathology (KU Leuven), under the supervision of prof. dr. Koen Van Laere (Nuclear Medicine and PETMR). Her research interest is mainly focused on neuroimaging and yoga.

A Yoga Therapy Model for Supporting Cancer Patients: Weaving Pancha Kosha and Vijnana Yoga Principles

Chen Rosner Or-Bach, *Israel*

Chen Or-Bach is a yoga practitioner since 2001, a yoga teacher since 2007 and a yoga therapist since 2011. She holds a BSc in computer sciences and cognitive sciences and an MA in cognitive sciences. In 2016 Chen was diagnosed with cancer and used yogic practices to support herself during her medical treatments and recovery. She then founded "Or Bach Wellbeing ", where she shares the wisdom of yoga with cancer patients. She serves as a board member in the Israeli Yoga Teachers Association, leading the domain of yoga and health.

Interventional Research Design: Use of Yoga Therapy to Reduce Anxiety in Competitive Dancers

Pranayama, Somatic Awareness, and Yoga Postures for Dancer Hip Injury Rehabilitation: An Interventional Study Design

Pamela Crane, *US*

Pamela Crane is a member of International Association of Yoga Therapists (IAYT) and is currently a Master of Science in Yoga Therapy candidate at Maryland University of Integrative Health. Additionally, she is a Yoga Alliance 200 RYT, Soul Feed Barre Certified, and a member of the National Dance Education Association (NDEO). Pamela has been successfully using Yoga Therapy as a healing modality for others since 2014, and has been teaching dance and fitness for over 25 years. She is a co- author of the Career and Technical Education Performing Arts/Dance Frameworks and End of Course test question bank for the state of Arkansas. Pamela is currently working on a book on the use of Yoga Therapy for Dancers.

Psychophysiological and phenomenological characterization of altered states of consciousness induced by Nidra Yoga in expert practitioners

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2 Department of Surgical, Medical and Molecular Pathology and Critical Care Medicine, University of Pisa, Pisa (Italy)

Andrea Zaccaro graduated in Clinical and Health Psychology at the University of Pisa in 2014, and he is member of the Order of Psychologists of Tuscany since 2016. In 2019 he got a PhD in Bio-Psychology, and he is now Research Fellow at the Department of Surgical, Medical, Molecular and Critical Area of the University of Pisa

Why do yoga therapy? A survey of motivations among yoga therapy clients in Japan

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2 Faculty of Information Science and Arts Toyo University

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4Japan Yoga Therapy Society

Yukiko Kezuka became a yoga therapist certified by the Japan Yoga Therapy Society in 2008 and established Purna Yoga. In 2015, she opened a studio specializing in yoga therapy in Omiya. Currently she is a practicing yoga therapist and is researching yoga and addiction as a Ph.D. candidate at Toyo University.

Interoceptive awareness in eating disorders through yoga: how flexible is your perception?

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4 International Association of Yoga Therapists (IAYT) certified yogatherapist

5 "Aldo Ravelli" Research Center for Neurotechnology and Experimental Brain Therapeutics, University of Milan, Italy"

Dr. Mattia Marchetti is a physician with a strong passion for psychiatry: he graduated in Medicine at the University of Milan, meeting the practice of yoga for his thesis, that shares the underlying trial with the poster presentation (Interoceptive awareness in eating disorders through a yoga class: how flexible is your perception?).

The Perspective of Yoga Professionals: Quantitative and qualitative research on the experience, practices, and opinions of global yoga professionals, both teachers and therapists

Amy Bennett, Network Yoga Therapy, The Netherlands

Amy Bennett is a Master student in Organizational Psychology at Utrecht University and an intern at Network Yoga Therapy
