

*Information presentations and speakers:*

**Show me the move: on studying the effects and working mechanisms in dance movement therapy**

**Dr. Susan van Hooren:**

Showing the beneficial effects of therapies is more and more important in Dutch health care, in which a biomedical perspective prevails. In this context, high standards are demanded regarding the methodology of the study designs. From a dance therapeutic perspective, the question is how we should answer this and how we should design new studies with high quality and at the same time stick to the artistic and creative nature of the field. There is not one golden answer to this, but there are several fruitful directions. These directions will be discussed with an elaboration on international studies that focus on dance movement therapy, studies from neighbouring fields of research, and working mechanisms of dance movement therapy referring to embodiment, social attunement, and implicit processes.

***Susan van Hooren*** is associate professor at Zuyd University of applied sciences and Open University of the Netherlands. She is head of the research centre of arts therapies in the Netherlands, known as KenVaK and is head of the master of arts therapies. During her career, she combined practice based research, with teaching activities and clinical work. Her research focus on evaluating arts therapeutic interventions and its working factors, aging, sexology, and clinical psychology, resulting in many publications in high ranking peer reviewed journals and contributions on national and international conferences.



## "Somehow we belong together, here we are something special"

Embodying the investigation of autistic social interactions.

### **Dr. Hanne de Jaegher:**

The idea of embodiment is immensely popular in cognitive science and psychology today. Everything, including social cognition, is *embodied*. But what does that really mean? And what would it mean to get out of the old armchair and find out?

My colleagues and I have devised a method for investigating the experience of social interactions. The method, called PRISMA, provides a hands-on way to unravel the experience of interacting. It allows researchers to calibrate and trust themselves to be the sophisticated instruments with which to study intersubjectivity.

This method can also be applied to the study of autistic interactions. I will demonstrate how this works, by inviting the audience to participate in a short hands-on investigation, and by presenting some findings we made on an interaction between two children with autism.

The prismatic investigation reveals that a potentially subtle instrument for understanding autistic interaction consists in a group of researchers engaging in a systematic, embodied unfolding of interactive experience. If it is true that the different ways in which people with autism move, both individually and with others, affect their ways of understanding the world and of thinking (as suggested by Hobson 2002; Donnellan et al. 2013; De Jaegher 2013), then PRISMA offers a tool for testing and refining this claim.

Our findings show a more sophisticated attunement between the children with autism than classical theories like Theory of Mind predict – a finding that is in line with the experience of many practitioners in the field.

**Hanne De Jaegher** is philosopher of mind and cognitive scientist. Through the concept of participatory sense-making, she grapples with various issues in the interdisciplinary study of subjectivity and intersubjectivity, including embodiment, interactive experience, autism, love and intimacy, and ethical and societal issues. She received her doctorate from the University of Sussex, UK, in 2007, and has worked in various projects funded by EU Marie Skłodowska Curie Actions. She currently holds a Ramón y Cajal research fellowship at the University of

the Basque Country, San Sebastián, Spain.



## **Action observation and mental states comprehension in individuals diagnosed with autism**

### **Dr. Marc Thioux:**

I will show data suggesting that individuals with autism are able to reenact other people's action in their mirror neuron system to the same extent as age and IQ-matched control participants. Problems arise however when the results of mirror neurons computations have to be transferred to other brain circuits involved in representing the emotions and the state of mind of the person performing the action. Based on these results, I will argue that dance therapy could foster the development of more efficient brain connections between the mirror neuron system involved in mimicking other people's action and other brain networks involved in feeling the emotions and representing the state of mind of others.

**Marc Thioux** obtained a PhD in neuropsychology and cognitive neuroscience at Louvain University (Belgium). Studied autism at the Yale University Child Study Center with a focus on savant skills. Joined the department of neuroscience at the UMCG to conduct research on autism and the mirror neuron system.



**Creating connections:  
social attunement in autism through kinaesthetic partnering**

**Dr. Rosemarie Samaritter:**

This presentation will introduce a dance informed perspective on the experience of social attunement in autism.

DMT addresses the integrated body-mind through dynamic experiential activities like dance, movement and play. Within these activities the interpersonal relationship between participants and therapist develops through kinaesthetically shared activities. Methods applied in DMT may vary broadly, from rhythmic dance activities that contribute to the regulation of vital impulses to dance activities that help to express inner feelings and support emotional release.

The focus for this presentation will be on kinaesthetic partnering. Dancing with a partner affords playful non-verbal attunement. A dance therapist will take the movement patterns of the participant for their potential to relate and will seek to join the other in shared rhythms and shared spatial patterns. These aspects fit well into an enactive perspective on interpersonal relating in autism. The presentation will highlight the specific role that nonverbal markers of interpersonal relating can play for the attunement between two movers during their kinaesthetic interactions. From the nonverbal interactions between dance therapist and participants with autism the Shared Movement Approach has been described as a specific intervention that departs from the participant's capacities to relate and take these further into kinaesthetic interpersonal attunement.



***Rosemarie Samaritter*** is a licensed senior dance movement therapist and supervisor. She has been working in outpatient settings in Dutch Mental Health Services and in private practice for more than thirty years. In 2015 she obtained her PhD at University of Hertfordshire (UK). As a researcher at Codarts Arts for Health Rotterdam (NL) she is currently involved in intervention research and the development of innovative DMT research projects with a specific focus on dance informed research strategies.