

## Day 1: Neuroplasticity & Therapeutic Intervention of Autism

### Topics of Day 1

- How genes and the environment work together
- The soup of Brain chemicals in Autism: Neurotransmitters and their influence upon behaviour
- How does this knowledge affect my treatment? Does therapy affect neurochemistry and genetics?
- Neurons that Fire Together Wire Together: How learning and language development occurs in the brain
- Neuronal Connectivity in Autism: Faulty wiring and how this affects learning and language development in Autism
- Neuroplasticity and Therapeutic Intervention. Brain changes with different frames of reference: Sensory Processing, RDI, TEACCH, Social Thinking, etc.

### Day 2 : Self-Regulation, Stress and Immune system of Autism



#### Topics of Day 2

- Exploring the links between autism, the immune system and the brain.
- How stress affects the immune system.
- How Regulation through the sensory systems can affect the stress
- Treatment techniques to support regulation (sensory, cognitive, emotional)

By Kim Barthel

### Day 3 : Relationship-based & Cognition-based Intervention Strategies for Autism



#### Topics of Day 3

- The science of attunement for the child with ASD (e.g. DIR Floortime, RDI, Dragonfly, DMM)
- The neuro-science of Theory of mind and Social Thinking
- Executive function in the child with ASD
- Attunement & cognitive strategies

By Kim Barthel

### Day 4: *Sensory* Processing Intervention & *Motor* Intervention for *Autism*



#### Topics of Day 4

- Sensory processing in the **Autistic brain** (sensory processing intervention, *Therapeutic listening*, *integrated Listening system*, *Irlen*).
- The science of sensory processing intervention for the child with autism.
- The brain parts involved in **motor control** in autism.
- How therapy affects the **motor system** in clients with autism.

By Kim Barthel

