

Dissecting the Social Brain with Neurostimulation: Mapping Connectivity, Plasticity, and Individual Differences

Friday, September 12, 2025 11:00 AM (1h 30m)

This symposium explores the neural foundations of the social brain, highlighting how social perception emerges from the dynamic interplay between brain networks supporting perception, action, and cognition. Through a set of complementary studies, we will present how visual, motor, and cerebellar networks support the encoding of social signals, adapt through experience, and vary across individuals.

A central theme of the symposium is the functional relevance of connectivity across brain regions involved in processing social cues—whether visual, emotional, or action-related. From early visual cortices and the superior temporal sulcus to motor and cerebellar areas, these circuits form dynamic networks whose interactions are crucial for decoding facial expressions, perceiving others' actions, and engaging in socially meaningful behaviors.

Another focus is on neural plasticity: how the brain's social circuits can be reshaped through experience, learning, or targeted modulation. Across studies, we examine the capacity of the social brain to adapt—whether by strengthening specific cortico-cortical pathways, revealing experience-dependent changes in motor resonance, or uncovering modulatory influences between cerebellar and cortical structures.

The symposium also addresses individual differences in social responsiveness. By examining variability in emotional and sensorimotor reactivity to socially charged stimuli, we uncover how personal attitudes and predispositions are mirrored in neural processing patterns.

The symposium brings together researchers at different career stages, offering diverse perspectives on advancing our understanding of the social brain through innovative neurostimulation techniques. Together, these contributions provide a multidimensional view of social cognition, integrating mechanisms of connectivity, plasticity, and individual variability.

If you're submitting a symposium talk, what's the symposium title?

If you're submitting a symposium, or a talk that is part of a symposium, is this a junior symposium?

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