FORUM

Clinical trials utilizing bio-markers as outcome measures to develop therapeutics for core symptoms of autism spectrum disorders.

Dr. Hidenori Yamasue

Department of Neuropsychiatry,
School of Medicine, The University of Tokyo

December 12 (Thursday), 2013

16:00-17:00

1F Seminar Room, BSI Central Building

Abstract

Autism spectrum disorders (ASD), which prevail as high as 1 in 100 individuals, currently have no established pharmacological treatment. By utilizing multimodal magnetic resonance scans (i.e. functional magnetic resonance imagings, magnetic resonance spectroscopy, and diffusion tensor imaging), we successfully detected a positive effect of single dose oxytocin on neural and behavioral indices representing socio-communicational deficits, which constitute the core symptoms of ASD. The findings from the trial of single dose oxytocin made a path to conduct further trial of effect of long-term administration of this neuropeptide on severity of autistic symptom itself. We are now trying to develop a novel therapeutics for core symptoms of ASD by uncovering neurobiological mechanisms underlying oxtocin's effect with a combination method of clinical assessment, neuroimaging, and molecular level analysis.

Host: **Hiro. Nakahara** Lab for Integrated Theoretical Neuroscience