



東北大学脳科学GCOEセミナーのお知らせ

日時 2010年3月8日(月)16:30~18:00

会場 加齢医学研究所・大会議室

演者 櫻井 武 博士

Departments of Psychiatry and Pharmacology, Seaver Autism Center, Black Family Stem Cell Institute, Mount Sinai School of Medicine, New York, New York

演題 Autism genetics and synapse biology – application of mouse models –

Genetic factors play significant roles in autism spectrum disorders (ASDs). Recent genetics studies have identified several autism "causal" and "risk" genes, helping us to construct the framework for our hypothesis on genetic architecture of ASDs. Many of genes identified so far turned out to be involved in synapse formation and function. Mouse models that have alterations in these genes, therefore, can be analyzed for the synaptic alterations as well as behavioral characteristics relevant to ASDs. These analyses will also elucidate cellular pathways that may be possible targets for therapeutic approaches. In this talk, I would like to summarize the current ASD genetic findings and talk about our two mouse models as an example for application of mouse models in ASD research.

Reference:

Slc25a12 Disruption Alters Myelination and Neurofilaments: A Model for a Hypomyelination Syndrome and Childhood Neurodevelopmental Disorders., **Sakurai T**, Ramoz N, Barreto M, Gazdoiu M, Takahashi N, Gertner M, Dorr N, Sosa MA, Gasperi RD, Perez G, Schmeidler J, Mitropoulou V, Le HC, Lupu M, Hof PR, Elder GA, Buxbaum JD., Biol Psychiatry. *In press*.

A large-scale screen for coding variants in SERT/SLC6A4 in autism spectrum disorders., **Sakurai T**, Reichert J, Hoffman EJ, Cai G, Jones HB, Faham M, Buxbaum JD., Autism Res., 1(4):251-7, 2008.

連絡先: 創生応用医学研究センター 形態形成解析分野 (大隅典子) 内線8203