



Molecular and Cellular Mechanisms on Autism Spectrum Disorder

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Message from the Guest Editor

Dear Colleagues,

Autism spectrum disorder (ASD) is a group of neurodevelopmental disorders characterized by social and communication abnormalities. Synaptic abnormalities have been observed in preclinical ASD models. They are thought to play a major role in ASD and might be modified by targeted interventions. An imbalance in excitatory to inhibitory neurotransmission (E/I imbalance), through altered glutamatergic and GABAergic neurotransmission, respectively, is thought to be implicated in the pathogenesis of ASD. Molecular abnormalities in synaptic structures and functions in ASD involve neuroligins and neurexins, proteins that are crucial for aligning and activating synapses along with the SHANK3 scaffolding protein. The aim of this topic is to contribute to disentangling the complex synaptic and molecular abnormalities of ASD and related new experimental treatments.





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Message from the Editor-in-Chief

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