

January 18th, 2023

Postdoctoral position in the Shcheglovitov Lab to study human brain development and disease using stem cell-derived brain organoids

We are looking for a motivated and ambitious individual to join our group as a postdoctoral research associate to study the development of functional neural circuits under normal and pathological conditions using human stem cell organoids-derived organoids (Wang et al., *Nature Communications* 2022). We welcome applications from recent/ready-to-graduate PhD students with cellular, molecular, or system neuroscience background and experience in electrophysiology and/or calcium imaging. If you are interested in this opportunity, please send your CV and cover letter briefly describing your research interests to Dr. Alex Shcheglovitov (alexsh@neuro.utah.edu).

The following links have more information about the Shcheglovitov lab in the Department of Neurobiology at the University of Utah and life in Salt Lake City, Utah:

Shcheglovitov lab: <http://shcheglovitov-lab.utah.edu>

Living in Utah: <https://uofuhealth.utah.edu/living-in-utah>

Relevant publications:

Wang et. al., 2022: "Modeling autism-associated SHANK3 deficiency using human cortico-striatal organoids generated from single neural rosettes" *Nature Communications* <https://doi.org/10.1038/s41467-022-33364-z>

Chiola, Napan, Wang et al., 2021: "Defective AMPA-mediated synaptic transmission and morphology in human neurons with hemizygous SHANK3 deletion engrafted in mouse prefrontal cortex" *Molecular Psychiatry* <https://doi.org/10.1038/s41380-021-01023-2>

Shcheglovitov A et al., 2013: "Shank3 and IGF1 Restore Synaptic Deficits in Neurons from 22q13 Deletion Syndrome Patients", *Nature* <https://doi.org/10.1038/nature12618>

Reviews:

Shcheglovitov and Peterson 2021: "Screening Platforms for Genetic Epilepsies-Zebrafish, iPSC-Derived Neurons, and Organoids" *Neurotherapeutics* <https://doi.org/10.1007/s13311-021-01115-5>

Chiola et., 2021: "iPSC toolbox for understanding and repairing disrupted brain circuits in autism" *Molecular Psychiatry* <https://doi.org/10.1038/s41380-021-01288-7>