

## Spotlight on Neuroscience | Neurodevelopmental disorders

October 19, 2021



**Dr. Aniko Karpati**

Abcam, United Kingdom

Aniko Karpati is the Commercial Strategy Manager for Neuroscience at Abcam.

Aniko is responsible for the development of Abcam's neuroscience portfolio and partnership relationships. In her role, she identifies emerging neuroscience targets and works closely with the new product development team to build a relevant and highly validated neuroscience portfolio, spanning multiple product categories. Before joining the research area strategy team, Aniko supported Abcam's customers as Scientific Support Specialist with focus on technical sales.

Aniko obtained her PhD in Neuroscience at Tohoku University in Japan as a doctoral fellow of the Japan Society for the Promotion of Science. Her research interests are astrocyte physiology and the role of histamine as a neurotransmitter. Applying in vitro and in vivo techniques, she unraveled how histamine contributes to astrocyte signaling.



**Dr. Ki-Jun Yoon**

KAIST

Dr. Ki-Jun Yoon's longstanding question is how neural stem cells are regulated to achieve the precise cell division, cell migration and cell fate specification during brain development.

After finishing his Ph.D. in developmental genetics at POSTECH, Republic of Korea, he joined to Dr. Hongjun Song's laboratory at University of Pennsylvania. During his postdoctoral training, he investigated the epitranscriptomic control of

neural stem cells through m6A RNA modification during the cortical neurogenesis with genetically engineered mouse models and human brain organoids. Ki-Jun established his own lab at KAIST, South Korea since 2018 (<http://www.yoonlab.info>). His laboratory is using both in vivo mouse models and in vitro human iPSCs-derived brain organoids to model normal brain development and brain disorders.



**Dr. John Jia En Chua**

National University of Singapore

John Jia En Chua is an Assistant Professor in the Department of Physiology and Healthy Longevity Translational Research Program at the Yong Loo Lin School of Medicine, National University of Singapore. He is also a Joint Principal Investigator of the Institute of Molecular and Cell Biology and Principle Investigator at the Institute for Health Innovation and Technology.

John obtained his PhD at the University of Hamburg (Germany) where he worked on postsynaptic translational regulation and dendritic mRNA binding proteins. He did his postdoctoral training with Reinhard Jahn at the Max Planck Institute for Biophysical Chemistry in Göttingen, where he studied the composition and organization of protein complexes involved in presynaptic function. He was subsequently appointed a Research Group Leader at the Institute and a faculty member of the Göttingen Graduate School for Neurosciences, Biophysics, and Molecular Biosciences (GGNB). In 2015, he joined the Department of Physiology at NUS as an Assistant Professor and IMCB as a joint PI.

John's group combines molecular, biochemical, imaging, -omics, human stem cell and model organism technologies to elucidate proteins and biological pathways involved in neuronal network formation during brain development as well as in neurodegenerative conditions. Recent work from the group uncovered new insights into how guidance cue signalling coordinates with synaptic protein trafficking during neuronal network development, and how new potential AD biomarkers contribute to neuronal cell death in response to A $\beta$ .

John is a member of the SynGO consortium – an international collaboration of leading synaptic biologists dedicated to building an over-arching framework for the curation, analyses and generation of experimental data for the advancement of synaptic research in neuropsychiatric and neurodegenerative disorders. He was recently awarded the National University of Singapore, Yong Loo Lin School of Medicine Faculty Research Excellence Award.



**Dr. Noriko Osumi**

Tohoku University

Prof. Osumi is Vice President at Tohoku University and a professor belonging to School of Medicine. Her research background is developmental biology, and she has interest in brain development, evolution, and disease. Manipulating mammalian embryos is one of the key expertise in her lab.

She was a representative of CREST project (2005-2010) supported by JST, as well as of Grant-in-Aid for Scientific Research on Innovative Areas "Integrative Research toward Elucidation of Generation of Brain Systems for Individuality" (2016-2020).