

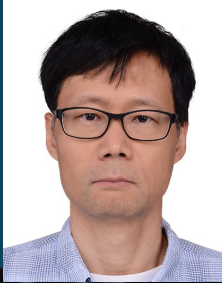
# Presynaptic Structural Proteins as a Regulator of Short-term Synaptic Plasticity

September 6th (Sunday), 09:35-11:30

Room 105-106, Daejeon Convention Center, Daejeon, Korea

Registration [KSBNS2026.org](http://KSBNS2026.org)

## Organizer



**Suk Ho Lee**

*Department of Physiology, Department of Brain and Cognitive Sciences, Seoul National University, Korea.*

**Description**

: He pioneered presynaptic calcium and vesicle dynamics to elucidate mechanisms underlying short-term synaptic plasticity. Now he extended his question how network dynamics and behavior are regulated by short-term synaptic plasticity.

## Speakers



**Daehun Park**

*Department of Medical and Biological Sciences, The Catholic University, Korea*

*"Liquid-liquid phase separation-mediated presynaptic assembly and its implications for synaptic function"*

He has pursued the question how phase-separated biomolecular condensates regulate neurotransmission and neural circuit function, especially focused on the role of liquid-liquid phase separation (LLPS). His works combine advanced imaging and molecular approaches to address this question.



**Takafumi Miki**

*Department of Cell Physiology, Graduate School of Medicine, Akita University, Japan*

*"Actin- and condensate-dependent confinement of synaptic vesicles governs their rapid recruitment for sustained neurotransmission"*

He pioneered the vesicle dynamics to unveil how synaptic vesicles are re-loaded to an active zone in a small bouton synapses during high frequency transmission. Recently, he has studied it in depth using single vesicle movement tracing techniques.



**Che Ho Yang**

*Department of Physiology, Seoul National University College of Medicine, Korea*

*Actin-dependent recruitment of reluctant synaptic vesicles into releasable vesicle pool sculpts short-term plasticity.*

His research is focused on the question how central synapses sustain synaptic transmission during high frequency stimulation. He have elucidated two essential players on this question: mitochondria and actin. He will talk about the latter.



**Han Kyung Ah**

*Department of Anatomy & Cell Biology, College of Medicine, Chungnam National University, Korea*

*Intracellular Signaling in Presynaptic Architecture and Synaptic Plasticity*

She has pursued the question how intracellular signaling regulates active zone architecture and synaptic transmission. She combined molecular and cellular approaches with electrophysiology and behavior to elucidate how these mechanisms translate into circuit-level function.