

Brain Science

Functional Interplays between Neurons and Glia

November 4 - 5, 2021

IBS Science Culture Center, Daejeon, Korea

Conference Invitation

Brain is a complex organ with multiple cell types. Therefore, it is no surprise that neurons in the brain interact with multiple brain cell types such as astrocytes, microglia, and oligodendrocytes, and vascular cell types such as endothelial cells and pericytes. In this IBS Conference on neuroglia interaction, experts from various disciplines are gathered to discuss about the latest development of novel concepts and tools to decipher the neuroglia interaction.

Keynote Speaker

Maiken Nedergaard (University of Rochester)
"The Nightlife of Astrocytes"

Morgan Sheng (Broad Institute of MIT and Harvard)
"The role of complement in synapses and neurodegenerative disease"

Martin Lauritzen (University of Copenhagen)
"Neurovascular coupling by vascular smooth muscle cells, precapillary sphincters and capillary pericytes and the BOLD signal"

Day 1

Session 1-1 Neuroglia Interaction: postsynaptic mechanism

Chair | **Seong-Gi Kim**
Jeff Biernaskie (University of Calgary)
Wonsuk Chung (KAIST)

Session 1-2 Neuroglia Interaction: molecular tools

Chair | **C.Justin Lee**
Wondo Heo (KAIST)
Sangkyu Lee (Institute for Basic Science)
Yulong Li (Peking University)
Myunghwan Choi (Seoul National University)

Session 1-3 Neuroglia Interaction: peri and presynaptic mechanism

Chair | **Eunjoon Kim**
Schuichi Koizumi (Yamanashi University)
Alexei Verkhratsky (The University of Manchester)

Chair

C.Justin Lee (IBS, Center for Cognition and Sociality)
Eunjoon Kim (IBS, Center for Synaptic Brain Dysfunctions)
Seong-Gi Kim (IBS, Center for Neuroscience Imaging Research)

Registration

<https://ibs-conference.org/2021/brain>

Deadline : October 15, 2021

This Conference will be held in a hybrid format due to the corona virus. The Main Conference will be held in Daejeon, Korea, and overseas speakers will participate online.

Day 2

Session 2-1 Neuroglia Interaction: neuroglia vascular research

Chair | **Seong-Gi Kim**
Anna Devor (Boston University)
Minah Suh (Sunkyunkwan University)
Kazuto Masamoto (The University of Electro-Communications)
Serge Charpak (Sorbonne University)

Session 2-2 Neuroglia Interaction: peri and presynaptic mechanism

Chair | **C.Justin Lee**
Alfonso Araque (University of Minnesota)
Baljit Khakh (UCLA)
Eunji Cheong (Yonsei University)

Session 2-3 Neuroglia Interaction: neuroglia imaging

Chair | **Eunjoon Kim**
Mijin Yun (Yonsei University)

Contact

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