

Special Session 4. Joint Session of KSBNS-KSCBFM
Title: Neurovascular homeostasis in the regulation of brain health

September 8th (Tuesday), 16:05-18:00

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

Registration KSBNS2026.org

= Organizer & moderator =


Professor Yun Seon Song

Department of Pharmacology, College of Pharmacy, Sookmyung Women's University, Seoul, Korea

President, Korean Society for Cerebral Blood Flow & Metabolism (KSCBFM)

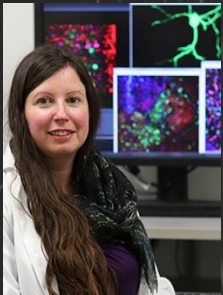
This symposium explores neurovascular homeostasis and blood-brain barrier integrity across stress, neuroinflammation, and metabolism. Presentations reveal how psychological stress, microglial activation, and endothelial-pericyte crosstalk disrupt BBB function, triggering neurological and psychiatric pathologies. It bridges basic neuroscience and clinical neurology to identify therapeutic targets for cerebrovascular disease and neurodegeneration.


Professor Byung Gon Kim

Department of Brain Science, Neurology, Ajou University School of Medicine, Suwon, Korea

Chair, Academic committee, Korean Society for Cerebral Blood Flow & Metabolism (KSCBFM)

= Speakers =


Professor Caroline Ménard

Psychiatry and Neuroscience, Université Laval and CERVO Brain Research Center, Quebec City, QC, Canada

"Blood-brain barrier function and signaling in depression"

Professor Caroline Menard employs reverse translational research, studying stress response mechanisms in mice to uncover novel biological drivers of human disease and resilience. Her program integrates behavioral, molecular, and imaging studies, validating rodent findings in human samples for translational impact.


Professor Je Wook Yu

Department of Microbiology, Yonsei University College of Medicine

"Glial cell-neutrophil crosstalk as a key driver of blood-brain barrier disruption"

Professor Yu investigates pattern-recognition receptor (PRR) and inflammasome signaling pathways in innate immune cells using mouse models and molecular studies to elucidate innate immune dysfunction-driven metabolic and neurological disease mechanisms.


Professor Minah Suh

Sungkyunkwan University, Republic of Korea

"Microglia-neuron interactions drive chronic stress-induced E-I balance in the prefrontal cortex via CSF1-CSF1R signaling"

Professor Suh's research focuses on understanding the underlying mechanisms of physiological interactions among neurons, glial cells and vascular system by using multimodal imaging methods


Professor Heon-Woo Lee

College of Pharmacy, Kyung Hee University, Seoul, Republic of Korea

"Animal model and its application in vascular biology: endothelial migration and differentiation"

Professor Heon-Woo Lee investigates endothelial cell biology and vascular development, focusing on endothelial-pericyte interactions, metabolic signaling, and blood-brain barrier maintenance. His research combines molecular mechanisms with angiogenic pathways to elucidate neurovascular homeostasis.