

第40回最先端脳科学セミナー

Molecular Mechanisms of Long-Term Memory

演者: **Bong-Kiun Kaang 教授**

Department of Biological Sciences,
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日時: 2018年3月6日(火) 17:00~18:30

場所: 日医工オーデトリウム (医薬イノベーションセンター1F)

Professor Bong-Kiun Kaang has long been pioneering synaptic plasticity research unravelling the molecular mysteries of Learning and memory, and Psychiatric disorders.

Dr. Kaang's extraordinary contributions to understanding the dynamic mechanisms that govern memory formation and retrieval have been putting forward answers to many unsolved theories. His discovery of the role of proteasome-dependent protein degradation in memory destabilization have proposed a cornerstone of both memory update and forgetting mechanisms (1). His study of the post-learning profile of mouse hippocampal tissue's transcriptome and translome has revealed diverse phasic gene-regulatory events occurring during memory formation. This work pinpointed the importance of negative gene regulation for learning and memory (2).

Furthermore, together with other prominent scientists, he led the team that established the causal link implicating NMDA receptors in the pathogenesis of Autism Spectrum Disorder, and thus putting forth NMDA receptor modulators as one of the pillars of therapy (3).

In this seminar, professor Kaang will talk about not only these studies but also his current work on the synaptic memory engram.

- References**
- 1) *Science*, 319 (5867):1253-6 (2007).
 - 2) *Science*, 350 (6256):82-7 (2015).
 - 3) *Nature*, 486 (7402):261-5 (2012).

※ 本セミナーは、大学院医学薬学教育部「脳科学特論」の一環です。
履修者は、レポートの提出が必要です。また、大学院の単位認定の対象となります。

主催: 医・生化学 井ノ口 馨

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