

## SEMINAR

演者: **Todd C. Sacktor, M.D.**

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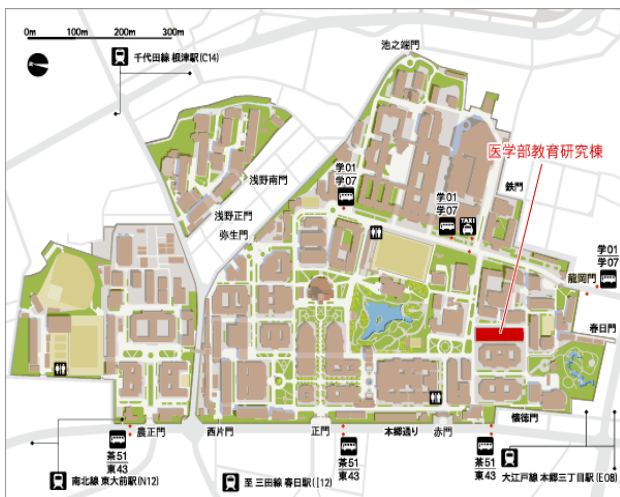
演題: **Enhancing, erasing, and tracing long-term  
memories by targeting PKM $\zeta$**

要旨:

Most molecular targets for the manipulation of memory focus on the signaling events that initiate memory formation during the brief time window of memory consolidation, or following the reactivation of memory, during reconsolidation. Targets for maintaining the long-term memory trace after consolidation have been largely unknown. Recently, however, the persistently active atypical PKC isoform, PKM $\zeta$ , has been identified as a potential component of the molecular mechanism maintaining the long-term memory trace. Pharmacological or genetic inhibition decreasing PKM $\zeta$  activity disrupts both new and established long-term memories, whereas increasing PKM $\zeta$  enhances both new and established memories. Whereas conditional knock-out mice show no LTP or long-term memory, constitutive PKM $\zeta$  knock-outs reveal the role of a PKM form from the other atypical PKC, PKC $\lambda$ . Localizing the increases of PKM $\zeta$  within specific circuits of the brain days to weeks after memory consolidation gives the first indication of how the physical trace of long-term memories are stored and can be erased and enhanced.

日時:平成25年 7月 2日(火) 13:00~14:00

場所:東京大学 医学部教育研究棟 2階 第1・第2セミナー室



皆様のご来聴を心よりお待ちしております。

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