



ONSA/CBIR セミナー

Contribution of sleep to learning and memory in humans

演者

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日時

2023年12月7日(木) 18:00 開始

会場

オンライン開催

参加希望者の登録はこちらから

<https://forms.gle/HTzjkmDuF8VAMoWo6>

参加登録
QRコード



講演要旨

発表言語は日本語で、スライド表記は英語です
(Spoken Japanese, Slide Presentation English)

Sleep is crucial for the continuity and development of life. Sleep-related problems can alter brain function and cause potentially severe psychological and behavioral consequences. However, the role of sleep in our mind and behavior is far from clear. In this talk, I will first describe how learning is facilitated and stabilized in association with changes in the excitation/inhibition (E/I) ratio during NREM and REM sleep, obtained by simultaneous magnetic resonance spectroscopy and polysomnography measurement. I will also show that temporary sleep problem can impair visual plasticity in otherwise healthy adults, utilizing the well documented phenomenon, the first night effect (FNE), a sleep disturbance that occurs during the first session of sleep experiments. I will then introduce our recent findings on how deep NREM and REM sleep may influence cerebrospinal fluid dynamics and discuss how healthy brain functions may be maintained during sleep in humans.

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