大学院特別講義

新潟脳神経研究会特別例会の御案内

日時:平成31年1月30日(水)16:45~18:00

場所:脳研究所1F検討会室

Illuminating brain circuits in action in health and disease



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Optical techniques have become central to research at the forefront of brain science and are still rapidly increasing in their breadth and importance to the field. For example, the U.S. BRAIN Initiative has as one of its priorities the aim of fostering continued innovation in this domain. I will present recent advances in optical brain imaging, which have allowed the visualization of large-scale neural codes in behaving animals, as well as optical readouts of neuronal voltage oscillations. In particular, I will discuss the miniature integrated microscope and a recent application of this technology to the study of Parkinson's disease and L-DOPA-induced dyskinesia. Emerging innovations in optical brain imaging are providing new glimpses into how multiple brain areas work together to coordinate mammalian behavior and are likely to yield improved understanding of both healthy and diseased brains.

Schnitzer先生は、超小型顕微内視鏡をはじめとする数々のイメージング技術を開発し、自由行動下の脳神経活動の可視化と挙動の解析に成功した世界屈指の研究者です(Nat Methods 2011; Science 2015; Cell 2016; Nature 2017, 2018 他多数)。またとない機会かと思いますので、多くの方々のご参加をお待ちしております。

(担当:システム脳病態学分野) 新潟大学脳研究所長:那波宏之