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：令和元年７月２９日（月）　９：１５～１０：１５
場所：統合脳機能センター６Ｆ　メディアホール

Brain-wide network dynamics predict vulnerability to chronic stress

Prof. Rainbo Hultman

Department of Molecular Physiology and Biophysics, Carver College of Medicine, University of Iowa, USA

The use of multi-site *in vivo* neurophysiological recordings will be presented as a way of probing brain-wide neural oscillations on a millisecond timescale in the chronic social defeat stress model of major depressive disorder MDD. By combining machine learning approaches with our recording approach, we have augmented interpretation of the millions of data points collected by these methods by using patterns of electrical connectivity to define susceptibility-related emotional states. This relationship between electrical connectivity patterns and emotional/behavioral states was then be validated using out-of-sample testing across different depression-vulnerability paradigms. Maps of brain-wide activity may be useful for identifying new therapeutic targets that impact specific brain network activity patterns.
(*Ref; R Hultman et al Brain-wide Electrical Spatiotemporal Dynamics Encode Depression Vulnerability, Cell 173, 166–180, 2018*)

どうぞ奮ってご参加ください。

（担当：分子神経生物学分野）
新潟大学脳研究所長：那波宏之