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２９年１２月５日（火）17:00 ～ 18:00
場　所：脳研究所　１Ｆ　検討会室

Effects of Aging and Dopamine D2L-Deficiency on Motor/Cognitive Functions and Synaptic Plasticity

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Yanyan Wang 先生は、世界に先駆けてノックアウトマウスを用いた海馬の神経可塑性と学習・記憶の研究を発表されています。本セミナーでは、ドーパミンの機能に関する最近の研究を発表されます。

Alterations in the dopamine D2 receptor（D2R）system have been implicated in age-related decline of motor and cognitive functions and neurodegenerative disorders such as Parkinson's disease. There are two isoforms of D2R, termed D2L（long form）and D2S（short form）. The differential functions of individual D2R isoforms in the brain and aging are poorly understood, primarily because selective pharmacological ligands are not available. To overcome this obstacle, we generated selective D2L deficient mice（D2L-/- mice）. This seminar will focus on the roles of aging and D2R isoforms in motor activity, cognitive function, and synaptic plasticity. Our findings suggest that the deletion of D2L may facilitate the aging process in mice and D2L and D2S have differential functions. We also showed that various forms of synaptic plasticity were differentially affected by selective molecules and aging. These studies contribute to a better understanding of the molecular and cellular mechanisms underlying age-related decline in motor and cognitive functions. Additionally, understanding the role of individual D2R isoforms in aging may hold promise for advancement in the treatment of related disorders such as Parkinson's disease.

どうぞ奮ってご参加ください。

（担当：動物資源開発研究分野 笹岡俊邦）
新潟脳神経研究会幹事代表：那波宏之