第22回 生物と行動セミナー

An estrogen-sensitive limbic-hypothalamic circuit controls maternal aggression

体内エストロゲンに感受性を持つ辺縁ー視床下部

回路は母性攻撃行動を制御する

山口 隆司 先生

New York University School of Medicine Neuroscience Institute, Dayu Lin Lab

場所: 人間科学研究科本館1階 インターナショナル・カフェ

日時: 8月4日(金) 16時~17時

講演要旨 (※講演は日本語で行われます)

Lactating animals across species show aggressive behaviors to protect infants from threats. Importantly, the estrogen surge during pregnancy is believed to stimulate maternal aggression in the lactation period. However, it remains ambiguous how estrogen shapes the maternal brain that drives aggressive behaviors to social threats. Using a series of recording, functional and molecular tools, we found that the surge of estrogen during pregnancy organizes a limbic-hypothalamic circuit that drives maternal aggression through estrogen receptor alpha. Our study reveals an essential role of the limbic-hypothalamic circuit in maternal aggression and highlights the importance of pregnancy estrogen in the formation of maternal aggression circuitry.

References:

Yamaguchi, T. et al. (2020) Nat Neurosci 23, 1111–1124 Yamaguchi, T. (2022) Neuroscience Research 174: 1-8

問い合わせ先:人間科学研究科行動生理学 八十島安伸

内線:8047