

# 253<sup>rd</sup> WPI-IIIS Seminar

## Maternal brain mechanism underlying protective aggression

Female mammals undergo dramatic behavioral changes during pregnancy and lactation. They prioritize the care and well-being of their offspring over their own survival. Notably, lactating females display “maternal aggression,” an aggressive behavior in which they attack predatory intruders to protect their young. It has been proposed that circulating hormones during pregnancy and parturition remodel the brain circuit for the expression of this reproductive state–dependent aggression. However, the neural mechanisms of female aggression remain unclear. In this seminar, I will present recent findings on the neural plasticity and hormonal regulation underlying the temporal specificity of maternal aggression. I will also discuss how circulating hormones shape the “maternal brain circuit”.



## Dr. Takashi Yamaguchi

Department of Neurosciences,  
New York University School of Medicine

Date: **Monday, May 25, 2026**

Time: **11:00 – 12:00**

Venue: **1F Auditorium, IIIS Building**

*\* On-site participation only*



Contact: International Institute for Integrative Sleep Medicine, University of Tsukuba  
029-853-5859 (ext.5859) | [wpi-iiis-alliance@ml.cc.tsukuba.ac.jp](mailto:wpi-iiis-alliance@ml.cc.tsukuba.ac.jp)