

# 215<sup>th</sup> WPI-IIIS Seminar

## Cross-species comparison linking form and function of neural circuits in teleost fish

Animals have evolved stimulus sensitivities that are matched to their respective habitat. Environmental cues are then transformed by the brain into appropriate behavioral responses, but the way in which evolution has shaped these sensorimotor transformations and their underlying circuit implementations remain largely unknown. We can leverage cross-species comparison to uncover not only the fundamental mechanisms that are common between species, but also the divergent mechanisms that are optimized to allow each species to survive in its specific environmental niche. By using both zebrafish and medaka that evolved in different environmental conditions and show divergent behavioral responses, I will elucidate the precise behavioral algorithms and the neural circuits that realize these sensorimotor transforms.



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Date: **Tuesday, November 26, 2024**

Time: **14:40 – 15:30**

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

**\* On-site participation only**



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