

# The Dynamic Memory Connectome

Understanding information flows and their changes in the brain requires a comprehensive map of neural structures at all levels, similar to those of Google Earth for continents, countries, cities, and streets. By integrating multiscale imaging technologies, Dr. Ann-Shyn Chiang proposes a practical approach aiming for mapping individual neurons, cellular organelles, synapses and single molecules in the entire *Drosophila* brain. He will discuss how the generated connectome map helps us to classify cell types, predict information flows, and manipulate target neurons that orchestrate complex behaviors. Our long-term goal is to construct the *Drosophila* engram and understand how learning and memory change the decision.



## Dr. Ann-Shyn Chiang

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Distinguished Chair Professor of National Tsing Hua University*

**Mon, Nov. 19** 16:00 to 17:30  
Center Bldg. **C209**

"Dr. Ann-Shyn Chiang invented the world's first hydrophilic tissue clearing technology, reconstructed a brain-wide wiring diagram in *Drosophila*", reported in The New York Times as the first step toward mapping human brain. At his Presidential Special Lecture in the Society for Neuroscience 2016 Annual Meeting, Dr. Chiang announced the era toward whole-body connectomics. He received many awards, including: Outstanding Research Award, National Science Council (2004, 2009, 2012); Outstanding Scholar Award, Foundation for the Advancement of Outstanding Scholarship (2007); Academic Award of Ministry of Education (2007); Outstanding Contributions in Science and Technology of Executive Yuan (2008); TWAS Prize in Biology (2012); and National Chair Award of Ministry of Education (2015). Dr. Chiang is currently the Dean of College of Life Science, the Director of Brain Research Center, the Distinguished Chair Professor of National Tsing Hua University in Taiwan, and the International Fellow of Kavli Institute for Brain and Mind (KIBM) at the University of California, San Diego.