Mu-Ming Poo Receives Gruber Neuroscience Prize

r. Mu-Ming Poo, a worldrenowned researcher whose innovative work has helped unravel some of the most important mysteries in cellular neuroscience, has become the recipient of the 2016 Gruber Neuroscience Prize.

Working currently as the Paul Licht Distinguished Professor in Biology Emeritus at the University of California, Berkeley and the director general of the CAS Institute of Neuroscience (ION) in Shanghai, Dr. Poo was honored with this



Throughout his long career, Poo's research approach has been unusually broad and inventive. In addition to his discoveries regarding synaptic plasticity, he has made major contributions in several other research areas, including neuronal polarization, the maturation of the neuromuscular junction, the molecular and cell mechanisms underlying axon guidance, and the neurotrophic regulation of synaptic functions. He has opened many new research avenues that have shaped entire

prestigious international award for his seminal discoveries regarding the molecular and cell mechanisms underlying synaptic plasticity in the brain.

The award will be presented to Poo, 67, in San Diego on November 13 at the 46^{th} annual meeting of the Society for Neuroscience.

"Through his innovative and ingenious experiments, Mu-Ming Poo has greatly advanced knowledge of mechanisms of brain plasticity – the ability to form new connections or change the strength of existing ones driven by our experiences of the world – in nerve cells," says Dr. Carla Shatz from Stanford University. "He has enhanced our understanding of how synapses, the special junctions between nerve cells so crucial for all brain functions, are reinforced or weakened by neural activity." fields. These include the use of nerve-muscle cultures to study synaptic plasticity in vitro, the discovery that the level of cyclic nucleotides can reverse the polarity of nerve pathfinding decisions, and the appreciation that synaptic plasticity often affects remote synapses.

In addition, Poo has an outstanding record of service to the international research community. Since 1999, he has almost single-handedly transformed the ION into a world-class neuroscience research institute.

"He is an extraordinarily dedicated scientist," says Dr. Robert Wurtz, chair of the Selection Advisory Board to the Prize. "The breadth of his impact on neuroscience has been exceptional, and he is much deserving of this award." (Gruber Neuroscience Prize Press Release, with minor revisions)