

## **AREAS OF RESEARCH INTEREST:**

- Studying the cellular model of learning and memory (long term potentiation, LTP) using electrophysiological recording from the hippocampus.
- Molecular pharmacology of LTP in the hippocampus, including the expression of crucial proteins involve in memory such as p-CaMKII and calcineurin.
- Studying the mechanisms of memory (short and long term memory) and memory impairment associated with some disease.
- Investigating the effects of neuroprotective drugs on memory and memory impairment by microinjecting tiny concentrations of drugs directly into the hippocampus, which is a brain region crucial for learning and memory.
- Effects of nicotine and sleep-deprivation on memory and synaptic plasticity and their signaling transduction.