

# Microplatforms for Optogenetics – William C. Tang



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## Research Group Members

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# Projects we are working on in the upcoming year

## **Project/research summary**

- Develop the hardware platform with DLP projection for optical stimulation integrated with multi-electrode array (MEA) for electrophysiology
- Develop the control, data collection, and illumination pattern generation software to integrate with hardware platform
- Demonstrate the optogenetic functions of the integrated platform with neuronal tissues from transgenic mice

# Possible areas of collaboration with other groups

- Hardware / software co-development and integration
- Matlab algorithms in sorting and analyzing spikes and spike trains
- Neuronal culture and genotyping