



New tools for monitoring & manipulating neural circuits

# SEMINAR & VISITING SPEAKER SERIES WORLD WIDE NEURO PLATFORM

DATE

Monday, February 14, 2022 12:00 PM CST

WORLD WIDE NEURO LINK https://www.crowdcast.io/e/mnn-seminar\_14Feb2022\_LL

## MEETING ID & PASSCODE None required

SPEAKER Dr. Loren Looger, PhD

HHMI Investigator, Professor Neurosciences UC San Diego

### BIO

Dr. Loren Looger received his BSc (Chemistry; 1996) and MSc (Mathematics; 1996) degrees from Stanford University. He then went on to complete his PhD in Biochemistry from Duke University in 2003. He did his Post-doctoral studies at Duke Univeristy (2003-2004) and Carnegie Institute of Plant Biolgoy (2004-2006). Afterwards, he joined the Howard Hughes Medical Institute (HHMI) as a Group Leader and became an Investigator in 2018. Dr. Looger became a Professor at the Univeristy of California San Diego in 2020.

#### RESEARCH

Dr. Looger will present updates on a variety of molecular tools for studying & manipulating neural circuits & other preparations. Topics include genetically encoded calcium indicators (including the new ultra-fast jGCaMP8 variants), neurotransmitter sensors (improved versions for following glutamate, GABA, acetylcholine, serotonin), optogenetic effectors including the new "enhanced Magnets" dimerizers, AAV serotypes for retrograde labeling & altered tropism, probes for correlative light-electron microscopy, chemical gene switches, etc. He will make all his slides freely available - so don't worry about hurriedly taking notes; instead focus on questions and ideas for collaboration. Please bring your suggestions for molecular tools that would be transformative for the field.

OBJECTIVES

1. Spread awareness of new tools

2. Nucleate new collaborations

3. Meet new people

For more information:

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