

IEM SPECIAL SEMINAR

TUESDAY
APRIL 7th, 2015

Optogenetic fMRI (ofMRI): *In Vivo* Visualization and Control of Neural Circuits



Institute for
Engineering in Medicine

UNIVERSITY OF MINNESOTA
Driven to DiscoverSM

DR. JIN HYUNG LEE

Assistant Professor of Neurology and Neurological Sciences
Bioengineering, Neurosurgery, and Electrical Engineering
Fellow, Chemical Biology Institute
Member, Bio-X
Stanford University



FREE event, no registration required.

Refreshments will be provided

For additional information on Jin Hyung Lee's presentation please contact: scot0353@umn.edu

12:00PM - 1:00PM
Nils Hasselmo Hall
Room 4-101

The Institute for Engineering in Medicine (IEM) is pleased to announce a special seminar by Dr. Jin Hyung Lee, "Optogenetic fMRI (ofMRI): In Vivo Visualization and Control of Neural Circuits."

Understanding the functional interactions of the whole brain has been a long sought-after goal of neuroscientists. However, due to the widespread and highly interconnected nature of brain circuits, the dynamic relationship between neuronal networks often remains elusive. The recent development of optogenetic functional magnetic resonance imaging (ofMRI) provides a key technological advancement in addressing this problem.

Jin Hyung Lee is an Assistant Professor of Neurology and Neurological Sciences, Bioengineering, Neurosurgery, and Electrical Engineering (Courtesy) at Stanford University. Dr. Lee received her Bachelor's degree from Seoul National University ('98) and Masters ('00) and Doctoral degree ('04) from Stanford University, all in Electrical Engineering. She is a recipient of the 2008 NIH/NIBIB K99/R00 Pathway to Independence Award, the 2010 NIH Director's New Innovator Award, the 2010 Okawa Foundation Research Grant Award, the 2011 NSF CAREER Award, the 2012 Alfred P. Sloan Research Fellowship, the 2012 Epilepsy Therapy Project award, the 2013 Alzheimer's Association New Investigator Award, and the 2014 IEEE EMBS BRAIN young investigator award. As an Electrical Engineer by training with Neuroscience research interest, her goal is to analyze, debug, and engineer the brain circuit through innovative technology.

