

SAVE THE DATE

Karen L Wrenn Lectureship

November 1, 2016
12–1 pm



LOCATION

Bryan Research Bldg. Auditorium 103

EVENTS

Lecture (12–1 pm)

Graduate Student Workshop
and Lunch (1–2 pm)

HOST

Dr. Murali Doraiswamy

SPEAKER

Edward S. Boyden PhD

Professor of Biological Engineering and Brain/Cognitive Sciences at MIT
Winner of the 2016 Breakthrough Prize in Life Sciences

Ed Boyden is a professor of Biological Engineering and Brain and Cognitive Sciences at the MIT Media Lab and the MIT McGovern Institute. He leads the Synthetic Neurobiology Group, which develops tools for analyzing and repairing complex biological systems such as the brain, and applies them systematically to reveal ground truth principles of biological function as well as to repair these systems. These technologies, include expansion microscopy, which enables complex biological systems to be imaged with nanoscale precision, optogenetic tools, which enable the activation and silencing of neural activity with light, and optical, nanofabricated, and robotic interfaces that enable recording and control of neural dynamics. He also co-directs the MIT Center for Neurobiological Engineering, which

aims to develop new tools to accelerate neuroscience progress. Ed received his Ph.D. in neurosciences from Stanford University as a Hertz Fellow, where he discovered that the molecular mechanisms used to store a memory are determined by the content to be learned. Before that, he received three degrees in electrical engineering, computer science, and physics from MIT. Amongst other recognitions, he has received the Breakthrough Prize in Life Sciences (2016), the BBVA Foundation Frontiers of Knowledge Award (2015), the Carnegie Prize in Mind and Brain Sciences (2015), the Grete Lundbeck Brain Prize (2013), the NIH Director's Pioneer Award (2013) and the NIH Director's Transformative Research Award (twice, 2012 and 2013). His TED talk has been viewed over 800,000 times.

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