



## Perspective Lecture

## Optical Tools for Analyzing and Repairing Biological Systems

Prof. Edward Boyden Co-Director, MIT Center for Neurobiological Engineering

Thursday, March 16<sup>th</sup>, 2023, 14:30 Aula Magna, Palazzo Bo Via VIII Febbraio, 2 - Padua

14:30 Registration of participants

15:00 Welcome and introduction

Prof.ssa Stefania Bruschi
DII Director

Prof. Fabrizio Dughiero Vice Rector of Innovation and Business Relations

15:15 Perspective Lecture

## Optical Tools for Analyzing and Repairing Biological Systems

Prof. Ed Boyden

16:15 Discussion

16:45 Coffee

Participation is free, subject to prior on-line registration at https://www.dii.unipd.it

by March 15<sup>th</sup>, 2023

This initiative is part of a series of Perspective Lectures organized by the Department of Industrial Engineering with the aim to foster the development and exchange of knowledge in the academic, research and entrepreneurial fields.

Prof. Boyden will discuss the technologies required to observe, control and understand complex biological systems, such as the brain, with great precision, across extended spatial and temporal scales. His research has led to the discovery of new molecular principles that have led to the development of new technologies such as Expansion Microscopy and Optogenetic tools.



Ed Boyden, Ph.D.

Y. Eva Tan Professor in Neurotechnology at MIT Howard Hughes Medical Institute

McGovern Institute Professor, Departments of Brain and Cognitive Sciences, Media Arts

and Sciences, and Biological Engineering

Co-Director, Center for Neurobiological Engineering, MIT

Co-Director, K. Lisa Yang Center for Bionics, MIT

Member, MIT Center for Environmental Health Sciences, Computational & Systems Biology Initiative, and Koch Institute

Leader, Synthetic Neurobiology Group Massachusetts Institute of Technology.

## **Organizing Committee:**

Prof. Elisa Cimetta, Prof. Stefania Bruschi and Prof. Patrizia Garengo

in partnership with

