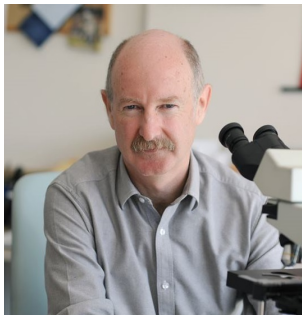
Lester Wolfe Workshop in Laser Biomedicine

How to Train Your Machine: Deep Learning in Biomedicine

Deep Learning is rapidly becoming a powerful toolkit in biomedical science, capable of tackling challenging problems ranging from information processing to image analysis and clinical diagnostics. Arising from the machine learning family of methods, our current deep learning revolution has been powered by the advent of inexpensive but powerful graphical processing units that provide super-computer levels of computational power in a single card. When applied correctly, deep learning models can far outperform deterministic programming, enabling breakthroughs in image classification and feature extraction. This workshop will focus on the application of deep learning tools in biomedical imaging in disciplines ranging from neuroscience to pathology, with a focus on quantitative data analysis.



Breaking the Neural Code of a Cnidarian

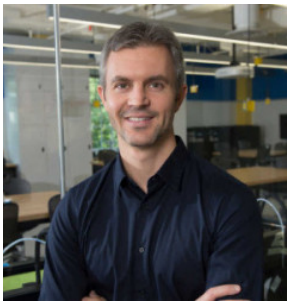
Rafael Yuste, MD, PhD
Co-Director and Professor,
Columbia University

Deep Learning for Pharmacokinetic Tomography

Conor Evans, PhD
Assistant Professor; Harvard Medical School, Wellman Center for Photomedicine

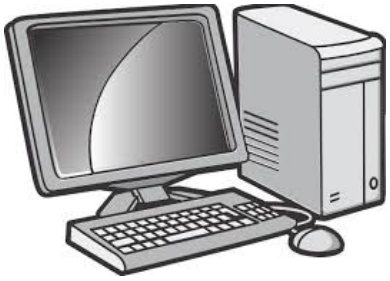
Chemical Imaging for Pathology: from Bayesian Models to Deep Learning

Rohit Bhargava, PhD
Professor; University of Illinois at Urbana-Champaign



Towards Incorporating Tissue Models in Deep Learning Widefield Endoscopy: Going Beyond RGB

Nick Durr, PhD
Assistant Professor, Johns Hopkins University



Tuesday, May 14th, 2019
3:30-6:00 PM

Massachusetts General Hospital
Simches Research Building
3rd Floor, Room 3110
185 Cambridge Street, Boston, MA

Refreshments served at 3:00 PM
No R.S.V.P. required

Sponsored by the MIT Laser Biomedical Research Center, MIT, MGH Wellman Center for Photomedicine, and the Harvard-MIT Division of Health Sciences and Technology