

# 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 formally 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.



**Rafeal Yuste, MD, PhD,**  
Co-Director of The Kavil  
Institute for Brain  
Sciences, Professor of  
Departments of Biological  
Sciences and Neuroscience;  
Columbia University



**Rohit Bhargava, PhD,**  
Professor of  
Engineering in the  
Department of  
Bioengineering  
University of Illinois at  
Urbana-Champaign

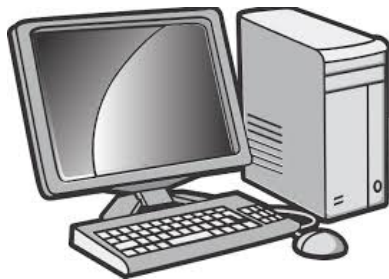


**Conor Evans, PhD,**  
Assistant Professor;  
Harvard Medical  
School, Wellman  
Center for  
Photomedicine



**Nick Durr, PhD,**  
Assistant Professor,  
Biomedical Engineering  
and the Director of  
Undergraduate Programs  
at the Center for  
Bioengineering  
Innovation and Design;  
Johns Hopkins University

(Titles to be announced)



**Tuesday, May 14<sup>th</sup>, 2019**

**3:30-6:00 PM**

**Massachusetts General Hospital  
Simches Research Building,**

**3<sup>rd</sup> Floor, Room 3110  
185 Cambridge Street, Boston, MA**

Refreshments served at 3:00 PM, Room 3110

No R.S.V.P. required

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Photomedicine, and the Harvard-MIT Division of Health Sciences and Technology