Harvard Center for Biological Imaging

Lunch and Learn Lecture Series

Fall 2022

Oct 4th
12:00PM

Whats New at the HCBI?

Doug Richardson. A lot has changed at the HCBI in the past few months and more changes are on tap for this year. Doug will provide a live demonstration of the HCBI's new image analysis infrastructure and introduce our newest microscopes that have recently arrived or are on their way.

Oct 18th
12:00PM

Expanding possibilities: The theory and realities of expansion microscopy

Heather Brown-Harding. Expansion microscopy is a great tool to artificially increase the resolution of a sample for light microscopy. Heather will do an overview of how expansion microscopy works and some of the pitfalls you may encounter.

Nov 1st
12:00PM

Shining a light on fluorescent dyes and molecules

Alex Lovely. In biological imaging there are a multitude of options when it comes to visualizing and labeling targets of interest (dyes, fluorescent proteins...). Alex will introduce the these various choices and details some of their advantages and disadvantages, an what to think about when designing an imaging experiment.

Nov 15th
12:00PM

3D Segmentation using ZEN: Connecting the dots

Chris Hellriegel: In this session we will present a brief recap on segmentation using the Image Analysis functionality of ZEN (covering AI segmentation as well as conventional threshold based segmentation) and introduce its 3D segmentation capabilities.

Nov 29th
12:00PM

Deconvolution – how math can sometimes solve your problems

Tabea Quilitz. Deconvolution can be a great tool to computationally improve the resolution and contrast of images captured in an optical microscope. Tabea will introduce you to the theory behind it and discuss practical considerations surrounding 2D and 3D Deconvolution Microscopy.

Location: Biolabs Lecture Hall, Room 1080
16 Divinity Avenue, Cambridge, MA

This lecture series is designed to provide information on applications and techniques available in the HCBI. *You do not need to be a member of the facility to attend!*
For further information, please contact hcbi_imaging@fas.harvard.edu.