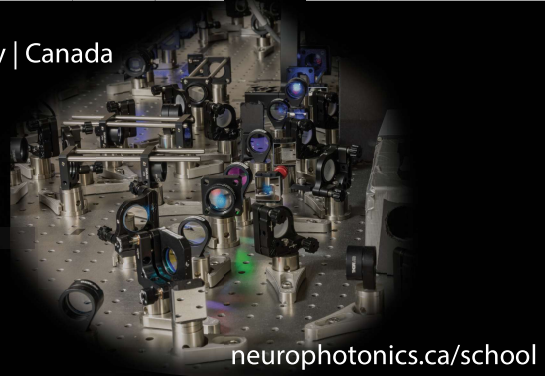


Frontiers in Neurophotonics Summer School

A summer school on advanced optical imaging and photoactivation techniques



neurophotonics.ca/school

The Frontiers in Neurophotonics Summer School combines tutorials, given by experts in photonics and neuroscience, and hands-on experiments involving advanced optical approaches to measure, manipulate, and follow molecular events in living neurons.

Topics

- Multiple fiber photometry
- Video-rate multimodal imaging *in vivo*
- Fluorescence lifetime microscopy
- Two-photon microscopy
- Light sheet microscopy
- Super-resolution microscopy
- Quantitative phase imaging
- Micro-optrodes and multi-electrode arrays
- Optogenetics
- Non invasive brain imaging with MRI
- Transparent vertebrate animal models
- Directed evolution of fluorescent biosensors
- Brain clearing approaches
- Genetically encoded fluorescent sensors
- AI approaches for image analysis
- Neurocomputational approaches

Speakers

- Daniel Côté | U Laval | Canada
- Rochelin Dalangin | U Laval | Canada
- Paul De Koninck | U Laval | Canada
- Yves De Koninck | U Laval | Canada
- Michèle Desjardins | U Laval | Canada
- Estibaliz Gómez-de-Mariscal | IGC | Portugal
- Luke Lavis | Janelia Research Campus | US
- Flavie Lavoie-Cardinal | U Laval | Canada
- Guanghan Meng | UC Berkeley | US
- Majid Mohajerani | McGill U | Canada
- Darcy Peterka | Columbia U | US
- Edward Ruthazer | McGill U | Canada
- Chen Yang | Columbia U | US



The 2023 Frontiers in Neurophotonics Summer School group

