

## Neurophotonics Summer School 2019

	Monday 3	Tuesday 4	Wednesday 5	Thursday 6	Friday 7
8:30	<b>Arrival/briefing</b>	<b>Arrival/briefing</b>	<b>Arrival/briefing</b>	<b>Arrival/briefing</b>	<b>Arrival/briefing</b>
9:00-10:30	<b>Daniel Côté</b> Basics of lasers and optical imaging	<b>Paul De Koninck</b> tracking molecular events in neurons	<b>Yves De Koninck</b> Optogenetics: from basic principles to in -vivo applications	<b>Thomas Kuner</b> 2-P vs MRI, morphometric differences following chronic pain, and transsynaptic viruses (TBC)	<b>Stéphane Dieudonné</b> Fast functional calcium imaging; pitfalls and challenges
10:30-11:00	Coffee break	Coffee break	Coffee break	Coffee break	
11:00-12:30	<b>Flavie Lavoie-Cardinal</b> Principles of fluorescence and Superresolution approaches	<b>Robert Campbell</b> Genetically encoded fluorophores and reporters to illuminate neuronal activity	<b>Ed Ruthazer</b> Imaging Brain Circuit Development	<b>Daniel Côté</b> Multimodal cellular imaging <i>in vivo</i>	<b>Tim Murphy</b> Mouse In Vivo Imaging and Optogenetic Tools for Elucidating Cortical Circuit Structure and Function Following Stroke
12:30-13:30	LUNCH	LUNCH	<b>** BLIQ LUNCH &amp; LEARN**</b>	LUNCH	<b>** ZEISS LUNCH &amp; LEARN**</b>
13:30-14:30	Experiment preview	Experiment preview	Experiment preview	Experiment preview	Experiment preview
14:30-19:00	Hands-on Lab experiments and demos	Hands-on Lab experiments and demos	Hands-on Lab experiments and demos	Hands-on Lab experiments and demos	Hands-on Lab experiments and demos
19:00-20:00	Dinner	Dinner	Dinner	Dinner	sponsored dinner: Doric Lenses
20:00-...	Image Analysis with Matlab/Python/Fiji	Sports session - BBQ	Poster session	Data analysis: Raspberry-Pi	Resto LvIOp

	Saturday 8	Sunday 9	Monday 10	Tuesday 11	Wednesday 12
8:30	<b>FREE TIME</b>	<b>Arrival/briefing</b>	<b>Arrival/briefing</b>	<b>Arrival/briefing</b>	<b>Arrival/briefing</b>
9:00-10:30		<b>Frédéric Leblond</b> Platform technology for spectroscopic tissue identification in pathology and surgical oncology applications	<b>Haruhiko Bito</b> Towards multiplex imaging of neural activity and signaling dynamics	<b>Jack Waters</b> Multiphoton microscopy: 2- and 3-photon excitation	Students presentations
10:30-11:00		Coffee break	Coffee break	Coffee break	Coffee break
11:00-12:30		Projects	Projects	Projects	Students presentations
12:30-13:30		LUNCH	LUNCH	LUNCH	LUNCH
13:30-19:00		Projects	Projects	Projects	Students presentations (until 15h30)
19:00-20:00		Dinner	Sponsored dinner (Le Ciel)	Dinner	