

Advances in Optics for Biotechnology, Medicine and Surgery XVII

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Monday, October 16, 2023

07:30 – 08:30	Breakfast and Discussion Time		
08:30 – 08:40	Conference Welcome – Conference Chairs		
	<u>Session 1: Optics in Surgical Interventions I</u>		
	Session Chair: Frederic Leblond		
08:40 – 09:10	Can near infrared nerve-specific imaging improve surgical outcomes?		1
	Summer Gibbs, Oregon Health and Science University, USA		
09:10 – 09:40	Seeing early cancer in a new light with hyperspectral endoscopy		2
	Sarah Bohndiek, University of Cambridge, United Kingdom		
09:40 – 10:10	Advanced optical imaging for surgical vision		3
	Sylvain Gioux, Intuitive Surgical, Switzerland		
10:10 – 10:40	Intraoperative detection of insufficient surgical margins in head and neck cancer resection using dual aperture fluorescence ratio imaging		4
	Kenneth Tichauer, Illinois Institute of Technology, USA		
10:40 – 11:10	Coffee Break (Lobby Bar) and Discussion Time		
	<u>Session 2: Optics in Surgical Interventions II</u>		
	Session Chair: Brian Wilson		
11:10 – 11:40	What role in surgery for Raman spectroscopy?		5
	Frederic Leblond, Polytechnique Montreal, Canada		
11:40 – 12:10	Development of imaging probes for fluorescence guided surgery of GI and endocrine tumors		6
	Michael Bouvet, University of California San Diego, USA		
12:10 – 12:40	TBA		
	Pablo Valdes, University of Texas Medical Branch, USA		
12:40 – 13:10	Beyond tumor-to-background ratios: Methods for improved decision making in fluorescence guided surgery		7
	Kimberley Samkoe, Thayer School at Dartmouth, USA		
13:10 – 14:30	Lunch		
	<u>Session 3: Microscopic Imaging in Biomedicine I</u>		
	Session Chair: Melissa Skala		
14:30 – 15:00	Non-destructive 3D pathology and analysis for precision medicine		
	Jonathan Liu, University of Washington, USA		
15:00 – 15:30	Low-cost, in vivo microscopy		8
	Dongkyun Kang, University of Arizona, USA		
15:30 – 16:00	Autofluorescence lifetime imaging to monitor immune cell metabolism and function		9
	Melissa Skala, Morgridge Institute for Research, USA		

Monday, October 16, 2023 (continued)

16:00 – 16:30	Cell tracking in vivo: From hematopoietic stem cells to mature leukocytes Charles P. Lin, Wellman Center for Photomedicine, Massachusetts General Hospital, USA	10
16:30 – 18:00	Coffee Break and Poster Session I (Convento Room) <u>Session 4: Microscopic Imaging in Biomedicine II</u> Session Chair: Kenneth Tichauer	
18:00 – 18:30	Label-free fluorescence lifetime techniques for image-guided interventions Laura Marcu, University of California, Davis, USA	11
18:30 – 19:00	Fast mid-infrared imaging with non-degenerate two-photon absorption Eric Potma, University of California, Irvine, USA	12
19:00 – 19:30	Investigating cellular metabolic changes in response to therapy using two-photon excited autofluorescence Narasimhan Rajaram, University of Arkansas, USA	13
19:30 – 21:00	Dinner	
21:00 – 22:00	Social Hour (Lobby Bar)	

Tuesday, October 17, 2023

07:30 – 08:30	Breakfast and Discussion Time	
	<u>Session 5: Vascular Imaging and Biofluid Studies</u>	
	Session Chair: Summer Gibbs	
08:30 – 09:00	Towards fluorescence molecular in vivo liquid biopsy of circulating tumor cells	14
	Mark Niedre, Northeastern University, USA	
09:00 – 09:30	Minimally-invasive surgical application of multispectral and polarization resolved imaging	15
	Dan Elson, Imperial College, United Kingdom	
09:30 – 10:00	Extreme imaging cytometry - From instrumentation to AI acceleration	16
	Kevin Tsia, The University of Hong Kong, Hong Kong	
10:00 – 10:30	Shortwave infrared imaging and spectroscopy in the time and spatial frequency domains	17
	Darren Roblyer, Boston University, USA	
10:30 – 11:00	Coffee Break (Lobby Bar) and Discussion Time	
	<u>Session 6: Optics in Neurosciences and Neuropathology I</u>	
	Session Chair: Kimberly Samkoe	
11:00 – 11:30	Minimally invasive monitoring of the central nervous system	18
	David Busch, University of Texas Southwestern, USA	
11:30 – 12:00	High-resolution imaging of myelin loss and degradation in neurodegenerative diseases with birefringence microscopy	19
	Irving Bigio, Boston University, USA	
12:00 – 12:30	Optical spectroscopy for real-time neuronavigation during deep brain stimulation surgeries	21
	Daniel Côté, CERVO Brain Research Center, Université Laval, Canada	
12:30 – 14:00	Lunch	
14:00 – 18:00	Excursion – Guided tour of the Convento de Cristo	
	<u>Session 7: Optics in Neurosciences and Neuropathology II</u>	
	Session Chair: Daniel Côté	
18:30 – 19:00	Non-invasive evaluation of microvascular and endothelial function with hybrid near-infrared spectroscopies	23
	Turgut Durduran, ICFO-The Institute of Photonic Sciences, Spain	
19:00 – 19:30	Assessing cerebrovascular insufficiency and neural risk with diffuse optical methods	24
	Maria Angela Franceschini, Massachusetts General Hospital, Harvard Medical School, USA	
19:30 – 20:00	Changes in neurovascular coupling as an indicator of cerebral health	25
	Jana Kainerstorfer, Carnegie Mellon, USA	

Tuesday, October 17, 2023 (continued)

20:00 – 21:30

Dinner

21:30 – 22:30

Social Hour (Lobby Bar)

Wednesday, October 18, 2023

07:30 – 08:30	Breakfast and Discussion Time	
	<u>Session 8: Automated Learning Approaches in Biomedicine</u> Session Chair: Narasimhan Rajaram	
08:30 – 09:00	Multimodal computational pathology Faisal Mahmood, Harvard Medical School, USA	26
09:00 – 09:30	Real-time label-free AI-enhanced digital histopathology using SLAM microscopy Stephen Boppart, University of Illinois Urbana-Champaign, USA	27
09:30 – 10:00	Multimodal computational colonoscopy Nicholas Durr, Johns Hopkins University, USA	28
	<u>Session 9: Imaging Device Standards and Tissue Phantoms</u> Session Chair: Dongkyun Kang	
10:00 – 10:30	Phantoms to accelerate technology development and standardization in Biophotonics Stefan Andersson-Engels, Tyndall National Institute, Ireland	29
10:30 – 11:00	Tools to build consensus and accelerate clinical translation of intraoperative fluorescence imaging Ethan LaRochelle, QUEL Imaging, USA	30
11:00 – 11:30	Coffee Break (Lobby Bar) and Discussion Time	
	<u>Session 10: Nanomedicine</u> Session Chair: Mark Niedre	
11:30 – 12:00	Nanobody-based fluorescent contrast agents for rapid and specific intra-operative tumor visualization Sophie Hernot, Vrije Universiteit Brussel, Belgium	31
12:00 – 12:30	Multifunctional porphyrin-lipid nanoparticles for cancer theranostics: From discovery to first-in-human and beyond Brian Wilson, University Health Network, Canada	32
12:30 – 14:00	Lunch	
14:00 – 15:30	Free Time / Discussions	
15:30 – 17:00	Coffee Break and Poster Session II (Convento Room)	
	<u>Session 11: Contributed Talks</u> Session Chair: Jonathan Liu	
17:00 – 17:20	The tauVIVO time-domain fluorescence imaging system for the simultaneous imaging of ICG and targeted NIR tracers Hans Ingelberts, Vrije Universiteit Brussel, Belgium	33

Wednesday, October 18, 2023 (continued)

17:20 – 17:40	Fluorescence depth quantification using spatial frequency imaging and deep learning reconstruction Michael Daly, Princess Margaret Cancer Centre, Canada	34
17:40 – 18:00	Near infrared fluorescent anti-mucin antibodies target and brightly label colonic polyps in CPC-APC mice Kristin Cox, UC San Diego, USA	35
18:00 – 18:30	Free Time	
18:30 – 19:30	Wine Tasting	
19:30 – 21:00	Conference Banquet	
21:00 – 22:00	Social Hour (Lobby Bar)	

Thursday, October 19, 2023

07:30 – 09:00	Breakfast and Discussion Time	
	<u>Session 12: Clinical Translation of Emerging technologies</u>	
	Session Chair: Jana Kainerstorfer	
09:00 – 09:30	Coherent spatial imaging of hemodynamics Bernard Choi, University of California, Irvine, USA	36
09:30 – 10:00	Monitoring radiotherapy with functional OCT: Microvascular responses and correlations with MRI Alex Vitkin, University of Toronto / Princess Margaret Cancer Centre, Canada	37
10:00 – 10:30	Computational approaches for model-based Diffuse Optical Tomography Hamid Dehghani, University of Birmingham, United Kingdom	38
10:30 – 11:00	Low-cost optoacoustics? Prospects for miniaturizing and democratizing optoacoustic imaging systems in biomedical research and the clinics Cagla Ozsoy, ETH Zurich, Switzerland	39
11:00	Coffee break and boxed lunches available	
	Check-out (by 12 Noon) and Departure	

Poster Presentations

1. **A low-cost, compact device for monitoring tissue oxygen consumption using speckle contrast optical spectroscopy** 40
Andres Quiroga, ICFO, Spain
2. **Preliminary investigation of non-invasive blood pressure estimation using speckle contrast optical spectroscopy** 41
Ariane Garrett, Boston University, USA
3. **A combined frequency domain near infrared spectroscopy and diffuse correlation spectroscopy system for monitoring the sternocleidomastoid muscle** 42
Carlos Gomez, Boston University, USA
4. **Measurements of human cerebral blood flow changes with speckle contrast optical spectroscopy** 44
David Boas, Boston University, USA
5. **Fiber-based wavelength-swept spontaneous Raman spectroscopy for brain tissue classification** 45
Elahe Parham, CERVO Brain Research Center, Université Laval, Canada
6. **Creating Open-Source software packages for Raman spectrum processing and analysis** 46
Guillaume Sheehy, Polytechnique Montreal, Canada
7. **Guiding nanoparticle enhanced photothermal therapy for cancer with photoacoustic thermal imaging and diffuse optical tomography** 47
Ivan Kosik, University Health Network Toronto, Canada
8. **Polarized light microscopy for quantitative assessment of colorectal cancer: Can we predict local recurrence?** 48
Kseniia Tumanova, University of Toronto, Canada
9. **High-density speckle contrast optical tomography of cerebral blood flow of the adult brain** 49
Lisa Kobayashi-Frisk, ICFO - The Institute of Photonic Sciences, Spain
10. **Monitoring of cerebral autoregulation during early mobilization towards personalization of post-stroke mobilization** 50
Lisa Kobayashi-Frisk, ICFO-The Institute of Photonic Sciences, Spain
11. **Tissue classification of breast cancer by hyperspectral unmixing** 52
Lynn-Jade Jong, Netherlands Cancer Institute, Netherlands
12. **A smartphone autofluorescence imaging platform and classification algorithm for the early detection and referral of oral lesions in primary care settings** 53
Ruchika Mitbander, Rice University, USA
13. **Excitation-emission characterization of ICG in biologically relevant solutions** 54
Sophie Lyon, QUEL Imaging, USA
14. **Addressing the effects of skin tone on photoacoustic imaging** 55
Thomas Else, CRUK Cambridge Institute, University of Cambridge, United Kingdom
15. **Optical measurement of a guidewire displacement during percutaneous coronary interventions** 56
Thomas Shooner, Laval University, Canada