WestNIRS 2025 Program
October 20-24th, 2025

Workshop Day 1: Monday, October 20

Time	Session	Location
9:00 – 9:30 AM	*Registration and coffee*	WIRB 3000
9:30 – 9:40 AM	**Opening remarks**	
9:40 – 10:10 AM	**Lecture:** Introduction to fNIRS **Dr. Jesse Mark, *Western University***	
10:10 – 10:40 AM	**Demo**: Hardware overview, cap setup, and data collection	
10:40 – 11:00 AM	Coffee break with equipment expo	
11:00 – 11:45 PM	**Lecture**: Introduction to preprocessing, data analysis, and design considerations **Dr. Androu Abdalmalak, *NIRx and Western University***	
11:45 – 12:45 PM	Lunch break	
12:45 – 1:45 PM	**Tutorial:** MNE-NIRS **Dr. John Griffiths, *University of Toronto***	
1:45 – 2:15 PM	**Tutorial:** fNIRS-EEG (Part 1 of 2) **Dr. John Griffiths, *University of Toronto***	
2:15 – 2:30 PM	Move to WIRB 4190 **No access to WIRB 3000 until tomorrow!**	WIRB 4190
2:30 – 2:45 PM	Coffee break	
2:45 – 3:15 PM	**Tutorial:** fNIRS-EEG (Part 2 of 2) **Dr. John Griffiths, *University of Toronto***	
3:15 – 3:30 PM	Coffee Break	
3:30 – 5:00 PM	**Tutorial:** BIDS, quality control, preprocessing, analyses, tips and tricks (Brain AnalyzIR Toolbox + custom code) **Kevin Stubbs, *Western University***	

Workshop Day 2: Tuesday, October 21

Time	Session	Location
9:00 – 9:30 AM	*Registration and coffee*	WIRB 3000
9:30 – 12:30 PM	**Keynote Workshop**: From lab to mobility with community data collection: multimodal methods in developmental cognitive neuroscience with typical, risk, and pathology populations **Dr. Anastasia Kerr-German, *Mercer University***	
12:30 – 1:30 PM	Lunch break *Grab a bagged lunch on your way out and find a nice place to eat in the 1st floor lobby, back patio, or explore our beautiful campus. Seating will be available in 4190 after 1 PM once setup is complete.* **No access to WIRB 3000 until tomorrow!**	WIRB 4190
1:30 – 3:30 PM	**Keynote Lecture:** Computational modelling and tomographic reconstruction **Dr. Hamid Dehghani, *University of Birmingham***	
3:30 – 3:45 PM	Coffee break	
3:45 – 4:45 PM	**Tutorial**: NIRSTORM - a Brainstorm plugin for fNIRS data analysis **Edouard Delaire & Shahla Bakian-Dogaheh, *Concordia University***	
4:45 – 5:00 PM	**Closing remarks**	

Conference Day 1: Wednesday, October 22 (earlier start at 9:20)

Main Themes: Developmental, ADHD, infant clinical, machine learning, motor, software, and feeding

All sessions will be held in WIRB 3000 except for the social event at The Grad Club

Time	Session
9:00 – 9:20 AM	*Registration and coffee*
9:20 – 9:30 AM	**Opening remarks**
9:30 – 10:30 AM	**Public Lecture:** Beyond fNIRS: The untapped potential of tissue spectroscopy **Dr. Mamadou Diop, *Western University***
10:30 – 11:00 AM	Coffee break with equipment expo
11:00 – 12:00 PM	**Keynote**: The toddler data desert in developmental cognitive neuroscience: where we have been and where we are going **Dr. Anastasia Kerr-German, *Mercer University***
12:00 – 1:00 PM	Lunch break
1:00 – 1:30 PM	**Invited Speaker:** Using fNIRS to inform arousal dysregulation in ADHD **Dr. Barbara Fenesi, *Western University***
1:30 – 2:15 PM	**Invited Speaker:** Translating bedside fNIRS into clinical impact for neonatal brain health **Dr. Emma Duerden, *Western University***
2:15 – 2:30 PM	**Oral Presentation**: Long-term brain function alterations following early childhood malnutrition during a Go-No-Go task **Dr. Kassandra Roger, *Western University***
2:30 – 2:45 PM	**Oral Presentation:** Functional connectivity and machine learning classification of neonatal brain injury using fNIRS **Kerlas Samaan, *Western University***
2:45 – 3:00 PM	Coffee break
3:00 – 3:45 PM	**Poster session and sponsor exhibition**
3:45 – 4:15 PM	**Invited Speaker:** Analyzing infant brain activity in a naturalistic sensorimotor task using FLARES (fNIRS Lightweight Analysis Research and Evaluation Suite) **Dr. Candace Burke, Tyler de Zeeuw, & Dr. Jenni Karl, *Thompson Rivers University***
4:15 – 4:45 PM	**Invited Speaker:** Application of fNIRS to study complex contributors to ingestive behaviour **Dr. Daiva E Nielsen, *McGill University***
4:45 – 5:15 PM	**WIRB Facility Tour** (*join up at the social event after the tour*)
5:00 – PM	**Social event at The Grad Club**

Conference Day 2: Thursday, October 23 (earlier start at 9:20)

Main Themes: Optical imaging, clinical, motor, new user experience, ADHD, sleep, fNIRS-EEG

All sessions will be held in WIRB 3000

Time	Session
9:00 – 9:20 AM	*Registration and coffee*
9:20 – 9:50 AM	**Virtual:** From Lab to Life: Exploring technical pathways and application potentials of real-time fNIRS **Dr. Franziska Klein, *OFFIS - Institut für Informatik***
9:50 – 10:50 AM	**Keynote:** Molecular imaging using diffuse optical spectroscopy **Dr. Hamid Dehghani, *University of Birmingham***
10:50 – 11:00 AM	Coffee break
11:00 – 11:15 AM	**Oral Presentation:** Feasibility of using hybrid NIRS/DCS to measure changes in cerebral blood flow and volume pulsatility **Farah Kamar, *Western University***
11:15 – 11:45 AM	**Invited Speaker**: Applications for optical monitoring of cerebral blood flow and metabolism **Dr. Leena Shoemaker, *Western University***
11:45 – 12:00 PM	**Oral Presentation:** Localizing fNIRS hemodynamic oscillations on the cortical surface using wavelet MEM **Edouard Delaire, *Concordia University***
12:00 – 1:00 PM	Lunch break
1:00 – 2:00 PM	**Special Session:** fNIRS in the ICU (adult and pediatric) *Ongoing research, lessons learned, clinical implications, and Q&A* **Dr. Derek Debicki, Dr. Rishi Ganesan, Garima Gupta, Jack de Jeu, Matthew Kolisnyk, Brian Krivoruk, Haonan Sun, *London Health Sciences Centre and Western University***
2:00 – 2:15 PM	**Oral Presentation:** Examining real-world cognition in healthy aging and Alzheimer's disease using movies and fNIRS **Garima Gupta, *Western University***
2:15 – 2:30 PM	**Oral Presentation:** fNIRS and fMRI responses to median nerve stimulation: validation in controls and translation to the ICU **Jack de Jeu, *Western University***
2:30 – 2:45 PM	**Oral Presentation:** Predicting neurological recovery in acutely brain-injured patients using functional near-infrared spectroscopy **Matthew Kolisnyk, *Western University***
2:45 – 3:00 PM	Coffee break
3:00 – 3:45 PM	**Poster session and sponsor exhibition**
3:45 – 4:15 PM	**Invited Speaker:** From community to clinic: Mapping neurovascular dynamics of function and recovery across aging and disease **Dr. Nick Bray, *Memorial University of Newfoundland***
4:15 – 4:30 PM	**Oral Presentation:** Medication vs. movement in ADHD: Interaction between medication and physical activity on neurocognitive functioning **Beverly-Ann Hoy, *Western University***
4:30 – 5:00 PM	**Invited Speaker:** The good, the bad, and the ugly: The NCIL experience developing fNIRS paradigms for reading development **Dr. Aaron Newman, *Dalhousie University***
5:00 – 5:15 PM	**Oral Presentation:** Hemodynamic spectral signatures across vigilance states: a whole-night EEG/fNIRS investigation **Shahla Bakian-Dogaheh, *Concordia University***

Conference Day 3: Friday, October 24

Main Themes: developmental, social, deconvolution analysis, faces, real/virtual, feedback, WestNIRS

All sessions will be held in WIRB 3000

Time	Session
9:00 – 9:30 AM	*Registration and coffee*
9:30 – 10:00 AM	**Virtual:** The benefits of deconvolution analysis for fNIRS studies of social cognition in children and adults **Dr. Michaela Kent, *Western University***
10:00 – 10:30 AM	**Invited Speaker:** Neural mechanisms associated with processing emotions in real and virtual faces **Dr. Bobby Stojanoski, *Ontario Tech University***
10:30 – 10:45 AM	Coffee break
10:45 – 11:00 AM	**Invited Speaker:** The effect of modulating Deep Brain Stimulation settings on fNIRS-based functional connectivity: A patient-led study **Dr. Susan Boehnke, *Queen's University***
11:00 – 11:25 AM	**Project feedback**
11:25 – 11:45 AM	**Discussion:** Future of WestNIRS
11:45 – 12:00 PM	**Closing remarks and awards ceremony**