

Yale / Wu Tsai Institute: fNIRS Workshop Program

November 8-9, 2024

Friday, Nov 8

- 8:30-9am **Registration and complimentary continental breakfast:** 100 College Street, Room 1116
- 9 – 10:15 am **Introduction:** Sara Sanchez-Alonso (Yale)
- Keynote speaker:** Susan Perlman, Washington University in St. Louis
- The Use of fNIRS for Studying Social Interaction: What can Neural Synchrony Tell us About Relationships?*
- 10:15 - 10:30 am *Coffee Break*
- 10:30 – 12 pm **Paper session:** Adam Noah (Yale), Moderator
- The Neural Bases of Language Processing During Social and Non-Social Contexts: A fNIRS Study of Autistic and Neurotypical Preschool-Aged Children – Meredith Pecukonis (Boston University)*
- Neural Specificity for Live Dyadic Face Processing: Preliminary TMS and fNIRS findings – Joy Hirsch (Yale University)*
- The Role of Trust in Human-Computer Interactions Using fNIRS – Danushka Bandara (Fairfield University)*
- 12 – 1:30 pm **Lunch and Poster session**
- Brain Activation Mapping from Concurrent fNIRS and fMRI Data during Hand Movement and Speech Therapy Tasks – Tess Meier (Worcester Polytechnic Institute), Poster #1*
- Assessing Robotic Assisted Surgical Skills with Optical Neuroimaging – Kehan Yang (Worcester Polytechnic Institute), Poster #2*
- First Episode Psychosis (FEP) Patients Show Increased Activity in Left Temporal-parietal Junction During Social Interaction – Adam Noah (Yale University), Poster #3*
- Spatial global component filter vs short channel regression for removing non-cortical component of fNIRS – Xian Zhang (Yale University), Poster #4*
- Classification of first-episode psychosis patients using brain activity and behavioral response during live face processing – Rahul Singh (Yale University), Poster #5*
- Neural Correlates of Eye Movements During Face Gaze for ASD and TD – Y-J Wang (Yale University), Poster #6*

Use of high density fNIRS to evaluate brain function during interaction and walking in naturalistic environments – Shannon Kelley (Boston University), Poster #7

Mapping Language Network Areas Across Development via Simultaneous fMRI-fNIRS – Sara Sanchez-Alonso (Yale University), Poster #8

1:30 – 3 pm

Panel Discussion: Meryem Yücel (Boston University), Chair

Methodological Developments in Signal Processing

Panelists: Luca Pollonini (University of Houston), Roeland Hancock (Yale University) & Stefan Carp (Harvard University).

3 – 3:30 pm

Coffee break

3:30- 4:30 pm

Paper session: Sara Sanchez-Alonso (Yale), Moderator

Obstacle Avoidance in Healthy Adults and People with Multiple Sclerosis: Preliminary fNIRS Study – Fares Al-Shargie (Rutgers University)

Investigating Hemodynamic Patterns During Beat Processing in Cochlear Implant Users: Insights from a Finger Tapping Study – Samantha O’Connell (NIRx Medical Technologies)

Saturday, Nov 9

8:30-9am

Complimentary continental breakfast

9 – 10:15 am

Introduction: Richard Aslin (Yale)

Keynote speaker: Luca Pollonini, University of Houston

Accuracy, Repeatability and Reliability of Individual-level fNIRS: Challenges and Opportunities

10:15 - 10:30 am

Coffee Break

10:30 – 12 pm

Panel Discussion: Richard Aslin (Yale University), Chair

Combining fNIRS with other Multi-Modal Imaging Techniques.

Panelists: Joy Hirsch (Yale), Laurel Gabard-Durnam (Northeastern University) & Erin Solovey (Worcester Polytechnic Institute).

12 – 1:30 pm

Lunch (on your own)

1:30 – 3:30 pm

fNIRS hands-on workshop: Jeremy Burnison (NIRx Medical Technologies)

4 – 5 pm

Yale Campus Tour (please email sara.sanchez.alonso@yale.edu if you would like to join the tour)