Thursday, June 27th, 2024

5th Floor | Gary L. Thomas Energy Engineering Building

7:30 AM    Breakfast
8:30 AM    Opening Remarks
            Yoav Shechtman & Shwetadwip Chowdhury, Conference Organizers
            Sharon Wood, Executive Vice President and Provost
            Don Siegel, Department Chair, Walker Department of Mechanical Engineering

9:00 AM    Session 1
            Andrew Dunn, The University of Texas at Austin
            *In Vivo Microscopy of Microvasculature Following Brain Injury*
            Dvir Yelin, Technion – Israel Institute of Technology
            *Toward Noninvasive Blood Count*
            Charles Lin, Massachusetts General Hospital and Harvard University
            *Imaging the Hematopoietic System: From Blood Stem Cells to Mature Leukocytes*

10:30 AM   Break
11:00 AM   Session 2
            Francisco Robles, Georgia Institute of Technology
            *Accessible Optical Imaging Tools for Label-Free Molecular Imaging and 3D Microscopy*
            Adela Ben-Yakar, The University of Texas at Austin
            *LEAD Fluorescence Microscopy Performing at 100’s kHz Frames Per Second for 3D-Imaging Flow Cytometry and Brain Imaging*
            Melissa Skala, University of Wisconsin-Madison
            *Autofluorescence Imaging of Immune Cell Metabolism*

12:30 PM   Lunch
1:30 PM    Session 3
            Seemantini Nadkarni, Massachusetts General Hospital and Harvard University
            *Wideband Micromechanical Mapping of the Extra-Cellular Matrix Landscape*
            James Tunnell, The University of Texas at Austin
            *Implantable SERS Biosensor for Monitoring Cancer Treatment Response*
            Amit Meller, Technion – Israel Institute of Technology
            *Electro-optical sensing of single protein biomarkers in nanopores and nanochannels: towards digital proteomics*

3:00 PM    Break
3:30 PM    Session 4
            Junjie Yao, Duke University
            *From Technology to Discovery: Deeper, Faster, and Colorful Photoacoustic Imaging in Life Sciences*
            Hafeez Dhalla, Duke University
            *The Inevitable Convergence of Robotics and OCT*

5:00 PM    Poster Session 1
            2nd Floor, Gary L. Thomas Energy Engineering Building
**HARRINGTON SYMPOSIUM**

Optical Methods in Quantitative Bio-Imaging

*Concept to Application*

**Friday, June 28th, 2024**  
**5th Floor | Gary L. Thomas Energy Engineering Building**

7:00 AM  
**Breakfast**

8:00 AM  
**Session 5**

- **Alex Walsh**, Texas A&M University  
  *Machine Learning to Enhance Metabolic Specificity of Autofluorescence Lifetime Imaging*

- **Shalin Mehta**, Chan Zuckerberg Biohub San Francisco  
  *Mapping Cellular Dynamics of Viral Infection with Computational Microscopy and Deep Learning*

- **Laura Waller**, University of California, Berkeley  
  *Computational Microscopy with Dynamic Samples*

9:30 AM  
**Break & Poster Session 2**

- **2nd Floor, Gary L. Thomas Energy Engineering Building**

11:00 AM  
**Session 6**

- **Tomasz Tkaczyk**, Rice University  
  *Technology for Integrated Optical Systems for Biomedical Diagnostics*

- **Elizabeth Hillman**, Columbia University  
  *Harnessing the Power of High-Speed 3D Microscopy for Diverse Biomedical Applications*

- **Ed Boyden**, Massachusetts Institute of Technology  
  *Optical Tools for Analyzing and Repairing Biological Systems*

12:30 PM  
**Closing Remarks**

- **Tyrone Porter**, Department Chair, Department of Biomedical Engineering

12:45 PM  
**Lunch**