Stony Brook University

Agenda for IEDM Multiscale Bio-imaging Workshop

8:30am: **Welcome**

8:30am-8:45am: **William Wertheim, Interim Dean, School of Medicine**

Jon Longtin, Interim Dean, College of Engineering and Applied Sciences

8:45am: **Introduction and Overview**

Joel Saltz, Co-Director of IEDM

Yi-Xian Qin, Co-Director of IEDM

9:00am-10:00am: Radiology and Pathology Image Analysis - *Introduction by Dr. Joel Saltz*

Speakers: Topic

- Hassan Arbab: THz PHASR scanner for skin and corneal imaging (10-min)
- Tahsin Kurc (10-min)
- Raj Gupta: Correlating radiologic and microscopic features of diseases to predict pathobiology, treatment response, and survival (10 min)
- Arie Kaufman (Introduction to audience and research areas of interest: 1-2 mins)
- Chaun Huang (Introduction to audience and research areas of interest: 1-2 mins)
- Discussion

10:00am-11:00am: Biomedical Image Technologies and Analyses (Part I) - *Intro. by Dr. Yi-Xian Qin*

Speakers: Topic

- Yingtian Pan: In vivo, high-resolution, multimodality optical imaging of awake animals (10-min)
- Rina Tannenbaum: Single cell imaging, mass spectroscopy, and MRI (10-min)
- Romeil Sandhu: Shape analysis (10-min)
- David Xianfeng Gu (Introduction to audience and research areas of interest: 1-2 mins)
- Alfredo Fontanini (Introduction to audience and research areas of interest: 1-2 mins)
- Zhaozheng Yin (Introduction to audience and research areas of interest: 1-2 mins)
- Discussion

11:00am – 11:30am   Break

11:30am-12:30pm: Biomedical Image Technologies and Analyses (Part II)

Speakers: Topic

- Congwu Du: Optical imaging of brain functional changes in drug addiction (10-min)
- Miriam Rafailovich: Digital image speckle correlation (10-min)
- Pawel Polak: Face motion analysis (10-min)
- Joshua Plotkin: Neural imaging (10-min)
- Wei Lin (Introduction to audience and research areas of interest: 1-2 mins)
- Hong Qin (Introduction to audience and research areas of interest: 1-2 mins)
- Discussion

12:30pm – 1:30pm: Networking Lunch

1:30pm-2:30pm: Integration of Multiple Modalities/Multiple Scales - *Introduction by Drs. Yi-Xian Qin and Joel Saltz*

Speakers: Topic

- Prateek Prasanna: AI imaging analysis, and radiology imaging (10-min)
- Richard Moffitt: Molecular/single-cell/spatial genomics (10-min)
- Chao Chen: AI machine learning and imaging analysis (10-min)
- Helmut Strey: Multi-scale brain imaging (10-min)
- Paul Vaska: High resolution PET imaging of breast cancer (10 min)
- Benjamin Sterling (Introduction to audience and research areas of interest: 1-2 mins)
- Peng Zhang (Introduction to audience and research areas of interest: 1-2 mins)
- Janos Hajagos (Introduction to audience and research areas of interest: 1-2 mins)

2:30pm:-2:45pm: Break

2:45pm – 3:30pm: Round Table Breakout Discussion

3:30pm – 4:00pm: Summary and Closing remarks