

NEUROIMAGING AND BRAIN AGING WORKSHOP



WEDNESDAY DECEMBER 15, 2021; 11AM ET—5:30PM ET / 8AM PT—2:30 PT

WITH PRESENTATIONS BY:



F. Vankee Lin, PhD Stanford University



Kuan Hong Wang, PhD University of Rochester



Jianhui Zhong, PhD University of Rochester



Timothy Baran, PhD University of Rochester



Zhengwu Zhang, PhD UNC Chapel Hill



Ben Risk, PhD Emory University



Adam Turnbull, PhD University of Rochester



Ehsan Adeli, PhD Stanford University



Andy Anderson, PhD University of Rochester



Beth Mormino, PhD Stanford University



Gregory Samanez-Larkin, PhD Duke University



Tim Murphy, PhD University of British Columbia



Ju Lu, PhD UC Santa Cruz



Yi Zuo, PhD UC Santa Cruz



Yogita Chudasama, PhD NIMH



Janine Simmons, MD, PhD NIA













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OVERVIEW: The objective of this workshop is to introduce the principles and applications of neuroimaging techniques for the study of brain aging. This workshop is aimed towards students, post-doctoral fellows, and faculty who are new to the field and who are interested in an orientation on neuroimaging and brain aging research. This workshop is funded through the NEW Brain Aging Center (NIH U24 AG072701).

MEETING LINK: https://urmc.zoom.us/j/99012312750 (Zoom meeting ID: 990 1231 2750)

SCHEDULE:

Please register with our network here: https://www.newbrainaging.org/contact

| Introduction | | |
|---|----------------------------------|--|
| 11-11:10am ET | Drs. Vankee Lin & Kuan Hong Wang | Workshop objective and plan |
| Overview of Cross-species Brain Imaging | | |
| 11:10-11:35am ET | Dr. Jianhui Zhong | Imaging physics |
| Human Brain Imaging | | |
| 11:35-12pm ET | Dr. Timothy Baran | PET, PET-MRI co-registration |
| 12-12:25pm ET | Dr. Zhengwu Zhang | DTI, DTI-fMRI coupling |
| 12:25-12:50pm ET | Dr. Ben Risk | fMRI |
| 10 minutes Break 1 | | |
| 1-1:25pm ET | Dr. Adam Turnbull | Low dimension network analytical methods |
| 1:25-1:50pm ET | Dr. Ehsan Adeli | Imaging data harmonization, novel ML/DL method |
| 1:50-2:15pm ET | Dr. Andy Anderson | Neural decoding and mental representation |
| 2:15-2:40pm ET | Dr. Beth Mormino | Multi-modality imaging as AD biomarkers |
| 2:40-3pm ET | Dr. Vankee Lin | Intervention and brain mechanisms |
| 10 minutes Break 2 | | |
| 3:10-3:30pm ET | Dr. Greg Samanez-Larkin | Discussion of brain imaging studies of emotion and aging in humans |
| | Animal I | Brain Imaging |
| 3:30-3:55pm ET | Dr. Tim Murphy | Mesoscopic Imaging of cortical activity |
| 3:55-4:20pm ET | Drs. Ju Lu & Yi Zuo | Two-photon microscopic imaging of structural and functional dynamics |
| 4:20-4:45pm ET | Dr. Kuan Hong Wang | Miniscope imaging; circuit manipulation in behaving animals |
| 4:45-5:10pm ET | Dr. Yogita Chudasama | Emotional behavior and brain mechanisms in animals |
| 5:10-5:30pm ET | Dr. Janine Simmons | Wrap up discussion on cross-species neuroimaging work of brain aging and emotion: challenges and opportunities |







