

Big Data Neuroscience
Workshop 2018: Organized
by the Advanced
Computational Neuroscience
Network (ACNN)

September 6 - 7, 2018
Case Western Reserve University
Cleveland, OH

BDN 2018 Program

Thursday, September 6th

Time	Location	Event
8:00 AM - 8:30 AM	Thwing Center	Registration and <i>Breakfast</i>
8:30 AM - 8:45 AM	Thwing Center	Welcome introductory remarks
8:45 AM - 9:00 AM	Thwing Center	Invited Speaker Mark Chance (Case Western Reserve University)
09:00 AM - 09:35 AM	Thwing Center	Keynote Helen Mayberg (Icahn School of Medicine at Mount Sinai)
9:35 AM - 10:00 AM	Thwing Center	Invited Speaker Lin Mei (Case Western Reserve University)
10:00 AM - 10:30 AM	Thwing Center	Invited Speaker Ivo Dinov (University of Michigan)
10:30 AM - 10:45 AM		<i>Coffee break</i>
10:45 AM - 11:10 AM	Thwing Center	Invited Speaker Franco Pestilli (Indiana University)
11:10 AM - 11:35 AM	Thwing Center	Invited Speaker Jonathan Haines (Case Western Reserve University)
11:35 AM - 12:10 PM	Thwing Center	Keynote Vinod Menon (Stanford University)
12:10 PM - 1:20 PM	Thwing Center	<i>Lunch break and networking session</i>
1:20 PM - 1:35 PM	Thwing Center	Invited Speaker: Raghu Machiraju (Ohio State University) Panel Discussion: Challenges and Opportunities in Translational Neuroscience Speakers: Kevin Ward (U. Michigan Ann Arbor); Samden Lhatoo (University Hospitals, Cleveland Medical Center); Pallavi Tiwari (Case Western Reserve University); Raghu Machiraju (Ohio State University)
1:35 PM - 2:35 PM	Thwing Center	
2:35 PM - 3:45 PM	Thwing Center	<i>Coffee break and Poster Session</i>
3:45 PM - 5:00 PM	Thwing Center	Lightning Talks
5:00 PM - 5:25 PM	Thwing Center	Invited Speaker Lei Wang (Northwestern University)
5:25 PM - 5:50 PM	Thwing Center	Invited Speaker Satya Sahoo (Case Western Reserve University)
5:50 PM - 6:00 PM	Thwing Center	<i>Concluding remarks and agenda for Day 2 of workshop</i>

Friday, September 7th

Time	Location	Event
8:00 AM - 8:30 AM	Thwing Center	<i>Light breakfast</i>
8:30 AM - 8:35 AM	Thwing Center	Introduction – Satya Sahoo
8:35 AM - 9:10 AM	Thwing Center	Keynote Alan Jasanoff (Massachusetts Institute of Technology)
9:10 AM - 9:35 AM	Thwing Center	Invited Speaker Dhabaleswar Panda (Ohio State University)
9:35 AM - 10:00 AM	Thwing Center	Invited Speaker Melissa Cragin (Midwest Big Data Hub)
10:00 AM - 10:15 AM	Thwing Center	<i>Coffee break</i>
10:15 AM - 10:40 AM	Thwing Center	Invited Speaker Zhong-Lin Lu (Ohio State University)
10:40 AM - 11:05 AM	Thwing Center	Invited Speaker Richard Gonzales (University of Michigan).
11:05 AM - 11:40 AM	Thwing Center	Keynote Nitin Tandon (University of Texas Health Science Center at Houston)
11:40 AM - 12:00 PM	Thwing Center	<i>Concluding remarks and BDN 2019!</i>
12:00 PM - 12:30 PM	Thwing Center	Program Concludes: Boxed lunches to go

Accepted Posters

Thursday, September 6th (2:35pm – 3:45pm)

- **Poster 1:** Julia Schroer, Haley Gittleman, Rebecca Achey, Carol Kruchko and Jill Barnholtz-Sloan. *Incidence and survival trends of meningioma in the elderly: a population-based study*
- **Poster 2:** Andrea Waksmunski, Jessica Cooke Bailey and Jonathan Haines. *Pathway analysis integrating in silico functional data for age-related macular degeneration*
- **Poster 3:** David Bridwell, Ramesh Srinivasan and Vince Calhoun. *Spatiotemporal Group ICA reveals EEG networks that support attentional biases*
- **Poster 4:** Chen Fu, Shanshan Zhang, Fulai Jin and Anthony Wynshaw-Boris. *Structural variations and exomic SNVs associated with ASD with macrocephaly*
- **Poster 5:** Noel-Marie Plonski and Helen Piontkivska. *Transcriptome diversity in early neuro-development*
- **Poster 6:** Hari Subramoni and Dhableswar Panda. *Impact of High-Performance and Scalable HPC and Deep Learning Middleware on Neuroscience Applications*
- **Poster 7:** Hailong Song, Mei Chen, Chen Chen, Jiankun Cui, Jianlin Cheng, Ralph DePalma, Weiming Xia and Zelong Gu. *Quantitative Proteomic Analysis Reveals Mitochondrial Dysfunction following Low-Intensity Primary Blast Exposure*
- **Poster 8:** Ben Latimer, Tyler Banks, Feng Feng, Arjun Ankathatti, Prasad Calyam and Satish Nair. *Software Automation for Biologically Realistic Neuro Big Data Simulations*
- **Poster 9:** Sharang Chaudhry and Kaushik Ghosh. *A Bayesian self-selection method for delineating white matter fiber tracts*
- **Poster 10:** Larry Liu, William Bush, Mehmet Koyuturk and Gunnur Karakurt. *Interplay between Traumatic Brain Injury and Intimate Partner Violence: A Data-Driven Analysis Utilizing Electronic Health Records*
- **Poster 11:** Shashank Gugnani, Xiaoyi Lu, Franco Pestilli, Cesar Caiafa and Dhableswar Panda. *MPI-LiFE: Designing High-Performance Linear Fascicle Evaluation of Brain Connectome with MPI*
- **Poster 12:** Muhong Gao and Chunming Zhang. *New development on statistical learning of neuronal functional connectivity*

- **Poster 13:** Xiaoyi Lu. *NeuroScience Meets Cloud: Designing High-Performance HPC and Big Data Libraries on Clouds for Accelerating NeuroScience Applications*
- **Poster 14:** Dipti Shankar, Xiaoyi Lu and Dhabaleswar K. Panda. *Designing High-Performance, Resilient and Heterogeneity-Aware Key-Value Storage for Modern HPC Clusters*
- **Poster 15:** Giana D'Aleo, Robert Igo and Lynn Bekris. *TOMM40 Genetic Variants in APOE $\epsilon 3/\epsilon 3$ Carriers and the Risk for Alzheimer's Disease*
- **Poster 16:** Satya Sahoo, Arthur Gershon, Bilal Zonjy, Pramith Devulapalli, Nassim Shafiabadi, Curtis Tatsuoka, Kaushik Ghosh and Samden Lhatoo. *Neuro-Integrative Connectivity (NIC) Workflow: A Compositional Pipeline using a Common Abstraction Model for Epilepsy Seizure Network Analysis*
- **Poster 17:** Joshua Valdez, Michael Rueschman, Matthew Kim and Satya Sahoo. *Scientific Reproducibility in Neuroscience*
- **Poster 18:** Scott Frank, Matthew Kucmanic and Colin Drummond. *Engineering for Convergence, Inclusion, and Research in Community Life Ecology (EnCIRCLE): Providing Environmental, Social and Economic Context for Biomedical and Neuroscience Big Data*
- **Poster 19:** Nora L. Nock and Anastasia Dimitropoulos. *Neural Activation in Response to Food Cues in Endometrial Cancer Survivors with Obesity and Aging Brains Seeking Weight Loss*
- **Poster 20:** Zheng Wang, Huiyuan Chen and Jing Li. *Network-based integration of multiple omics data for drug repositioning of Neurodegenerative diseases*
- **Poster 21:** James Anibal, Alexandre Day, Ratnadeep Mukherjee, Tanika Simoneaux and Grégoire Altan-Bonnet. *Machine Learning applied to Multi-dimensional Immune Cell Data reveals unique Disease Profiles with Clinical Applications.*
- **Poster 22:** Nicholas Wheeler, Mike Warfe and William Bush. *Introducing Aneris: A Hadoop Cluster for Bioinformatics at Scale*

Lightning Talks

- **Title:** NeuroScience Meets Cloud: Designing High-Performance HPC and Big Data Libraries on Clouds for Accelerating NeuroScience Applications
Speaker: Xiaoyi Lu
- **Title:** A simplified crossing fiber model in DWI
Speaker: Curtis Tatsuoka
- **Title:** Neural Activation in Response to Food Cues in Endometrial Cancer Survivors with Obesity and Aging Brains Seeking Weight Loss
Speaker: Nora L. Nock
- **Title:** Network-based integration of multiple omics data for drug repositioning of Neurodegenerative diseases
Speaker: Zheng Wang
- **Title:** Dynamic and Adaptive Experimentation with Real-Time fMRI
Speaker: Curtis Tatsuoka

Notes

Thwing Center Floorplan

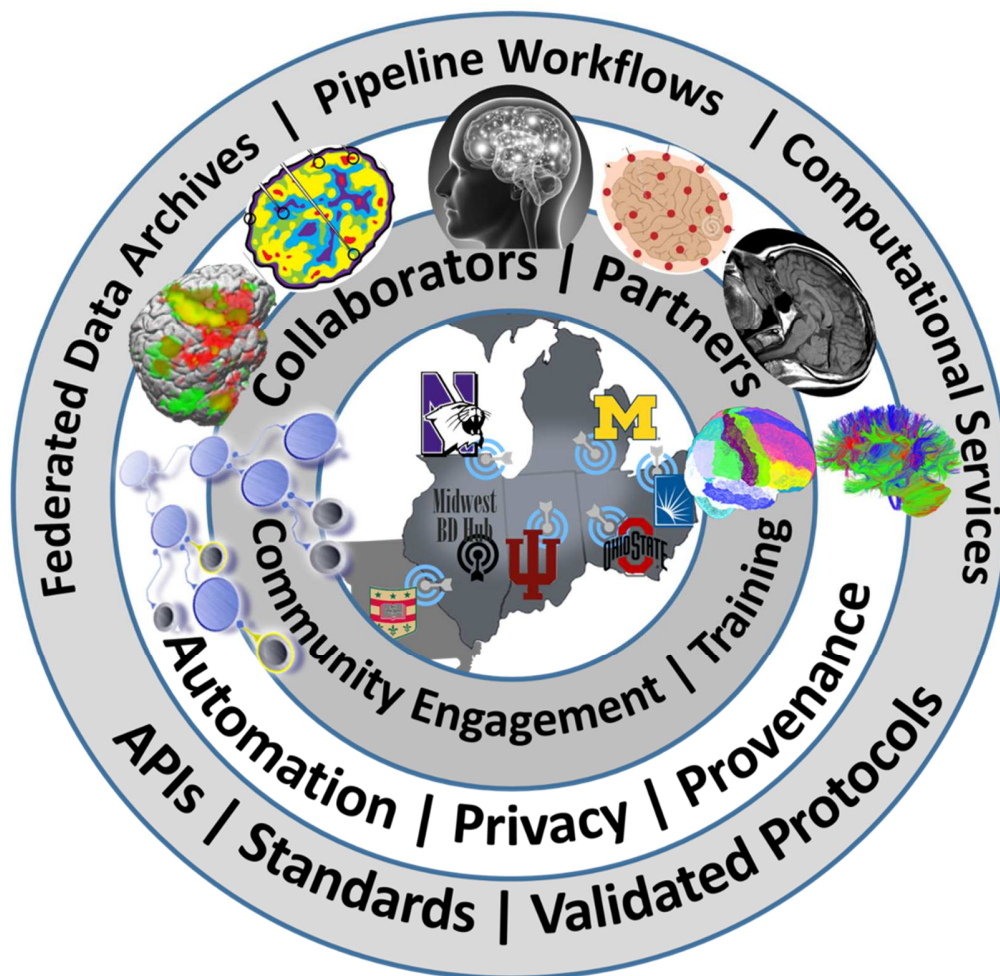


2019 ACNN Workshop

[Advanced Computational Neuroscience Network \(ACNN\)](http://www.neurosciencenetwork.org/ACNN)

Thursday, 19 Sep 2019 - Friday, 20 Sep 2019

University of Michigan
Ann Arbor, Michigan, USA



<http://www.neurosciencenetwork.org/ACNN> Workshop 2019.html

