2019 Neural Computation and Engineering Connection

Thursday, January 24, 2019
CNT - Russell Hall Suite 204, 1414 NE 42nd St.

11:15a-12:30p  Poster session and lunch (provided)
12:30-12:40pm  Welcome: Adrienne Fairhall, Eric Shea-Brown
12:40-12:55pm  1-slide introductions by new UWIN and Computational Neuroscience fellows:
                Allie Widman, Lylah Deady, Kinsey Bice, & Laura Arjona, UWIN postdoctoral fellows; Dennis Tabuena & Ben Chasnov, Comp Neuro graduate fellows
12:55-1:10pm   "Subject-specific quantification and acceleration of motor learning"
                Momona Yamagami, UWIN graduate fellow, Steele and Burden labs
1:10-1:25pm    "Electrophysiological Correlates of Feedback Learning in Humans"
                Patrick Rice, Comp Neuro graduate fellow, Stocco lab
1:25-1:40pm    "Continuous long-term recording of sleep in a mouse model of epilepsy"
                Raymond Sanchez, UWIN graduate fellow, de la Iglesia lab
1:40-2:00pm    Break
2:00-2:15pm    "Does the mouse see the world like an artificial neural network"
                Iris Shi, Comp Neuro graduate fellow, Shea-Brown and Buice labs
2:15-2:30pm    "What do patients with retinal prostheses actually see?"
                Ezgi Yücel, UWIN graduate fellow, Fine and Rokem labs
2:30-2:45pm    "Concurrent measurement of olfactory information and behavior tracking during odor-guided navigation"
                Mohammad F. Tariq, UWIN graduate fellow, Gire and Perkel labs
2:45-3:00pm    "Investigating Neural Synchrony Within the Monkey Hippocampus"
                Aaron D. Garcia, UWIN graduate fellow, Buffalo and B. Brunton labs
3:00-3:20pm    Break
3:20-4:10pm    "'He can be a normal child; he couldn’t do that before.': The potential for therapy-directed neurorecovery after pediatric-onset SCI"
                Keynote lecture: Andrea Behrman, University of Louisville
4:10-5:10pm    Ethics panel discussion: "What are our responsibilities as scientists at the interface of neuroscience, computation, and engineering?"
                Chair: Adrienne Fairhall; Participants: Andrea Behrman, Michael Berry, Loren Frank, Mitra Hartmann, David Perkel, Abby Person, Maryam Shanechi, Eric Shea-Brown
2019 Neural Computation and Engineering Connection
Friday, January 25, 2019
UW Husky Union Building (HUB) Room 334
Late afternoon reception in HUB 332

8:45-9:15am Continental breakfast
9:15-9:30am Welcome and community updates: Adrienne Fairhall, Eric Shea-Brown
Session I, Chair: Gabrielle Gutierrez
9:30-10:20am "Neural Decoding and Control of Mood to Treat Neuropsychiatric Disorders"
   Keynote Lecture: Maryam Shanechi, University of Southern California
10:20-10:50am "Advancing Neuroscience through Next-Generation Optical Tools"
   Andre Berndt, UW Bioengineering
10:50-11:10am Break
11:10-11:40am "Context-Adaptive Neural Models of Language"
   Mari Ostendorf, UW Electrical & Computer Engineering
11:40a-12:00p "Bioinspired multifunctional mobility"
   Tom Libby, UW Electrical and Computer Engineering & Biology
12:00-12:30pm "Decoding motor control to improve movement in cerebral palsy"
   Kat Steele, UW Mechanical Engineering
12:30-1:30pm Lunch (provided)
Session II, Chair: Jon Rueckemann
1:30-2:20pm "Insights into cerebellar control of movement"
   Keynote Lecture: Abby Person, University of Colorado Denver
2:20-2:40pm "Signatures and mechanisms of low-dimensional neural predictive manifolds"
   Stefano Recanatesi, UW Physiology & Biophysics
2:40-3:00pm "From the wet lab to the web lab"
   Anisha Keshavan, UW Speech and Hearing Sciences & eScience Institute
3:00-3:20pm Break
3:20-3:50pm "Distributed correlates of visually-guided behavior across the mouse brain"
   Nick Steinmetz, UW Biological Structure
3:50-4:40pm "Whiskers as tactile & flow sensors: linking neuroscience, mechanics, and robotics"
   Keynote Lecture: Mitra Hartmann, Northwestern University
4:40-6:10pm Reception in HUB 332 (across the hall)