

CENTER FOR SENSORIMOTOR NEURAL ENGINEERING

Improving lives by connecting brains and technology

March, 2018

Honors and Awards

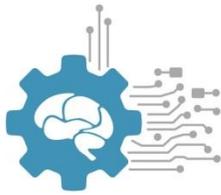
- Congratulations to MIT CSNE faculty member **Polina Anikeeva** for winning the 2018 Vilcek Prize. The Vilcek Prize recognizes contributions to biomedical research made by immigrant scientists. For more, see: <http://news.mit.edu/2018/polina-anikeeva-and-feng-zhang-awarded-2018-vilcek-prize-0201>

Upcoming Seminars, Lectures, Courses, Conferences

- Final judging of the 2018 **Neural Engineering Tech Studio Competition** will take place on Wednesday, March 7th, from 12:30-2:20 PM at the CSNE (1414 NE 42nd St., suite 204). The TechStudio is a neural engineering student design competition hosted by the CSNE. At the final, teams will present their projects to a panel of industry, media and academic judges and a winner will be announced. All of this will be accompanied by light refreshments and loud applause. We encourage everyone to come and see the show.
- UW Institute for Neuroengineering Seminar: “Changes in Corticospinal Synaptic Strength Lead to Compensatory Changes in Cortical Neuron Firing. What’s the Feedback Signal?” by **Steve Perlmutter** (Research Associate Professor, Dept. Physiology & Biophysics, UW) and “Learning physics and the physics of learning” by **Steve Brunton** (Assistant Professor, Dept. of Mechanical Engineering, UW), Wednesday, March 14th, 2018, 3:30 pm, Husky Union Building (HUB) 337.
- **Inaugural Engineering Accessibility Design Fair**, Thursday, March 15, 2018, Atrium of the Paul Allen Center, University of Washington, 4:30-6:30 PM
- The Organization for Computational Neuroscience meeting will be held in Seattle, July 13-18, 2018 (Local organizers: **Adrienne Fairhall, Eric Shea-Brown, Christof Koch**; Invited keynote speakers include **Raj Rao**); abstracts are due on March 5, 2018: <http://www.cnsorg.org/cns-2018>
- A crowdfunding campaign to raise support for a new episode of the BrainWorks TV show has just launched. CSNE Executive Director **Eric Chudler** will host this new episode that would feature the latest research about Brain-Computer Interface (BCI) technology and how it can help people with movement issues caused by stroke, spinal cord injury, Parkinson's disease and other neurological disorders. Donate and tell others: <https://uw.useed.net/projects/1010/home/>

New CSNE Publications

- Narain, D., Remington, E.D., Zeeuw, C.I. and **Jazayeri, M.**, A cerebellar mechanism for learning prior distributions of time intervals. Nat. Commun. 2018 Feb 1;9(1):469. doi: 10.1038/s41467-017-02516-x.



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- Castagnola, E., Winchester Vahidi, N., Nimbalkar, S., Rudraraju, S., Thielk, M., Zucchini, E., Cea, C., Carli, S., Gentner, T.Q, Ricci, D., Fadiga, L and **Kassegne, S.**, In vivo dopamine detection and single unit recordings using intracortical glassy carbon microelectrode arrays. MRS Advances, 1-6. doi:10.1557/adv.2018.98, 2018.

CSNE in the News

- Brain-implanted devices could lead to UW medical breakthroughs (Seattle Times, February 6, 2018):
<https://www.seattletimes.com/seattle-news/education/brain-implanted-devices-could-lead-to-uw-medical-breakthroughs/>
- Seeking materials that match the brain (MIT News, February 18, 2018):
<http://news.mit.edu/2018/faculty-profile-polina-anikeeva-0219>
- Faculty Friday:
<https://www.washington.edu/wholeu/2018/02/16/faculty-friday-eric-chudler/>

Recent Papers of Interest to the CSNE Community

- Hubscher, C.H., Herrity, A.N., Williams, C.S., Montgomery, L.R., Willhite, A.M., Angeli, C.A. and Harkema, S.J., Improvements in bladder, bowel and sexual outcomes following task-specific locomotor training in human spinal cord injury. PLOS ONE, 2018; 13 (1): e0190998 DOI: 10.1371/journal.pone.0190998
- Kraus, D., Naros, G., Guggenberger, R., Leão, M.T., Ziemann, U. and Gharabaghi, A., Recruitment of additional corticospinal pathways in the human brain with state-dependent paired associative stimulation, J. Neuroscience, 38:1396-1407, 2018.

Grant and Funding Opportunities

- Craig H. Neilsen Foundation, Psychosocial Research Projects:
<http://chnfoundation.org/psychosocial-research/>
- Breakthrough Prize
<https://breakthroughprize.org/>
- UW Three Minute Thesis 2018 Competition
<http://grad.uw.edu/for-students-and-post-docs/core-programs/uw-three-minute-thesis/>

Please send additional news and events items for inclusion in this newsletter to Dr. Eric Chudler (CSNE, Executive Director) at chudler@uw.edu.