



November, 2015

## Upcoming Seminars, Lectures, Courses

- **Technology Commercialization (ENTRE 541)** is a course to be offered during the winter quarter at the University of Washington. The course provides graduate students with the principles and practice of building a technology commercialization plan for an innovative new technology. Teams of three to five students will research and present a commercialization plan from technologies made available by UW researchers and staff. This is a four credit course with the expectation that students will spend at least ten hours a week on combined class time and independent research.
- **Neural Engineering (BioE498/599)** will be taught by Drs. Raj Rao and Lise Johnson during winter quarter at the University of Washington. The course will meet on Wednesdays and Fridays, 2:00-3:20 pm.
- The **CSNE Neuroethics Journal Club** is an opportunity for graduate and undergraduate students to explore ethical issues in neural engineering and bioengineering. The Journal Club meets biweekly to discuss issues of interest to the group and is open to exploring new topics. Right now, the club is comparing how research studies are reported in the popular media and peer-reviewed literature. The Journal Club is always open to new members and has a flexible format. Please contact CSNE Neuroethics Fellow Dr. Laura Specker Sullivan for more information and meeting times.
- **CSNE Kavli seminar:** Dr. Alik Widge (Director, Translational NeuroEngineering Laboratory Division of Neurotherapeutics, Massachusetts General Hospital) will present a talk titled “Closing the Loop for Psychiatric Deep Brain Stimulation” on Thursday, November 5, 2015, 1:00-2:00 pm at the CSNE (1414 NE42nd Street, Suite 204, Seattle, WA).
- **“Journey into the Brain”** is the title of a UW Whole U presentation (November 19, 2015; 12:00-1:00 pm) by Dr. Eric Chudler (CSNE Executive Director; registration required: <http://www.washington.edu/wholeu/2015/10/23/journey-inside-the-brain-with-dr-eric-chudler/>)
- The **2015 CSNE Hackathon** will take place November 6-9. This event brings students together to develop novel technologies addressing sensorimotor neural engineering problems. Final presentations will take place on November 9 at 9 am, followed by judging and awards at 11 am. All Hackathon events will be held at the CSNE (1414 NE42nd Street, Suite 204, Seattle, WA).
- **Allen Institute for Brain Science 2015 Showcase Symposium** (Dec. 2-3, 2015); registration is limited, apply to attend by November 13, 2015: <http://engage.alleninstitute.org/site/Calendar?view=Detail&id=100424>



## New CSNE Publications

- Kopec, C.D., Erlich, J.C., **Brunton, B.W.**, Deisseroth, K. and Brody, C.D., Cortical and subcortical contributions to short-term memory for orienting movements, *Neuron*, DOI: <http://dx.doi.org/10.1016/j.neuron.2015.08.033>
- Hinson, B.T. and **Morgansen, K.A.**, Gyroscopic sensing in the wings of the hawkmoth *Manduca sexta*: the role of sensor location and directional sensitivity, *Bioinspir. Biomim.* 2015 Oct 6;10(5):056013.

## CSNE in the News

- San Diego State University press release about CSNE renewal; includes video with CSNE SDSU Deputy Director Sam Kassegne:  
<http://medicalxpress.com/news/2015-10-renewed-brain-injured.html>
- San Diego Fox News press release about CSNE renewal:  
<http://fox5sandiego.com/2015/10/26/microchip-shows-promise-in-paralysis-spinal-cord-injuries/>
- **Polina Anikeeva** quoted by the BBC at:  
<http://www.bbc.com/news/science-environment-34539056>

## Recent Papers of Interest to the CSNE Community

- Lee, J., Ozden, I., Song, Y-K., and Nurmikko, A.V., Transparent intracortical microprobe array for simultaneous spatiotemporal optical stimulation and multichannel electrical recording, *Nature Methods* (2015) DOI: doi:10.1038/nmeth.3620.
- Tee, B.C-K., Chortos, A., Berndt, A., Nguyen, A.K., Tom, A., McGuire, A., Lin, Z.C., Tien, K., Bae, W-G., Wang, H., Mei, P., Chou, H-H., Cui, B., Deisseroth, K., Ng, T.N., and Bao, Z., A skin-inspired organic digital mechanoreceptor, *Science*, 16 October 2015: Vol. 350 no. 6258 pp. 313-316, DOI: 10.1126/science.aaa9306.
- Poldrack, R.A. and Farah, M.J., Progress and challenges in probing the human brain. *Nature*, 526: 371–379, 2015.
- Ariani, G., Wurm, M.F. and Lingnau, A., Decoding internally and externally driven movement plans, *Journal of Neuroscience*, 21 October 2015, 35(42): 14160-14171; doi: 10.1523/JNEUROSCI.0596-15.2015.

## Grant Opportunities

- The NIH has issued a Notice of Intent to Publish a Funding Opportunity Announcement for the Blueprint for Neuroscience Research: Training in Computational Neuroscience, From Biology to Model and Back Again (T90/R90):  
<http://grants.nih.gov/grants/guide/notice-files/NOT-DA-15-081.html>



## CENTER FOR SENSORIMOTOR NEURAL ENGINEERING

*Improving lives by connecting brains and technology*

- The Open Science Prize: <https://www.openscienceprize.org/>
- A Nanotechnology-Inspired Grand Challenge for Future Computing on brain like computing with participation from five agencies including NSF to “Create a new type of computer that can proactively interpret and learn from data, solve unfamiliar problems using what it has learned, and operate with the energy efficiency of the human brain.” See: <http://www.nano.gov/futurecomputing>
- Integrative Strategies for Understanding Neural and Cognitive Systems (NSF-NCS): <http://www.nsf.gov/pubs/2016/nsf16508/nsf16508.htm>
- National Science Foundation Research Traineeship (NRT) Program: <http://www.nsf.gov/pubs/2016/nsf16503/nsf16503.htm>
- Rita Allen Foundation; Scholars Award 2016: [http://www.ritaallen.org/docs/Scholars\\_Program\\_Grant\\_and\\_Online\\_Nomination\\_Guidelines.pdf](http://www.ritaallen.org/docs/Scholars_Program_Grant_and_Online_Nomination_Guidelines.pdf)

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