Issue 8 2016

CfNN NEWSLETTER

The Center *for* Neurorestoration and Neurotechnology (C*f*NN) began with a June 2012 award from the Department of Veterans Affairs Rehabilitation Research and Development Service. The Center is a collaboration between the Providence VA Medical Center , Brown University, Butler Hospital,

NIH BRAIN Grant for Wireless Neural Interfaces

Congratulations to Dr. Leigh Hochberg, director of the VA Center for Neurorestoration and Neurotechnology at the Providence VAMC, and our partners at Brown University for the award from the National Institutes of Health's BRAIN initiative to advance technology of wireless brain interfaces for future human use.

The three-year, $5.7 — million grant will support completion of the final design, manufacturing, regulatory review, and initial clinical testing of a fully implanted system for chronically recording neuronal activity from the human brain. Support for an additional two years is anticipated through a linked grant for continued clinical testing if there is good progress during the first three years.

Hochberg and Arto Nurmikko, professors of Engineering at Brown and members of the Brown Institute for Brain Science, will co-lead the project.

C*f*NN's Center Award Renewal Submitted!

The CfNN Center renewal was submitted through Grants.gov on Saturday, February 6th - four days before the deadline. Dr. Leigh Hochberg announced the submission "With great thanks to everyone who wrote, planned, contributed, edited at the last minute…" Further, Dr. Hochberg continued "The C*f*NN - wide "introspection" of where we are, and where we want to be, was well worth every font, margin, and spacing adjustment and will serve us wonderfully over the (hopefully) 5+ additional years of the Center!"

Next steps for the Center application include a Peer Review in April 2016 and the Site Visit in the May/June timeframe. A funding decision will be made sometime after the Site Visit, and would be continuous from the current award end date. Congratulations!

Welcome to C*f*NN

Taylor Ricard, MSCJ, has joined the Focus Area B team of C*f*NN as a Health Science Specialist. Ms. Ricard has a Master's degree in Criminal Justice from Roger Williams University. She previously worked at Rhode Island Hospital as a Senior Research Assistant with Dr. Peter Friedmann on multiple National Criminal Justice Drug Abuse Treatment (CJ-DATS). Ms. Rickard will be working on multiple studies including "Transcranial Direct Current Stimulation Virtual Reality for PTSD," "Treating the Chronic effects of Mild Traumatic Brain Injury in Veterans," and "Veterans with Seizures" research projects with Dr. Mascha Frank and Dr. W. Curt LaFrance, Jr.

IMPORTANT DATES

MEETING DATES:

- March 8, 2016
  4:00PM
  C*f*NN Executive Council Mtg.
- March 9, 2016
  12:00 PM
  IRB Meeting
- March 22, 2016
  4:00PM
  C*f*NN Leadership Mtg.
- March 23, 2016
  12:00PM
  R&D Meeting

DATES TO REMEMBER

Brain Mind Research Day 2016
Brown University
3rd Annual
Wed, March 30
10:30AM to 3:00PM
Sayles Hall
Poster session viewing & lunch

1:00PM
Salomon Hall
Keynote address
György Buzsáki, MD, PhD
Biggs Professor of Neural Science
NYU Neuroscience Institute
New York University, Langone MC
"Emergence of Cognition from Action"

CENTER RENEWAL

April 2016
Peer Review

May/June 2016
Site Visit

June 2016
Notification

Contributions and suggestions should be sent to Nancy.Gilbride@va.gov
Providence VA Medical Center 830 Chalkstone Ave., Providence, RI 02908

CfNN and PVAMC hosts Senator Whitehouse and Governor Raimondo

On November 20th, 2015, the Center for Neurorestoration and Neurotechnology and the Providence VA Medical Center hosted a meeting with leaders in research and neuroscience. This was the second meeting with Senator Sheldon Whitehouse (D-RI), to build on the information from the first meeting and included Governor Gina Raimondo. This program will help to develop cutting-edge therapies and technologies with neurological and mental health disorders. Brown University, the University of Rhode Island, Lifespan, Care New England and the Providence VA Medical Center were all represented to participate in the robust and strategic discussion about the future of research and neuroscience in Rhode Island.

Recent Publications

- Noah S. Philip, Samual J. Ridout, Sarah E. Albright, George Sanchez and Linda Carpenter
  5-Hz Transcranial Magnetic Stimulation for Comorbid Posttraumatic Stress Disorder and Major Depression
  Journal of Traumatic Stress, April 2016, 29; 1-4.
- Noah S. Philip, David L Dunner, Sheila M. Dowd, Scott T. Aaronson, David G. Brock, Linda L. Carpenter, Mark A. Demitrack, Sarit Hovav, Philip G. Janicak, Mark S. George
  Can Medication Free, Treatment-Resistant, Depressed Patients Who Initially Respond to TMS Be Maintained Off Medications? A Prospective, 12-Month Multisite Randomized Pilot Study
  Brain Stimulation Journal, November 2015.
  This work was presented in part as posters at the 2015-5 Meetings of the American Psychiatric Association, Anxiety and Depression Association of America, CNS Spectrums Neuroscience Education Initiative, Clinical TMS Society, and Society for Biological Psychiatry.

State's first "Brain Week" to showcase wealth of brain science R&D

by Nancy Kirsch

A Providence –based national advocacy organization for mental illness research, Cure Alliance for Mental Illness, with support from the **Brown Institute for Brain Sciences (BIBS)** and the **Norman Prince Neurosciences Institute** (NPNI), will host Rhode Island's first-ever Brain Week, March 12-19.

"Brain Week Rhode Island is an accessible and enjoyable way to raise Rhode Islanders' awareness of the importance of neuroscience research and its critical role in helping people lead healthier and more productive lives," said Hakon Heimer, Brain Week Rhode Island chair and the alliance's co-founder, who emphasized that these events are designed for the general population, not neuroscience experts. "We want to get Rhode Islanders excited about the promise of science to increase our knowledge of the nervous system, which will help us to cure brain and spinal disorders. Brain Week aims to inspire the next generation of neuroscientists here in Rhode Island, and bring attention to our State's burgeoning brain-related research, development and enterprise sector."

Brain Week Rhode Island is part of Brain Awareness Week (www.dana.org/baw), a week every March when thousands of organizations and institutions worldwide organize creative learning activities in their communities to excite individuals of all ages about the brain and brain research.

"The 2016 Rhode Island Innovates report [identifies] neuroscience as among the strongest innovation areas in the biosciences in Rhode Island. There is great opportunity to leverage the existing talent in the state, in brain sciences and neuroscience, to help build the med-tech and biotech sector," said **Dr. Diane Lipscombe**, professor of neuroscience Brown University and interim director at the **Brown Institute for Brain Science**. "Brain science and neuroscience research depends on the contributions of many disciplines, including biological, physical and theoretical sciences." It's exciting, she said, that Rhode Island's brain science and neuroscience institutes are eager to collaborate, and Brain Week Rhode Island is a great venue to work together.

Brain Week Rhode Island includes eight days of family-friendly events, ranging from opportunities to learn about neuroscience research to fun brain-themed activities for all ages. Throughout the week, Brown neuroscientists will visit Rhode Island schools to conduct free presentations and workshops on neuroscience, to inspire the next generation of brain researchers.