



The BRAINet SYNAPSE

BRAINet is a friends group of the OHSU Brain Institute (OBI) that helps build community awareness, interest, and support for neuroscience research at OHSU.

BRAINet Synapse Newsletter

September 2016

President's Message

*By Helen Richardson,
BRAINet President*

I imagine we all have been parties to conversations about the pros and cons of technology. Often the ones I hear bemoan how people are tied to their devices and other negative aspects. Our luncheon speaker, Dr. Jeffrey Kaye, gave a decidedly different twist to that topic, informing us about the usefulness of technology for non-intrusive medical tracking. The following Mirabella tour of rooms set up with devices able to help track various indicators of health and wellness such as speed of walking, was interesting and enlightening. It made me wonder what 'they' will think of next and how quickly it may come to pass.

Regards,

Helen Richardson, President

Summer Tour Synopsis

BRAINet members had a unique opportunity this year: A private viewing of the new iMRI facility in Doernbecher Children's Hospital.



Dr. Lissa Baird, medical director of pediatric neuro-oncology, was scheduled to host us, but she was called into surgery at the last minute. Dr. Nate Selden, chief of neurosurgery, very kindly volunteered to show us the control room of the 3-Tesla machine. Our timing was ideal, as a brain surgery was currently taking place. We were able to see the 18,000 pound magnet travel on overhead rails into the operating room to take precise pictures of the brain.

Dr. Selden spent 45 minutes answering our questions – from how much did it cost (\$2 million, funded by the hospital and donors, including the family of Arnold and Leona Poletiek), to what happens if you bring credit cards near the magnet (they are wiped!). Thank you Dr. Selden and team!



September Lecture Luncheon

Join us on Monday, September 19, at **11:30 a.m.** at the Multnomah Athletic Club for an update on the Unity Center for Behavioral Health by Dr. George Keepers.



Dr. Keepers is professor and chair of the Department of Psychiatry at OHSU. He has been integral in the development of the Unity Center, an unprecedented

collaboration between four health systems to provide a combination of emergency and inpatient services for those in a mental health crisis. Dr. Keepers will provide background and an update on the opening of the Center in 2017.

11:30 Registration and Lunch Served

12:00-1:00 Lecture

Cost

\$25 Members

\$25 Guests of Members

\$30 Non-Members

To register and pre-pay to secure your reservation (you can renew your membership at the same time!), please visit:

<http://goo.gl/Rf7Q9O>

Registration will close at midnight on Wednesday, September 14.

This month we will be served Chicken Marsala.



Brain in the News

by George Ivan Smith, BRAINet member

Rosie Spinks explained in *Quartz* (6-13-16) why it was lucky that French neurosurgeon Alim-Louis Benabid—unlike most surgeons—is willing to experiment.

Benabid, who trained as a physicist, was performing brain surgery nearly 30 years ago on a patient with Parkinson's disease. Curious, he increased the frequency of his electric probe from 50 to 100 Hz as he inserted it into the patient's thalamus.

The patient's muscular tremors immediately stopped, but resumed when the current was removed. Benabid's eureka moment opened the way to high-frequency deep brain stimulation (DBS). For his creation—the “brain pacemaker” — Benabid received a European Inventor Award from the European Patent Office.

The modern iteration works by embedding a small pulse-generating pacemaker on a patient's chest, then connecting it by cables to fine electrodes in the brain. Once implanted, the pacemaker constantly emits electrical impulses between 100 and 150 Hz, which curb abnormal nerve signals that cause tremors.

OHSU's Dr. Kim Burchiel studied under Dr. Benabid, and was the first in the U.S. to perform this surgery on a Parkinson patient. He and colleagues will be presenting information on his newest iteration of the surgery — performed while the patient is asleep as opposed to awake — at the World Parkinson Congress taking place in September right here in Portland. Find more information about the Congress and the workshop for patients at these links:

[World Parkinson Congress](#)

[Asleep vs. Awake Deep Brain Stimulation](#)

Special Invitation to Members

2016 TBI Symposium

Featuring

John Leddy, M.D.

*The State University of
New York at Buffalo*

Friday, September 16:

***Scientific Symposium of
Traumatic Brain Injury***

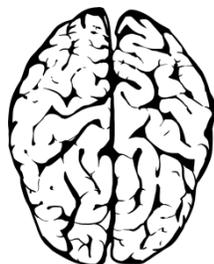
Saturday, September 17:

***Advances in Complex
Concussion Recovery***

*For a detailed agenda,
please visit*

<http://goo.gl/aDpC92>

This event is free to BRAINet
Members. Please contact
stoutk@ohsu.edu for
registration information.



Have you renewed your BRAINet membership?

By renewing your membership, you become part of a dynamic outreach organization that has a special connection to the inner-circle of everything neuroscience-related at OHSU, as well as supporting our outreach efforts.

BRAINet Membership Levels	
Member	\$25
Friend	\$75
Supporter	\$250
Patron	\$500

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*Thank you for
your continued
support!*

Clinical Trials of Interest

ORCATECH's RITE program is a new research study conducted completely on the Internet from the comfort of your home. The RITE Study (Research via Internet of Technology and Experience) is a dedicated online cohort designed to optimize the conduct of pervasive computing health research, as well as frequently capture novel data in its own right.

Relationships Between Fatigue, Mobility, Histidine, and Proinflammatory Cytokines in Multiple Sclerosis

Study Purpose

The study purpose is to examine relationships between fatigue, mobility, and blood biomarkers (i.e., histidine and proinflammatory cytokines) in people with Multiple Sclerosis. Prospective participants who match the screening criteria and decide to participate in the research will visit the OHSU Marquam Hill campus to provide a blood sample, participate in gait and balance tasks, and complete questionnaires about fatigue, mood, and health habits.

Alzheimer's Comprehensive Treatment Network of Oregon and Washington (ACTNOW!)

Study Purpose

To create a network of individuals supportive of Alzheimer's research and interested in keeping up to date on latest developments in Alzheimer's research at OHSU.

STAR-C-Telemedicine: Accessible Caregiver Support

Study Purpose

This study aims to use telemedicine technology to teach caregivers for people with dementia about bothersome dementia behaviors. The purpose of the study is to find out if it is practical and effective to use telemedicine in this way.

Improving sleep quality in people with insomnia

Study Purpose

The study purpose is to test drug-free approaches (sleep hygiene and hypnosis) for people with insomnia.

Research Study on Balance Problems Caused by Traumatic Brain Injury (TBI): Portable Neuromodulation Stimulator

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Institute