

From: [Melanie Fried-Oken](#)
To: [Glory Noethe](#)
Subject: FW: Neuroscience News, July 2010
Date: Monday, July 12, 2010 2:00:34 PM
Attachments: [image002.png](#)

From: Oregon Brains
Sent: Thursday, July 01, 2010 3:59 PM
Subject: Neuroscience News, July 2010



JULY 2010

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Welcome to the [OHSU Brain Institute's](#) *Neurosciences News*, July 2010 edition.

OBI Communication team

(Chris Baunach, Bobby Heagerty, Mary Kays, Shirley McCartney, Ashley Thomas)

SPOTLIGHT ON...

[Brain Computer Interface \(BCI\) for Locked-in Syndrome \(LIS\)](#)

[An OHSU team of researchers led by **Melanie Fried-Oken**, PhD, CCC/SP professor of neurology and biomedical engineering, is designing a brain-computer interface \(BCI\) for persons with locked-in syndrome \(LIS\) to facilitate communication using brainwaves...](#)

UPCOMING EVENTS

Join us at the OHSU Brain Institute's 5th Anniversary Party!

Thursday, July 8th

4:30-6:30 pm

[Add to your calendar](#)

McKenzie Hall Fountain, OHSU Marquam campus. The first 100 people will receive a free Brain Tonic!

There will be food, drinks, live music, fun giveaways, and a raffle to win a Mac iPad! Help us celebrate how far OBI has come and where it will take us!

No RSVP is necessary for this event. OHSU ID is required for entry.

Congressman Earl Blumenauer will be there as a special guest to share with us his work on the Neuroscience Caucus on Capitol Hill

Research Roundtable for Parkinson's disease

Sunday, August 1st

12:30 – 2:30 p.m

The Parkinson Center of Oregon in collaboration with Brian Grant Foundation and the Michael J. Fox Foundation will be presenting a Research Roundtable featuring some of the latest and most exciting Parkinson's research on Sunday August 1 from 12:30 – 2:30 p.m. at the OHSU Vey Auditorium. For more information and to RSVP contact

hjohnson@michaelfox.org

5th Annual Portland Brain Tumor Walk

Saturday, August 28th

Registration and Check-in: 8 - 9 am

Walk: 9:30 am

Join Team OHSU at the Brain Tumor 5K walk/fun run at Willamette Park in Portland! We would love to have a strong OHSU presence at this important event...we can only do so with your support. Please join Team OHSU by visiting www.PortlandWalk.org. Click on "walk team list", find "Team OHSU", and click "join team". If you have questions, please contact Jodi Hall at halljo@ohsu.edu.

Save the date for the next OHSU Brain Institute Forum!

Tuesday, October 26th

The next OBI Forum will be held in conjunction with the Brookhart Lecture from the department of Physiology and Pharmacology on Tuesday, October 26th in the OHSU Old Library Auditorium. Jeff Friedman, MD, PhD, Rockefeller University, and Dan Marks, MD, PhD, OHSU, will be speaking about obesity and the brain. The Brookhart lecture will begin at 3:00 pm, and the OBI Forum will begin at 4 pm. Please join us following the lectures for a reception with food and drinks.

The 7th World Congress for Developmental Origins of Health and Disease (DOHaD)

Sept 18-21, 2011

This event will be held in Portland on under auspices of the OHSU Heart Research Center. The DOHaD field addresses how adverse conditions in utero alter postnatal phenotype in ways that increase vulnerability to later-life chronic diseases. These include (eg):

- Neuropsychiatric: schizophrenia, ADHD, depression, and risk of degenerative neurologic diseases
- Cardiometabolic: HTN, obesity, diabetes, atherosclerotic vascular disease, kidney disease

We are committed to showcasing OHSU research in this field, to emphasizing emerging evidence for programming effects on neural circuits, and highlighting the area of nutritional neurosciences. We welcome your input.

If you would like to be involved and/or receive updates on DOHaD 2011 meeting plans, please respond to rhumanl@ohsu.edu or contact Susan Bagby (bagbys@ohsu.edu).

NEUROSCIENCE EVENTS

The [Neurosciences online calendar](#) has an RSS feed that allows users to have regular updates on events sent to their RSS client (we use Outlook mail). You can subscribe to an RSS feed by clicking on the calendar RSS icon in a web browser, this will initiate the subscription process.

SPOTLIGHT ON...

Melanie Fried-Oken, PhD

Brain Computer Interface (BCI) for Locked-in Syndrome (LIS)

An OHSU team of researchers led by Melanie Fried-Oken, PhD, CCC/SP, professor of neurology and biomedical engineering, is designing a brain-computer interface (BCI) for persons with locked-in syndrome (LIS) to facilitate communication using brainwaves. Persons with LIS have no means to generate written or spoken messages because of acquired neurological disorders (amyotrophic lateral sclerosis, brainstem stroke, Parkinson's disease, multiple sclerosis, spinal cord injury) and neurodevelopmental

disorders (cerebral palsy, muscular dystrophy). Fried-Oken's team members are part of international efforts aimed at making computers clinically useful for individuals with severe motor and speech impairments.

The research, funded by a 5-year R01 grant from the National Institutes of Health (NIH), develops a non-invasive brain-computer interface, which requires a participant to wear a fitted cap (like a shower cap) with electrodes affixed to it. A display of letters is flashed on a computer screen in front of an end-user. The end-user's brain activity changes when a desired letter appears on the screen. A P300 event-related potential (EEG-based) is detected and the letter is automatically selected. With this method, full sentences are constructed.

There are a number of features that make this project unique. First, the group have designed a novel way to present letters for brainwave typing. A procedure called Rapid Serial Visual Presentation (RSVP) is used, where large letters are flashed on the screen, one at a time, very quickly (50-200 ms each). A message is constructed simply by using a yes/no selection of text input via the RSVP keyboard. They have integrated another advanced aspect into their spelling system with the use of natural language processing. We are all familiar with natural language processing in our cell phones. We start typing a text message and the device predicts letters and whole words for us. This application for the BCI system will predict upcoming text in much the same way. Instead of texting with our fingers, however, individualized neurophysiologic data inform the spelling, which uses an open-vocabulary natural language source.

Another unique feature of this system is the team's ultimate goal. They will place the BCI system in the homes of individuals with LIS and teach them how to use it for daily communication. Expert speech-language pathologists who specialize in augmentative and alternative communication (AAC) will work with families, care providers and end-users to customize the BCI system for individual use. Finally, the research group has included a community member with LIS as a member of their research team. In order to design the best system, they are asking the expert: a person who has lived with communication challenges every day for the past 16 years because of a brainstem stroke. The RSVP system will undergo rigorous testing in laboratory and natural settings, on individuals who are locked-in, as well as non-disabled participants.

The collaborative nature of the proposed translational research is expected to yield new knowledge for both BCI development and clinical AAC use. OHSU laboratories run by Brian Roark, PhD (associate professor of engineering, Department of Biomedical Engineering), Barry Oken, MD (professor of neurology, Clinical Neurophysiology Service), Chris Gibbons, PhD (instructor of neurology, Oregon Institute on Disability & Development), and Deniz Erdogmus, PhD and Kenneth Hild, PhD (Department of Biomedical Engineering) ensure that multi-disciplinary efforts will bring new and exciting outcomes to this important clinical problem.

ANNOUNCEMENTS

The Department of Neurological Surgery's spring newsletter, *Neurotransmitter*, is now available: [Neurotransmitter Spring 2010 \[pdf\]](#)

The OHSU Brain Institute (OBI) Leadership Council is pleased to announce OBI's mission, vision and goals for 2010 through 2015.

VISION: By 2015 the OHSU Brain Institute will be recognized as a national leader in conquering brain-related diseases and disorders through an exceptional network of experts in research, patient care, and education.

MISSION: The OHSU Brain Institute is dedicated to understanding, healing,

and protecting the brain through cutting-edge research, outstanding patient care, innovative public education, and training of future neuroscience leaders for Oregon and the world.

TAG LINE: Conquering diseases of the brain together.

GOALS AND STRATEGIES:

1. Increase awareness and support for the OHSU Brain Institute.
 - a. Stabilize OBI structure and governance, operating model, and program support.
 - b. Develop and implement an OBI branding plan with appropriate collateral pieces.
 - c. Create OBI extension of “knowledge of many for the care of one” OHSU message
 - d. Develop opportunities for OBI to work more closely with business, industry and communities across the state.
 - e. Collaborate with the OHSU Foundation to develop a Brain Campaign communications and fundraising plan.
 - f. Increase the membership, influence and contributions of the BRAINet group.
 - g. Develop and implement OBI media/communications vehicles or the future.
2. Optimize collaboration within the OHSU neuroscience community.
 - a. Reach out to all entities and individuals affiliated with OBI to inform, educate, and cultivate support for OBI’s mission and vision.
 - b. Develop and implement mechanisms to recognize and reward collaboration.
 - c. Facilitate trans-institutional neuroscience collaborative teams.
3. Enhance the reputation of the OHSU Brain Institute locally, nationally, and internationally.
 - a. Assist in development of a Neuroscience Congressional Caucus.
 - b. Create an OBI development plan to proactively connect state and national level leaders and identify external funding opportunities for OBI.
 - c. Increase published citations and news references to OBI.
 - d. Strengthen OHSU neuroscience alumni relationships.
4. Accelerate implementation of new discoveries in neuroscience.
 - a. Further integrate the research and clinical enterprises.
 - b. Contribute to development and implementation of OHSU Research Plan
 - c. Demonstrate value to OHSU Hospital for continued investment in Translational Neuroscience research.
5. Enrich the neuroscience educational experience at OHSU and across Oregon.
 - a. Leverage OBI to increase investment in neuroscience training opportunities.
 - b. Grow the OBI Neuroscience Graduate Fellowship Award program.
 - c. Increase participation in Neurobiology of Disease course.
 - d. Increase Neuroscience CME opportunities through video conferencing.
6. Address Oregonians’ need for effective treatment of brain diseases and disorders.

- a. Further develop and implement a statewide outreach plan to more actively engage OHSU neuroscience researchers and clinicians with communities across the state.
- b. Broaden neuroscience service line through better integration of clinical services and research programs.
- c. Further develop and implement statewide campaign to increase public awareness of brain health and care.

Zhi-Gen Jiang, M.D. promoted to Professor in Department of Otolaryngology's Oregon Hearing Research Center

The Department of Otolaryngology/Head and Neck Surgery at Oregon Health & Science University has recently announced the promotion of Zhi-Gen Jiang, M.D., from Associate Professor to Professor, effective July 1, 2010. Dr. Jiang has been a faculty member at OHSU since July 1, 1993 and with the Oregon Hearing Research Center, a part of the Department of Otolaryngology, since July 1, 1997. His primary research focus is on cochlear vessel electrophysiology and how vessel disturbances may contribute to many clinical hearing conditions. Jiang's laboratory investigates, with the support of an NIH R01 grant, nerve and fluid control mechanisms of the inner ear's small arteries and veins and the drugs affecting these mechanisms.

Dr. Norwood Knight-Richardson receives appointment

Please join me in congratulating Dr. Norwood Knight-Richardson on his appointment as Chief Administrative Officer at OHSU. OHSU is fortunate to have such a talented individual in this position and I am certain that Dr. Knight-Richardson will contribute to OHSU's success just as substantially as he has to the department's. I am delighted that he will be able to continue with some high-priority assignments within the department and will retain his role as vice-chair. A transition plan for the remainder of his duties will be completed in the next few weeks.

George A. Keepers, M.D.

New grant awards for stroke research in the Department of Anesthesiology and Perioperative Medicine

KASIA DAVIS, PHD – Anesthesiology and Perioperative Medicine: *The Mechanism of Endothelial Cell Protection by STAT 3*. This project is funded by a Postdoctoral Fellowship Award from the Pacific Mountain Affiliate of the American Heart Association,.

Brain damage following stroke results in part from poor tissue perfusion. This study is aimed at elucidating a mechanism whereby endothelial cells in the brain's blood vessels are protected from ischemic injury so that cerebral blood flow can be maintained.

DUSTIN JOHNSEN, BA – Anesthesiology and Perioperative Medicine: *Cell-Specific and Sex-Specific Responses to Isoflurane Preconditioning in an In Vitro Model of Ischemic Stroke*. This project is funded by a Predoctoral Fellowship Award from the Pacific Mountain Affiliate of the American Heart Association.

Male and female brains respond differently to experimental stroke following preconditioning with the anesthetic isoflurane (IsoPC). This study uses cell-specific and sex-specific cultures of astrocytes and neurons to explore a possible mechanism whereby IsoPC effects such sex-dependent responses to ischemia.

INES KOERNER, MD, PHD – Anesthesiology and Perioperative Medicine: *Scavenging of Epoxyeicosatrienoic Acid – A Novel Mechanism of Microglia-*

Mediated Neuronal Death. Funding for this research is provided by the Collins Medical Trust.

This project is based on the hypotheses that a microglial surface protein called cluster of differentiation 36 (CD36) facilitates the depletion of neuroprotective epoxyeicosatrienoic acid following stroke and that this mechanism of depletion can be inhibited by pharmaceutical intervention.

National survey ranks OHSU as one of the best for training most-needed doctors

OHSU School of Medicine scores 11th nationally for its success in meeting its social mission

PORTLAND, Ore. – Oregon Health & Science University is one of the best in the nation for meeting the social mission of medical education, which is based on an institution's training of primary-care physicians, graduates who work in areas without enough health care professionals and underrepresented minorities, according to a study published Monday in the *Annals of Internal Medicine*. The OHSU School of Medicine is ranked 11th nationally out of 141 schools, based on its composite score in these three areas. [Read full story at OHSU News](#)

PUBLICATIONS

Thompson EM, Dosa E, Kraemer DF, Neuwelt EA: Treatment With Bevacizumab Plus Carboplatin for Recurrent Malignant Glioma. *Neurosurgery* 67: 87-93, 2010

FUNDING OPPORTUNITIES

NIH FEDERAL OPPORTUNITIES

NEW NIH FORMATTING REQUIREMENTS ARE NOW IN EFFECT: A new version of the [application forms and instructions](#) are available. The new form and instructions must be used to apply for receipt dates on January 25, 2010 and beyond. You must continue to check the opportunity to which you are applying to download the application forms and instructions for opportunities due on or after January 25th, 2010. For more information on how the application is being restructured, please visit http://enhancing-peer-review.nih.gov/restructured_applications.html.

[National Institute of Mental Health \(NIMH\) Announces Availability of Funds for Competitive Revision Applications for Targeted Research on Mental Health Disparities](#)

Description: For investigators with select active NIMH-supported grants to submit revision applications (formerly competitive supplements) that support an expansion of the scope or research protocol to conduct secondary analyses to target research questions addressing mental health disparities. Specifically, NIMH seeks innovative, multidisciplinary research that uses existing data sources to increase knowledge of: (1) methods for measuring and tracking mental health disparities; (2) epidemiology of cardiovascular disease (CVD) risk factors among members of racial/ethnic/sex groups with serious mental illness (SMI); and (3) identification of differences in engagement, outcomes, or mediators for diverse groups in clinical trials. An application may focus on one or more of the three areas.

Deadline: August 31, 2010

Amount: \$125,000 for one year.

Eligibility: PIs on active NIMH grants, including R01, R21, R34, R37, P50, U01, and U19 may apply. To be eligible, the "parent" grant on which the revision application is based must be active at the time the revision

application is submitted and the research proposed in the revision must be accomplished within the current competitive segment. The project period of the competitive supplement may not exceed 1 year (12 months). If a no-cost extension is needed to complete the work proposed in the revision, the no-cost extension must be in place before the revision application is submitted. Only one revision request may be submitted per NIMH-funded parent grant.

[National Institute on Drug Abuse \(NIDA\) Core Center of Excellence Grant Program \(P30\)](#)

Description: Intended to bring together investigators currently funded by NIH or other federal or non-federal sources, to enhance the effectiveness of existing research and to extend the focus of research to drug abuse and addiction. Incremental work should not be the focus of Center activities; rather, new and creative directions are required. It is expected that individual core activities reflect a relationship to the integrating theme of the Center and the Center is expected to support the education, training, and mentoring of new investigators, and share findings, data and their resources.

Deadline: October 27, 2010, September 25, 2011, September 25, 2012

Amount: Varies – See full announcement.

Eligibility: The P30 must propose to support a research base of at least three ongoing research projects supporting at least two distinct principal investigators that are funded by NIH, and/or NSF, or other public health service agencies and have at least two years left in the award period at the time of submission. Each Research Support Core should interact with two or more funded research projects. Each Research Support Core should interact with two or more funded research projects. A PI of a NIDA P30 Core Center of Excellence cannot simultaneously serve as a PI of another NIDA center grant. Multiple PIs may be designated only for the NIDA Core Center, but not for individual cores.

NON-NIH FEDERAL OPPORTUNITIES

[Department of Defense \(DoD\) – Spinal Cord Injury \(SCI\) Translational Research Partnership Award \(TRPA\)](#)

Description: Promotes multi-institutional, multi-disciplinary partnerships among clinicians and laboratory scientists that accelerate the movement of promising ideas in SCI research into clinical applications. The Spinal Cord Injury Research Program (SCIRP) encourages proposals that specifically address prevention, alleviation, or acute care of medical complications from SCI (e.g., autonomic dysreflexia, spasticity, sensory dysfunction or deficit, pain, skin care issues, bladder and bowel dysfunction, sexual dysfunction, and adjustment to disability). This award is intended to support both new and established investigators across a broad spectrum of disciplines in research projects that are likely to have a major impact on spinal cord injury research. Training of the next generation of scientists and clinicians is encouraged; therefore, a Nested New Investigator Option is available for training graduate students, medical students, residents, postdoctoral fellows, and clinician-scientists new to spinal cord injury research. Alignment with current DoD research and collaboration with military researchers and clinicians is encouraged for all proposals.

Deadline: Pre-application (required): August 5, 2010 / Full application (by invitation only): December 1, 2010

Amount: Up to \$750,000 total for up to three years. An additional \$47,000 is allowed for projects requesting a Nested New Investigator Option with graduate student, medical student, resident, or post-doctoral fellow, and an additional \$63,000 is allowed for projects requesting a Nested New Investigator Option with clinician or clinician-scientist.

Eligibility: At least two distinct institutions must be involved. The TRPA supports the development of translational research partnerships among two

or three independent investigators (known as partners). At least one partner must be a clinician, and at least one partner must have experience in spinal cord injury laboratory research. For the Nested New Investigator option, only one Nested New Investigator may be requested per proposal.

[Department of Defense \(DoD\) – Spinal Cord Injury \(SCI\) Qualitative Research Award](#)

Description: Supports qualitative research studies that make an important contribution to SCI research and/or patient care and quality of life. Qualitative research projects using open-ended outcome variables must be directly applicable to the health care needs of the Armed Forces and combat veterans with spinal cord injuries, including family members and caregivers; therefore, collaboration with military researchers and clinicians is encouraged.

Appropriate qualitative research topics include, but are not limited to the explorative, descriptive, predictive, or explanatory study of:

Barriers preventing soldiers with spinal cord injuries from returning to active duty, returning home, or re-integrating into society.

Impact of personal factors and other medical conditions that influence or mediate patient's health or quality of life during hospitalization and/or rehabilitation following SCI.

Impact of care provision on the spouse and/or families of the spinal cord injured to include career issues, physical strain and injury, intimacy, etc.

Factors and strategies for improving psychosocial adjustment and adaptation to disability for patients and their family and friends; the influence of family and friends' involvement in the SCI patient's life experiences on quality of life and health outcomes.

Deadline: Pre-application (required): August 5, 2010 / Full application (by invitation only): December 1, 2010

Amount: Up to \$300,000 total for up to three years.

Eligibility: Independent investigators at all academic levels (or equivalent) are eligible to submit applications.

[Department of Defense \(DoD\) – Spinal Cord Injury Clinical \(SCI\) Trial Award - Rehabilitation](#)

Description: Supports rapid implementation of Phase 0, I or II clinical trials with the potential to have a significant impact on the understanding of SCI and amelioration of its consequences. All studies must be focused on rehabilitative aspects of SCI. All studies must also be applicable to the health care needs of the Armed Forces, their family members, and/or the U.S. veteran population. The Spinal Cord Injury Research Program (SCIRP) encourages proposals that specifically address prevention, alleviation, or acute care of medical complications from SCI (e.g., autonomic dysreflexia, spasticity, sensory dysfunction or deficit, pain, skin care issues, bladder and bowel dysfunction, sexual dysfunction, and adjustment to disability). Training of the next generation of scientists and clinicians is encouraged; therefore, a Nested New Investigator Option is available for training graduate students, medical students, residents, postdoctoral fellows, and clinician-scientists new to spinal cord injury research.

Deadline: Pre-application (required): August 5, 2010 / Full application (by invitation only): December 1, 2010

Amount: Up to \$750,000 total for up to four years. An additional \$47,000 is allowed for projects requesting a Nested New Investigator Option with graduate student, medical student, resident, or post-doctoral fellow, and additional \$63,000 is allowed for projects requesting a Nested New Investigator Option with clinician or clinician-scientist.

Eligibility: Independent investigators at any academic level (or equivalent) are eligible to submit applications. For the Nested New Investigator option, only one Nested New Investigator may be requested per proposal.

[Department of Defense \(DoD\) – Spinal Cord Injury \(SCI\) Investigator-Initiated Research Award](#)

Description: Supports studies that have the potential to make an important contribution to SCI research and/or patient care. The Spinal Cord Injury Research Program (SCIRP) encourages innovative proposals that specifically address prevention, alleviation, or acute care of medical complications from SCI (e.g., autonomic dysreflexia, spasticity, sensory dysfunction or deficit, pain, skin care issues, bladder and bowel dysfunction, sexual dysfunction, and adjustment to disability). Projects should be applicable to the health care needs of the Armed Forces, their family members, and/or the U.S. veteran population. All applications must specifically and clearly address the military relevance of the proposed research. Collaboration with military researchers and clinicians is encouraged. Research projects may focus on any phase of research from basic through translational, including preclinical studies in animal models or human subjects, as well as correlative studies associated with an existing clinical trial. Observations that drive a research idea may be derived from laboratory discovery, population-based studies, a clinician's first-hand knowledge of patients, or anecdotal data. SCIRP strongly supports collaborative research between basic scientists and clinical researchers, and between academic scientists and biotechnology/pharmaceutical industry scientists; consequently, collaborations that bring new perspectives from other disciplines or bring new investigators into the SCI field are also strongly encouraged (Qualified Collaborator Option).

Deadline: Pre-application (required): August 5, 2010 / Full application (by invitation only): December 1, 2010

Amount: Up to \$500,000 for up to three years. If requesting an Optional Qualified Collaborator, the maximum allowable funding for the entire period of performance is \$750,000 in direct costs.

Eligibility: Independent investigators at all academic levels (or equivalent) are eligible to submit applications. Optional Qualified Collaborator(s) must be at or above the level of assistant professor (or equivalent).

OBI COMMUNITY OUTREACH UPDATE

Brain Awareness Lecture Series 2010 DVDs are here!

Each lecture DVD is \$10.

How to Order:

1. Email [Ashley Thomas](#) with your DVD/book order request. She will confirm that the requested pieces of your order are available.
2. Send a check (payable to "OHSU Foundation") to:
OHSU
Attn: Ashley Thomas
3181 SW Sam Jackson Park Rd. L226
Portland, OR 97239

When your check is received, your order will be sent.

The lecture recordings are as follows:

OHSU BRAIN INSTITUTE BRAIN AWARENESS SEASON 2010 LECTURE SERIES: The Brain and the Mind

Monday, February 1

"How we Decide: From Brains to Behavior"

Jonah Lehrer

Author of How We Decide and Proust Was a Neuroscientist

Monday, February 15

“Battling Brain Disorders: The Critical Importance of Mental Health Advocacy—For the Individual and For Society”

Oregon Congressman Earl Blumenauer – Patrick Kennedy was unable to be at the lecture

Monday, February 22

“The Mercurial Mind: Bipolar and Creativity”

Kay Redfield Jamison, PhD
Johns Hopkins University

Monday, March 1

“The Emotional Brain: the Mysterious Underpinnings of Emotional Life”

Joseph LeDoux, PhD
New York University

Monday, March 8th

“The Executive Brain: The Frontal Lobes and the Civilized Mind”

Jordan Grafman, PhD
National Institute of Neurological Disorders and Stroke

GENERAL

1. To **add or subtract a name** to the OBI Neuroscience Network email list (approximately 900), please let Ashley Thomas (thomasas@ohsu.edu) know. This list grew a year ago as the initial phase of the Research Directory but we'd like to keep it as useful and current as possible.
2. If you know where you'd like your information put, please identify: EVENTS, AWARD & APPOINTMENTS, SEMINAR/TRAINING OPPORTUNITIES, FUNDING OPPORTUNITIES, NEWS, or ANNOUNCEMENTS AND OTHER. If not identified, we will put where we think most appropriate. Also, if there is additional information (a weblink) please include that.
4. Each OBI entity has a designated information contact person to provide information for the newsletter; if you'd like to know who that is for your department/institute, please check with Ashley Thomas (thomasas@ohsu.edu). Some programs not officially part of OBI are also providing information and receiving the newsletter because of usefulness.
5. Future requests for information will go out on the 15th of each month, with responses to be submitted by the 20th so if you have items of interest for the larger OHSU neuroscience community, please let your contact person know before the 20th.

OHSU Brain Institute's Neuroscience Newsletter is produced and edited by the OHSU Brain Institute's communication team.

Questions or suggestions, please contact Bobby Heagerty (heagerty@ohsu.edu).