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Message from the Director:

Our weekly summer seminar/social series, **NeuroNetworking**, is off and running. Kudos to Mathew Tantama--this is his brainchild, submitted in response to our RFA callout in May. I want to thank <u>Amy Brewster</u>, <u>Sebastien Helie</u>, <u>Natalya Kaganovich</u>, and <u>Ed Fox</u> for their time and excellent presentations in the series so far. Thus far we have learned about the role of microglia in dendritic and synaptic remodeling in acquired epilepsy, the role of the supplementary motor area in automatic sequence production, audiovisual word processing in school aged children who have a history of specific language impairments, and exploration of the brain circuit that controls meal size. If you have not had an opportunity to attend the weekly seminar series, please set aside time for Humpday--on **Wednesdays from 4-5 pm followed by a social hour with refreshments from 5-6 pm in Lyles Porter Hall Room 1160**. Please join us next week (June 22nd) when we welcome <u>Gaurav Chopra</u> and <u>Claudio Aguilar</u>. These are the first of 4 speakers from our "Aging & Neurodegeneration" Research Area. The full schedule can be <u>found here</u>.

Congratulations to those who were awarded a gran in response to our RFA! We received over 30 detailed and engaging proposals. Unfortunately, we could only support ~15% of the requested dollars, and only a handful of proposals received full funding. Please note that those awarded will see the funds reflected in the investigator's account by the end of June. As mentioned before, the money should be used within the calendar year (by June 30, 2017).

The Purdue Institute for Integrative Neuroscience is partnering with 3D3C to bring our Cell Engineering

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Core online. Projects are currently underway to convert human iPSCs into differentiated neurons. Contact us if you are interested in learning more about the facility.

Lastly, as a reminder, we are planning a retreat for fall, so please weigh in and provide your thoughts.

- Donna Fekete, Inaugural Director

Featured Faculty Member:

Dr. Keith Kluender earned his B.S. in Psychology with minors in Biology, Chemistry and Psychology in 1979 from Carroll College in Waukesha, Wisconsin. After earning a Master's degree in Experimental Psychology at Northeastern University in Boston, Massachusetts, he earned a PhD. In Experimental Psychology from The University Of Texas at Austin. Dr. Kluender's first faculty position was at the University of Wisconsin - Madison beginning in 1988 until he came to Purdue to serve as Professor and Head of the Department of Speech, Language, and Hearing Sciences. Keith currently serves on the PIIN leadership team as the Associate Director.

All of our research is designed to help us better understand how people hear complex sounds such as speech, how experience shapes the way we hear our world, and how we use what we hear to guide our actions and to communicate. These questions inspire us to be interdisciplinary in our thinking and experimental methods. Our work is at an intersection between traditional problems in perception, cognitive psychology, communication disorders, computer science, electrical engineering, linguistics, neuroscience, and philosophy. We always begin with quite general principles of perception, and our work is frequently



informed by approaches to analogous issues for vision, particularly information theory and Bayesian models. The interdisciplinary nature of our research encourages the use of many experimental tools. We study the performance of human listeners in a broad array of psychophysical and learning tasks. We use neurophysiological data to reveal auditory processes and to inform models of learning and plasticity. We use computational simulations of hearing and learning to generate and test new hypotheses. Although our emphasis is upon basic questions, our work is being extended to clinical problems of hearing impairment

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and language delay, and to practical solutions such as cochlear prosthetics (implants), hearing aid design,

and computer speech recognition. Please visit Dr. Kluender's website at:

https://www.purdue.edu/hhs/slhs/directory/faculty/kluender_keith.html

Save the Date:

Chromatin & Epigenetics Symposium will be held on Tuesday, October 11, 2016. Session topics include:

Epigenetic process in development and differentiation, RNA-dependent epigenetic regulation, chromatin

biology and disease and chromatin and genome integrity.

https://www.conf.purdue.edu/landing_pages/ces/

The U.S. National Academies of Sciences, Engineering, and Medicine, and Masdar Institute of Science

and Technology are pleased to announce the Fourth Arab American Frontiers of Science, Engineering

and Medicine Symposium. The upcoming meeting will be hosted in Abu Dhabi on November 5 to 7,

2016 by Masdar Institute, in partnership with Khalifa University, NYU Abu Dhabi and Petroleum Institute.

The call for applications is now open and scientists, engineers and medical professionals from the U.S.

and the Arab region are invited to submit their application online before the deadline of June, 30, 2016,

11:59 PM EDT (Washington D.C. time).

Funding Opportunities:

NIH Biophysical and Biomechanical Aspects of Embryonic Development This FOA encourages

applications that propose to advance our knowledge in the area of the physics and mechanics of

embryonic development.

RO1 Deadline: September 19

· <u>R21</u> Deadline: September 19

Burroughs-Wellcome Career Awards at the Scientific Interface BWF's Career Awards at the Scientific

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Interface (CASI) provide \$500,000 over five years to bridge advanced postdoctoral training and the first three years of faculty service. These awards are open to U.S. and Canadian citizens or permanent residents as well as to U.S. temporary residents. Candidates must hold a Ph.D. degree in one of the fields of mathematics, physics, chemistry, computer science, statistics, or engineering and must have completed at least 12 months but not more than 48 months of postdoctoral research by the date of the full invited application deadline. *Sponsor Deadlines:* Sept 6 – Pre-proposal; January 9 – Invited full proposals.

Competition is now open for HHMI Professors: http://www.hhmi.org/programs/hhmi-professors - Intent to apply is due July 1, 2016

NIH Impact of Aging in Human Cell Models of Alzheimer's Disease (R01) The goal of this FOA is to establish the impact of aging on the expression and/or modulation of AD pathological processes and to assess age-related AD genotype-phenotype relationships in human cell models. Research incorporating different brain cell types to promote neural circuit maturation and complexity in such cell models is expected to better recapitulate and give greater insight into AD pathological processes. Deadline: September 28.

NIH Development and Application of PET and SPECT Imaging Ligands as Biomarkers for Drug Discovery and for Pathophysiological Studies of CNS Disorders (R01) This FOA invites research grant applications from organizations/institutions that propose the development of novel radioligands for positron emission tomography (PET) or single photon emission computed tomography (SPECT) imaging in human brain, and that incorporate pilot or clinical feasibility evaluation in pre-clinical studies, model development, or clinical studies. Deadline: October 5.

Limited Submission: <u>Searle Scholars Program</u> The Searle Scholars Program seeks to fund high risk, high reward projects from candidates in their first appointment as a tenure-track assistant professor beginning on or after July 1, 2015. Applicants should be pursuing independent research careers in biochemistry, cell biology, genetics, immunology, neuroscience, pharmacology, or related areas in chemistry, medicine, and the biological sciences. Those in other fields including engineering, physics, psychology, and nutritional science may be eligible provided the project has a strong life science focus (see past awardees on the Searle website). For this opportunity, Purdue is limited to **one** application.

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Symposium Announcement:

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