University of Florida CENTER FOR SMELL AND TASTE

News and Announcements

Musings from the Director....



February finds us well into the Spring seminar season. This past month we had an exciting seminar by Dr. Steve Munger (U. Maryland School of Medicine) showcasing his research on alimentary chemosensation and the interesting potential of targeting taste receptors in the gut to control metabolic diseases such as diabetes. Upcoming this month we have two seminars, one at UF by Dr. Kristin Baldwin (Scripps Research Institute) on generating neuronal diversity and connectivity in the olfactory system (see page 3) and one at FSU by Dr. Ralph Norgren (Penn State U. College of Medicine) on the search for sweet (see page 4).

It is always a pleasure to recognize accomplishments of our members. This month praise goes out to new member Dr. Jeff Martens (Pharmacology, COM) who recently was awarded a 5 year R01 grant from the NIDCD for his very exciting work using gene therapy to rescue cilia defects and restore olfactory function. Congratulation to Jeff and his research team! Speaking of new members, I want to remind members new and old that we maintain an excellent shop core at FSU to design, build, and maintain apparatus and equipment used in chemical senses research. The services of this core are available at no charge to our members. You only need to pay for materials used. A number of our members have taken advantage of the shop core in the past and the arrangement works well. Contact Cheri Brown (browncl@ufl.edu) the Center office for more information.

Just one final reminder that if you haven't already done so, to be sure to plan to attend the main national chemical senses meeting (AChemS) being held just down the road in Ft. Meyers, FL (see page 6). The proximity of this national meeting provides a special opportunity to experience the full role and scope of research in our field, not only nationally but also internationally due to the number of foreign chemical senses researchers typically in attendance.

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Upcoming Chemical Senses Meetings

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1149 Newell Drive, Rm. L5-101E, McKnight Brain Institute

Featured Member

Dr. Jack Judy

Professor, Department of Biomedical Engineering Director, Nanoscience Institute for Medical and Engineering Technology (NIMET) University of Florida



Contact: jack.judy@ufl.edu

We're continuing to feature our new members. This month we're featuring Dr. Jack Judy, who just joined the Electrical and Computer Engineering as well as the Biomedical Engineering Departments this past summer. Dr. Judy also serves as the Director of UF's Nanoscience Institute for Medical and Engineering Technology. Dr. Judy is a world renowned leader in MEMS/NEMS technology and before coming to UF was a professor in the Department of Electrical Engineering at UCLA, where he led the creation of the multidisciplinary Neuro Engineering Training Program. Most recently he served as a Program Manager in the Microsystems Technology Office at DARPA, where he founded the Reliable Neural Engineering Technologies (Re-NET) Program, a \$66 million funding program that supports the study of high-performance neural interfaces between amputees and their prosthetic limbs. Among Dr. Judy's diverse research interests and experience, and his relation to the Center, is the development of electronic chemical sensing devices (enoses). At UCLA his research team worked with Cyrano Sciences (an enose start-up company is Pasadena, CA at the time) on the miniaturization of polymer/carbon black chemiresistors into chip-scale arrays. We are most pleased to have Dr. Judy join UF's growing chemical senses research community. His expertise will clearly enhance the Center's initiative being led by member Dr. Jose Principe (Electrical and Computer Engineering, COE) to develop a next generation of electronic noses that are not only capable of recognizing odorants but also locating the source of the odor signal. Dr. Judy epitomizes the broad diversity of expertise that can be brought to bear on chemical senses related issues and questions at the University of Florida.

Upcoming Chemical Senses Seminar

Sponsored by the Center for Smell and Taste, the Department of Neuroscience, and the McKnight Brain Institute

"Building and Maintaining Olfactory Processing Circuits"

by

Kristin Baldwin, Ph.D. Associate Professor Dept. of Molecular and Cellular Neuroscience The Scripps Research Institute San Diego, CA



Wednesday, February 12, 2014 12:00 Noon

DeWeese Auditorium, Room LG-101 McKnight Brain Institute

Dr. Baldwin studies how the olfactory system recognizes an enormous diversity of odorants and links them to appropriate innate and learned behaviors. Recently, her group mapped the projections of mitral neurons into the cortex using long-range viral tracers and three dimensional reconstructions of the olfactory bulb and cortex. They showed that the spatial map in the olfactory bulb is largely discarded in higher processing centers and suggest instead that stochastic wiring mechanisms are involved in building higher order circuits. They have also used genetic tools to selectively silence olfactory sensory neurons and mitral neurons and find these manipulations have surprising and distinct effects on different olfactory processing circuits. Dr. Baldwin will discuss the implications of these findings for olfactory coding and the regulation of neural circuit regeneration in the adult mouse.

LUNCH WITH Dr. Baldwin IMMEDIATELY FOLLOWS THE SEMINAR:

Faculties are reminded to encourage postdocs and grad students to take advantage of the opportunity to attend the luncheon with Dr. Baldwin immediately following the seminar on Wednesday, February 12th in Rm. L5-101B, McKnight Brain Institute.

These luncheons are provided at no charge and are an excellent opportunity to meet with the Center's speakers one-on-one. If you have a student or post doc who would like to attend, please have them e-mail us at ufcst@ull.edu to reserve a spot since seating is limited.

Announcing the 6th Annual James C. Smith Lecture at FSU

'The Search for Sweet'

by

Dr. Ralph Norgren Distinguished Professor of Neural and Behavioral Sciences College of Medicine The Pennsylvania State University

> Friday, February 28, 2014 4:00 PM

Psychology Building Auditorium (D201) Florida State University Tallahassee, FL



Dr. Ralph Norgren is internationally recognized for his work on the functional organization of the gustatory system and the neural basis of motivated behavior. He will be discussing recent advances in his life's work and its implication for understanding gustatory motivated behavior. Dr. Norgren will be in residence in the Psychology Department at FSU for the two days preceding his talk on the 28th to interact with interested students and faculty.

NIH News

> <u>NIDCD Small Grant Program (R03)</u>

(PAR-13-057)

National Institute on Deafness and Other Communication Disorders Application Receipt/Submission Date(s): February 26, 2013; June 26, 2013; October 18, 2013; February 26, 2014; June 26 2014; October 28, 2014; February 26, 2015; June 26, 2015; October 28, 2015

> NIDCD Clinical Research Center Grant (P50)

(PAR-13-062)

National Institute on Deafness and Other Communication Disorders Application Receipt/Submission Date(s): February, 22, 2013; May 30, 2013; October 1, 2013; January 30, 2014; June 2, 2014; October 1, 2014; February 2, 2015; June 6, 2015; October, 1, 2015

NIDCD Research Grants for Translating Basic Research into Clinical Tools (R01) (PAR-14-009)

National Institute on Deafness and Other Communication Disorders Application Receipt/Submission Date(s): June 23, 2014, February 23, 2015, October 23, 2015, June 23, 2016, February 23, 2017

Notice of Participation of NIDCD in RFA-NS-13-013 Collaborative Research on Chronic Traumatic Encephalopathy and Delayed Effects of Traumatic Brain Injury: Neuropathology and Neuroimaging Correlation (U01) (NOT-DC-13-004) National Institute on Declarge and Other Communication Disorders

National Institute on Deafness and Other Communication Disorders

- Notice of Participation of NIDCD in RFA-NS-13-014 Pilot Projects on Sports-Related Brain and Spinal Cord Injury Research (R21) (NOT-DC-13-005) National Institute on Deafness and Other Communication Disorders
- Notice of Participation of NIDCD in RFA-NS-13-015 Pilot Projects on Sports-Related Brain and Spinal Cord Injury Research (R03) (NOT-DC-13-006)
 National Institute on Deafness and Other Communication Disorders
- NIDCD Research Grants for Translating Basic Research into Clinical Tools (R01) (PAR-14-009)

National Institute on Deafness and Other Communication Disorders Application Receipt/Submission Date(s): June 23, 2014, February 23, 2015, October 23, 2015, June 23, 2016, February 23, 2017



UFCST Travel graduate students and postdocs

The Center provides travel awards for graduate students and postdocs at the University of *Florida on an ongoing basis. We* encourage applications from young scientists whose main area of interest is not the chemical senses, but who would benefit from exposure to the field. will also consider requests from graduate students and postdocs actively working in the chemical senses to attend the AChemS annual meeting or other scientific meetings of relevance to chemical senses research. Please submit requests for support in the form of a letter to the Center office at <u>ufcst@ufl.edu</u> at least one month *before the start of the meeting. Please include in the request the* estimated cost of travel, registration, and housing while at the meeting, and whether or not you intend to make a scientific presentation. Graduate students should submit letters that are *countersigned or otherwise* supported by their mentor. UFCST Travel Awards will be governed by the University of Florida travel guidelines.

Upcoming Chemical Senses Meetings

April 9-13, 2014

AChemS 2014 Annual Meeting Hyatt Regency Bonita Springs (Fort Meyers), FL http://www.achems.org/i4a/pages/index.cfm?pageid=3962 * ABSTRACT SUBMISSION DEADLINE: January 6, 2014 http://meetingassistant5.com/AChemS2014/

May 11-13, 2014 SenseAsia 2014 SingEx, Singapore http://www.senseasia.elsevier.com/

July 2014, 2014

Chemical Signals in Vertebrates 13 University of Illinois http://www.life.ilinois.edu/isce-csiv/

This meeting, now in its 13th year, focuses on chemical ecology with particular emphasis on chemical signals in terrestrial vertebrates, but has an increasingly broad representation of chemical senses research.

September 10-14, 2014 ECRO XXIV Dijon Dijon, France https://colloque.inra.fr/ecro2014