CHEMICAL SENSES POSTDOC – Florida State Universiy

Two NIH-funded postdoctoral positions are **available immediately** for research and training in **chemosensory-related** areas.

Up to 2 years of support are available from the Florida State University Chemosensory Training Program (CTP), funded from an institutional T32 NRSA training grant from the NIDCD. There are openings in the laboratories of Alan Spector, Wen Li, Lisa Eckel, Roberto Vincis, Liz Hammock, Doug Storace, or Debra Fadool for a highly-motivated and self-driven individual who wishes to work towards an independent career in chemosensory or chemosensory-related research. We seek individuals who desire interaction across a group of experts in the chemosensory field to accentuate their postdoctoral traineeship and who can contribute creatively to enhance or extend the research program of one of the laboratories in the CTP group while building their expertise and reputation as a bridge to an independent-investigator career. Value-added professional development and research collaborations across CTP laboratories and their graduate-and undergraduate students are therefore highly encouraged. Successful candidates must be a **US Citizen or US permanent resident** with a recent Ph.D. degree and should have substantive research experience as evidenced by a strong publication record including first author publication. We currently have two postdoctoral training opportunities available: One is a special opportunity supported by the VP for Research Office to enhance diversity of our trainees into academic positions and a second opportunity is for an open trainee. Both would be members of our training grant program and mentored by our faculty preceptor community.

Postdoctoral Trainer expertise ranges from exploration of gustatory and olfactory central coding, taste psychophysics, regulation of ingestive behavior, neuromodulation of ion channels, disruption of olfactory sensory signaling and circuitry attributed to diabetes and obesity, anxiety/threat, or gustatory physiology, olfactory bulb synaptic physiology, and TAAR signaling.

The CTP faculty research at molecular, physiological and behavioral levels is described in individual faculty pages on the FSU Program in Neuroscience Website; www.neuro.fsu.edu. The 30-year history of the CTP Training Grant Program and a Flyer explaining the current opportunity are found on the FSU Office of Postdoctoral Affairs (OPDA) Website: http://opda.fsu.edu/Awards-and-Fellowships/NIH-FSU-Postdoctoral-Fellowships/NIH-Training-Grant-Postdoctoral-Appointments.

Primary responsibilities will include designing and implementing research studies, collecting and analyzing data, preparing research results for publication, presenting at national and international meetings.

We are particularly interested in candidates with strong backgrounds in modern techniques, whether molecular, physiological or behavioral and would favor those with complementary expertise in multiple areas. Florida State University is committed to a rewarding environment for postdoctoral scholars and to providing opportunities for professional advancement and career

preparation. Professional Development and University-wide Opportunities for postdoc engagement are found on the FSU OPDA Website: http://opda.fsu.edu/

Current research focus of our training laboratories is to investigate the impact of metabolic disorders (obesity/diabetes) or anxiety/threat on chemosensory function, behavior, and physiology and uses a combinatorial, multidisciplinary approach. We are seeking creative, self-motivated individuals who have strong experimental experiences and the drive to pursue challenging, rigorous studies in the chemical senses. Experimental approaches employed in these laboratories include slice electrophysiology, in vivo awake recording, dynamic clamp, use of optical probes and calcium imaging, whole-nerve recording, optogentic and chemogenetic recording, fMRI, EEG/MEG, behavioral phenotyping, ion channel structure/function studies, protein-protein interactions, whole-animal metabolic phenotyping, tissue culture, psychophysical studies of sensory-mediated behaviors, confocal microscopy, olfactometry, genetically-modified mouse models, transection and lesion analysis of central sensory structures, ingestive behavior phenotyping following gastric bypass surgery, and taste preference testing.

Postdoctoral Scholars select a mentor from our team of faculty trainers. Scholars participate in semester-long rotating series of reading / practicum group with the trainers, annual special lecture series in the chemical senses, conference travel presentation of their research, and professional development activities with the CTP trainers or FSU postdoctoral association. Scholars are expected to develop an IDP with their selected mentor, and are coached in grant writing exercises to apply for extramural awards and fellowships. Appointments are provided access to health insurance benefits, retirement option plans, seminole savings program, and an annual training-related expense budget dependent upon pre- or postdoctoral trainning level. Salary is commensurate with level of experience as set by NIH institutional training grant guidelines.

Applicants should submit (SINGLE PDF) a cover letter explicitly addressing the qualifications for this position; paragraph describing their long-term career goals; 1-2 page research statement (length excludes citations); detailed curriculum vitae; and the names, email, and addresses for three professional references to: Debra Ann Fadool, CTP Director. Example publication of best work can also be included.

Deadline: Applications will be prioritized for decision if received prior to August 15, 2022.

Questions? Please contact Dr. Debra Ann Fadool (dfadool@bio.fsu.edu)

Specialized Predoctoral and Postdoctoral NIH Chemosensory Training Program

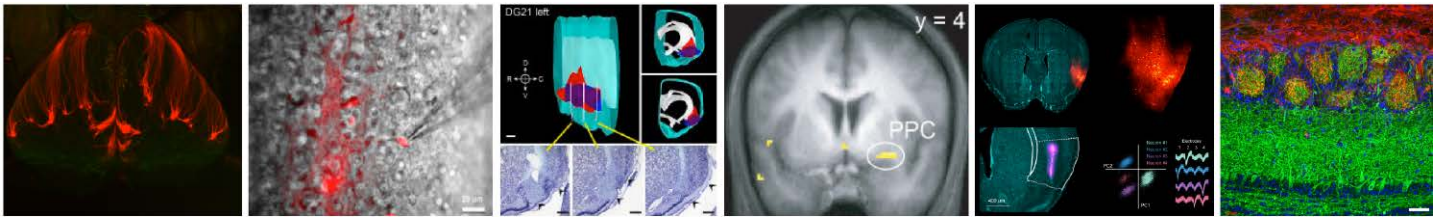
Available at Florida State University, Tallahassee, USA

program in NEUROSCIENCE
FLORIDA STATE UNIVERSITY

Predoctoral Applications Being Accepted for all Trainers. MUST be US Citizen.

Early decision, November 1; final deadline December 1, 2022

Postdoctoral opportunity can start immediately but must be appointed by September 1, 2022



Descriptions of Chemosensory Trainers:

Adam Dewan, Ph.D., ***Assistant Professor of Psychology and Neuroscience***
My research focuses on the molecular and cellular basis of sensory perception. We use a combination of genetic, optogenetic, calcium imaging and behavioral techniques to explore how olfactory perception is mapped and encoded within the brain.

Lisa Eckel, Ph.D., ***Professor of Psychology and Neuroscience***
My research explores the roles of sensory, endocrine and endocannabinoid systems in the control of ingestive behavior to better understand how dysregulation of these systems may promote eating related disorders including anorexia nervosa, binge eating and obesity.

Debra Ann Fadool, Ph.D., ***Distinguished Research Professor of Biological Science, Neuroscience and Molecular Biophysics***
My research explores regulatory signaling by ion channels, endocrine pathways, and neuromodulators that govern olfactory coding, odor detection, and energy homeostasis at the level of the olfactory bulb to understand sensory dysfunction attributed to diabetes and obesity.

Elizabeth Hammock, Ph.D., ***Associate Professor of Psychology and Neuroscience***
Attachment to a caregiver is an essential component of mammalian brain development. My research uses mouse models to explore the circuit based mechanisms of chemosensory-dependent infant attachment.

Tom Houpt, Ph.D., ***Professor of Biological Science and Neuroscience***
Animals are extremely good at learning which tastes and flavors predict nutritious foods, and which predict toxic foods to be avoided. I study the molecular mechanisms underlying food learning in conditioned taste aversion and flavor preference models.

Wen Li, Ph.D., ***Associate Professor of Psychology and Neuroscience***
The role of sensory systems in emotion encoding and its implications in emotional disorders such as anxiety and depression, using fMRI, event related potentials, autonomic physiology and sensory psychophysics. Current projects include perceptual training and category learning, fear learning and long-term fear memory, and olfactory perception and perceptual modification in anxiety disorders including post-traumatic stress disorder.

Alan C. Spector, Ph.D., ***Distinguished Research Professor of Psychology and Neuroscience***
We use behavioral procedures, coupled with experimental manipulations of the peripheral and central gustatory system, to study the functional organization of taste processing in the brain.

Douglas Storace, Ph.D., ***Assistant Professor of Biological Science and Neuroscience***
Despite the olfactory bulb being the first stage of olfactory information processing, it contributes to a surprising array of complex functions related to perception and learning. My research investigates the bulb's precise role in these high level neural computations by measuring how olfactory sensory input is transformed via bulb processing and transmitted to higher brain regions.

Paul Q. Trombley, Ph.D., ***Associate Professor of Biological Science and Neuroscience***
My research program explores cellular and molecular mechanisms that regulate neuronal excitability and the efficacy of synaptic transmission in the olfactory bulb. Our experimental approach uses primary neuronal cultures, brain slices, and patch-clamp electrophysiology, in combination with molecular biology and histological techniques, to examine modulation of ion channels, neurotransmitter receptors, and synaptic circuits.

Roberto Vincis, Ph.D., ***Assistant Professor of Biological Science and Neuroscience***
My research studies how cortical and thalamic gustatory brain regions integrate sensory and cognitive taste-related information and how they influence feeding behaviors. We use a combination of multisite electrophysiological and optical recordings, quantitative methods for data analysis, pharmacological and/or optogenetic manipulation of brain areas in concert with behavioral training.

Please contact individual CTP faculty members to discuss possibilities for joining their research team. Or contact Program Director, Dr. D.A. Fadool (phone/text 850 241-6392; dfadool@bio.fsu.edu). See also www.neuro.fsu.edu and http://opda.fsu.edu @FSUCTP

The Departments of Biological Science and Psychology at FSU are large, interdisciplinary departments with research programs in Neuroscience, Molecular Biophysics, Computational Science and Information Technology, Cognitive Science and Clinical Psychology/Neuroscience with access to advanced technical facilities including DNA, imaging, hybridoma, protein, viral, and instrumentation/engineering core facilities.