



Specialized Predoctoral and Postdoctoral NIH Chemosensory Training Program

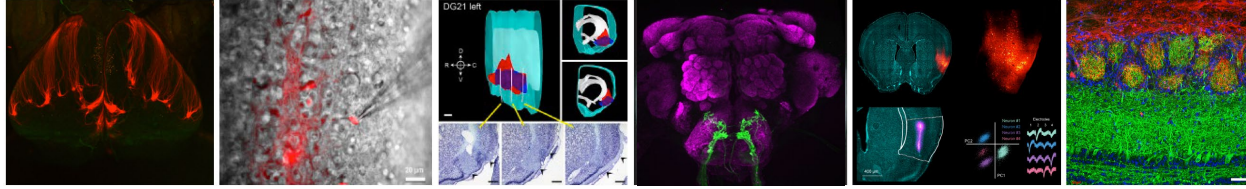
Available at Florida State University, Tallahassee, USA



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

Early decision, November 1; final deadline December 1, 2024

Postdoctoral opportunity can start immediately but must be appointed by September 1, 2024



Descriptions of Chemosensory Trainers:

Elizabeth Brown, Ph.D., Assistant Professor of Biological Science and Neuroscience

My lab investigates how taste preference for fats and sugars are encoded in the brain and modified by experience. We use a combination of behavioral, functional imaging, and molecular genetic techniques to investigate the mechanisms by which animals can discriminate between these different taste modalities and how they may be impacted by aging and neurodegenerative disease.

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. Our current hypothesis is that the olfactory bulb acts as a metabolic sensor to regulate energy homeostasis; we are targeting its activity as a means to mitigate the deleterious effects of diet-induced 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 Haupt, 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.

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.

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).

<http://opda.fsu.edu>

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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.

