CHEMICAL SENSES POSTDOCTORAL POSITIONS IN NEUROSCIENCE Florida State University

Three postdoctoral positions are available immediately for research and training in chemosensory-related areas at Florida State University (FSU). One position is supported by our NIH Chemosensory Training Program (CTP, T32), and two are funded through generous support of the FSU Vice President for Research Office.

Application review begins: September 26, 2025 (rolling until filled)

Preferred start date window: October 1 – December 1, 2025

Support duration: Up to 2 years

These positions offer training through the long-standing NIH-funded Chemosensory Training Program (CTP), now in its 31st year, and the Vice-President for Research at FSU. The three positions are to be hosted in the laboratories of Adam Dewan, Lisa Eckel, Suguru Takagi, Roberto Vincis, Liz Hammock, Doug Storace, or Debra Fadool. More details of the faculty research are described in individual faculty pages on the FSU Program in Neuroscience Website; www.neuro.fsu.edu. The program supports highly motivated individuals preparing for independent careers in chemosensory or related neuroscience research. We are a collaborative team of professors with a vested interest in the success of our trainees and fostering their knowledge/skills to be strong contributing scientists in the investigation of olfaction and taste. 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 hold a recent Ph.D. degree and should have substantive research experience as evidenced by a strong publication record including first author publication. Both CTP NIH appointees and CTP associates would be members of our NIH-sponsored training grant program and mentored by our faculty preceptor community. Trainees are expected to contribute creatively to the research program of their selected mentor(s) while engaging with the broader chemosensory community at FSU.

CTP faculty investigate chemosensory systems at the molecular, physiological, and behavioral levels.

Research projects span (but are not limited to):

- Central coding and behavioral correlates of olfactory and gustatory signals, including their integration.
- The impact of internal states such as obesity, diabetes, anxiety, or perceived threat on chemosensory processing, ingestive behaviors, and physiological responses.
- Development of tools and techniques to probe chemosensory circuits.

Experimental approaches include:

- *Electrophysiology:* slice physiology, in vivo awake recordings with high-density silicon probes, dynamic clamp
- Optical imaging: one- and two-photon calcium imaging, miniscopes, optical probes.
- Neural modulation: optogenetics, chemogenetics, pharmacology, lesions.
- *Behavior and metabolism:* ingestive behavior phenotyping, whole-animal metabolic profiling, gastric bypass models
- Cellular & molecular tools: ion channel structure/function, protein interactions, tissue culture
- *Sensory testing*: olfactometry, psychophysics, taste preference assays, genetically modified mice, central lesion/transection analysis

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 taste 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.

Training Environment and Expectations

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/

Postdocs select a mentor(s) from the CTP faculty and, in addition to conducting their primary research project, scholars participate in a range of value-added training activities. in semesterlong 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 provide access to health insurance benefits, retirement option plans, seminole savings program, and an annual training-related expense budget dependent upon postdoctoral training level. Salary is commensurate with level of experience as set by NIH institutional training grant guidelines.

Eligibility and Application Instructions

Requirements:

- Recent Ph.D. in neuroscience or a related field
- Demonstrated research experience with a strong publication record, including first-author papers
- Interest and expertise in molecular, physiological, or behavioral neuroscience, ideally spanning multiple domains
- Applicants are encouraged to directly contact preceptors that they are interested in working with prior to the submission of their formal application

TO APPLY: Submit a single PDF including:

- 1. Cover letter addressing qualifications
- 2. Paragraph describing long-term career goals
- 3. 2-page research project proposal (excluding citations), identifying potential mentor(s)
- 4. Curriculum vitae
- 5. Names, emails, and addresses of 3–4 references
- 6. One representative publication

Email to: Dr. Debra Ann Fadool, CTP Director – dfadool@bio.fsu.edu

Once received, your selected mentor will be contacted to provide a nomination letter detailing your scientific potential and proposed training plan.

Deadline: Applications will be prioritized for decision if received prior to September 26, 2025.

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