



A **postdoctoral scholar fellowship position** is open immediately in the Laboratory of **Debra Ann Fadool** at Florida State University in the area of **Sensory Nutrition** to understand how chronic metabolic imbalance/obesity impacts sensory systems. Our research has focused upon changes in diet, exercise, drug intervention, or selective genome editing to reverse the deleterious effects of metabolic imbalance on the nervous system. The laboratory is uncovering how electrical activity of the olfactory bulb (OB) can modify whole body metabolism (see recent manuscripts - <https://dfadool.neuro.fsu.edu/publications>). Our long-term research goal is to understand how olfaction and metabolism are

reciprocally interdependent - to reveal how olfactory output neurons convey metabolic information to endocrine pathways contained in the metabolic axis.

The position is available for 2 to 5 years as supported by a new award from NIH NIDDK. Salary is commensurate with level of experience and the NIH pay scale. The PI has a history of excellent job placement of trainees (<https://dfadool.neuro.fsu.edu/alumni-directory>) and has served the University in the role of Director of the Office of Postdoctoral Affairs (<https://opda.fsu.edu/>) – creating postdoctoral professional development training across campus and opportunities for postdoctoral leadership. The PI enjoys collaboration, and training postdocs in competitive grantsmanship, oral communication, laboratory management, and mentorship. We are home to a NIH Chemosensory Training Program that has been supported for over 30 years – so postdoctoral scholars also enjoy a community of expert faculty in the discipline and can participate in all activities of the program (<http://opda.fsu.edu/awards-and-fellowships/postdoctoral-fellowships-and-stipend-support/nih-chemosensory-training>).

Because our laboratory research focus is to investigate the impact of metabolic disorders (obesity/diabetes) on chemosensory function, behavior, and physiology, we use a combinatorial, multidisciplinary approach. Current experimental approaches employed in the laboratory include olfactory bulb slice electrophysiology, optogenetic and chemogenetic recording, behavioral phenotyping (computerized olfactometry/operant conditioning), ion channel structure/function studies, protein-protein interactions, whole-animal metabolic phenotyping (CLAMS), tissue culture, neural activity mapping, confocal and light sheet microscopy (tissue clearing), nanoparticle-based drug delivery, microbiome determination, and use of genetically-modified mouse models.

Minimum Qualifications: Only applicants who meet the following qualifications will be considered for the position:

- * Doctorate (MD and/or Ph.D. in medicine, biology, psychology, neuroscience, physiology, cell or molecular biology) is required.
- * Recent Ph.D.s are preferred.
- * Excellent communication skills, both oral and written.
- * Previous team working experience, leadership ability, and history of mentoring those less experienced than themselves.
- * Applicant should demonstrate published expertise in TWO of the following five areas –
 - (1) patch-clamp, slice electrophysiology, or EOG recordings,
 - (2) viral infections using stereotaxic or retroorbital surgery,
 - (3) behavioral phenotyping in mice (olfactory, metabolic, or memory),
 - (4) design and application of CRISPR genome editing, and

(5) neuroanatomical approaches and high-resolution microscopy.
Applicant should have a desire to be trained by the PI in the approaches not yet experienced.

TO BEGIN THE APPLICATION PROCESS, Applicants should submit (SINGLE PDF) a cover letter explicitly addressing their qualifications for this position and the nature of the training they wish to obtain during their postdoctoral fellowship period; a paragraph describing their long-term career goals; detailed curriculum vitae; and the names and contact information for three letter writers. Applicants may also include an example publication.

See program or laboratory websites for more detail on institutional resources -

Debra Fadool Laboratory = <http://dfadool.neuro.fsu.edu/>

Program in Neuroscience = <http://www.neuro.fsu.edu/>

Institute of Molecular Biophysics = <http://biophysics.fsu.edu/>

MRI facility = <https://mri.fsu.edu/> National High-field Magnetic Laboratory
= <https://nationalmaglab.org/>

Biological Imaging Facility = <https://bsir.bio.fsu.edu/>

Office of Postdoctoral Affairs = <http://opda.fsu.edu/>

Chemical Senses Training Program (CTP) History = <http://opda.fsu.edu/awards-and-fellowships/postdoctoral-fellowships-and-stipend-support/nih-chemosensory-training>

Research and Support Facilities Biological Sciences = <https://www.bio.fsu.edu/facilities.php>

Twitter = @FSUCTP and @dfadool