Position 1 - **Visual System Development and Degenerative Diseases** using zebrafish as a model organism. Current projects focus on two goals: To develop novel genetic models of inherited photoreceptor dystrophies and congenital diseases of the eye and retina; identify genes essential for photoreceptor subtype specification and mosaic patterning. We offer training in zebrafish genetics, confocal microscopy, biochemistry and molecular biology. Experience in embryology, genetics, molecular and cell biology or neuroscience is desirable but all qualified applicants will be considered.

Please send a cover letter with a description of research interests, C.V., representative reprints, and at least 3 letters of reference to Dr. James M. Fadool, Florida State University, 3018 King Life Sciences Building, Tallahassee, FL 32306-4295 or jfadool@bio.fsu.edu

See also http://www.bio.fsu.edu/faculty-jfadool.htm.

Position 2 - **Chemical Senses and Ion Channel Modulation** using slice electrophysiological methods in genetically altered mice and site-directed mutants in heterologous expression systems. Current research involves protein receptor tyrosine kinase modulation of ion channels in the olfactory bulb to study insulin and brain-derived neurotrophic factor signaling related to the neuropathology of diabetes, obesity, and regeneration. Projects include the function of protein-protein interactions between ion channels and adaptor proteins, intranasal drug delivery approaches, modification of olfactory axon targeting with diet or enrichment, and biophysical analysis of mitral cell firing using mouse models of disease. Applicant should demonstrate published expertise in patch-clamp electrophysiology, optical recording, behavioral phenotyping, or protein biochemistry with the desire to learn the approach not familiar.

Please send a cover letter with a description of research interests, C.V., representative pdf reprints, and the names of 3 referees to Dr. Debra Ann Fadool at dfadool@neuro.fsu.edu.

See program http://www.neuro.fsu.edu/ or laboratory website http://www.neuro.fsu.edu/faculty/dfadool/ for more details.