**ISOT Symposium – June 25, 2024**

40. *A broader view of obesity and the chemical senses*

Silfurberg B

**Presentation Schedule**

3:30 - 3:33 pm  
Organizer: Debra Ann Fadool *(Florida State University, Tallahassee, FL, USA)*

3:33 - 3:55 pm  
Dana Small *(Montreal Neurological Institute, McGill University, Montreal, Canada)*  
Odour-imagery ability is linked to food craving, intake, and adiposity change in humans

3:55 - 4:20 pm  
Wenfei Han *(Max Planck Institute for Biological Cybernetics, Tübingen, Germany)*  
Gut-brain pathways for reward and aversion

4:20 - 4:35 pm  
Ashley Loeven *(Florida State University, Tallahassee, FL, USA)*  
A reduction in gut microbiome evenness and diversity may mediate changes in metabolism regulated by the olfactory system and perturbed by fatty diet

4:35 - 5 pm  
Marc Tittgemeyer *(Max Planck Institute for Metabolism Research, Cologne, Germany)*  
GLP-1 as a signalling molecule underlying modulation of sensory learning and perception

**Helpful Literature Resources**


Training, Research, and Position Opportunities

The McGill Brain and Metabolism Initiative (BMI) is seeking to recruit a junior tenure track faculty member to help build a program in brain-body science. The ideal candidate will work in pre-clinical models and focus on one or more brain-body axis with relevance for promoting new insights into adaptive behavior and neurological, metabolic or mental health. Interest and experience with translational and reverse translational collaborations will be an asset. If interested, please send CV and cover letter to dana.small@mcgill.ca.

Chemosensory Training Program (CTP) has training openings for two postdoctoral scholars where trainees have the opportunity to select a home laboratory across 9 postdoctoral trainers expertise ranging 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. This NIH-supported program has been operating for 30 years to provide professional development in the field of chemical senses, has achieved strong job placement of its trainees, and offers internship experiences with alumni in industry, academia, and government. See website for more information and application process; feel free to see dfadool@bio.fsu.edu at the

New PhD students and postdoctoral trainees are being sought in the **Department of Body-Brain Cybernetics** at Max Planck Institute for Biology Cybernetics. Please see Wenfei Han (wenfei.han@tuebingen.mpg.de) at the conference for more information and if you would like to be considered for this training opportunity at the Max Planck in Tuebingen, Germany.

A **postdoctoral position** is available on an NIH-supported mechanism in the Chemical Senses at **Florida State University (FSU)** in the laboratory of Debra Ann Fadool to investigate the neuromodulation of ion channels and the disruption of olfactory sensory signaling and circuitry attributed to diabetes and obesity. We are seeking a creative, self-motivated individual who has strong experimental experiences and the drive to pursue challenging, rigorous studies in the chemical senses. Experimental approaches employed in the laboratory include slice electrophysiology, whole-nerve recording, optogenetic and chemogenetic recording, behavioral phenotyping, ion channel structure/function studies, viral track tracing, protein-protein interactions, whole-animal metabolic phenotyping, tissue culture, psychophysical studies of sensory-mediated behaviors, confocal microscopy, olfactometry, and genetically-modified mouse models. We are seeking an individual that has a background in membrane biophysics and preferred experience in slice electrophysiology, stereotaxic surgery, gut-brain interactions, obesity/metabolism, neuroendocrinology, and/or experimental use of cre-dependent mouse models. This individual would also have the opportunity to collaborate on studies exploring GLP-1 agonist effects during perinatal development and changes in related olfactory function. For more information, or to submit an application - [https://neurojobs.sfn.org/job/37859/postdoctoral-fellowship/](https://neurojobs.sfn.org/job/37859/postdoctoral-fellowship/)

A **postdoctoral training opportunity** or permanent employment in **obesity clinical trial research/operations** within **academia, government, or industry** is being sought. The PhD candidate has preclinical obesity research experience using molecular, histological, and behavioral approaches at the intersection of metabolic disease and neuroscience. Experienced in collaborative research, manuscript preparation, and protocol development, the candidate can work independently and as part of a team. Passionate about science communication and advancing treatments and understanding of obesity, the candidate is engaged in online courses on Good Clinical Practice, ICH, and clinical trial operations to supplement preclinical experience. For more information on the PhD candidate that is seeking such employment, please contact Ashley Loeven for a copy of her resume - [aml18bu@fsu.edu](mailto:aml18bu@fsu.edu)