Open Position(s): Pre-Doctoral Research Fellow
Townsend Lab (Neurobiology & Energy Balance)
University of Maine
School of Biology and Ecology
& Graduate School of Biomedical Science and Engineering (GSBSE)

Start Date: Negotiable and ASAP (job ad will be posted until the position is filled; ideally Sept 2019 or Jan 2020)

Job Description: The Townsend Lab combines mouse-models (transgenics, metabolic physiology), *in vitro* cell culture work, neurobiology and molecular biology in order to investigate how the brain regulates energy balance, communicates with peripheral metabolic organs, and undergoes adult neural plasticity. We are looking for a doctoral student researcher for a 4-5 year commitment to join a project in the lab that is funded by an NSF-CAREER. The student would apply via UMaine's Graduate School for Biomedical Science and Engineering (GSBSE) for a Ph.D. This work investigates adult neural stem cells and adult neural plasticity, particularly in the hypothalamus as it relates to the regulation of energy balance. Collaborative work includes shared mouse models with David Breault's laboratory at Harvard Medical School.

The person hired for this position will be expected to work full-time (grad school is typically 40-50hrs/wk) with 12 days of paid sick/vacation time per year (above the official University holidays), which become available after a 3mo probationary period. Pay is based on NIH rates for predoctoral fellows or the program guidelines (GSBSE) and based on prior experience. Attendance at weekly lab meetings is mandatory, as well as a commitment and strong interest in being a member of a laboratory team, including mentoring Masters and undergraduate students in the lab.

Required qualifications:
- BA/BS in Neuroscience, Biomedical Research, Molecular and Cellular Biology, Physiology, or a Related Field
- Relevant research experience in neurobiology (strongly encouraged: energy balance, molecular biology techniques)
- Strong letters of reference
- Demonstrated communication skills
- Interest in teaching undergraduate courses
- Demonstrated background in mammalian model (mouse work strongly encouraged: tissue microscopy, peripheral nerves)
- Excellent professionalism and interpersonal skills; courteous lab behavior
- Excellent record keeping, organization, data integrity, and data management skills
- Commitment to responsible conduct of research, research ethics and integrity
- Strong interest and experience in working with graduate and undergraduate students on research projects

- Strong communication skills (verbal, written); ability to work independently and as part of a collaborative and interdisciplinary team
- Self-driven to execute projects in the laboratory; maintenance of flexibility and creativity in a dynamic environment
- Strong work ethic, motivated to succeed; diligent and careful labwork

Preferred qualifications:
- Publication record in related field(s)
- Passion for and commitment to our research focus
- Leadership, mentoring and supervisory experience in a laboratory setting
- Laboratory experience in molecular and cell biology; biomedical focus
- Experience with mouse husbandry, mating, genotyping, metabolic physiology
- Experience with immunostaining, microscopy, qPCR
- Ability to troubleshoot, optimize protocols, read and analyze scientific literature
- Experience in grant writing
- Experience with bioinformatics, biostatistics (optional); competency in Excel, GraphPad Prism (or similar software), Image J/FIJI, and image analysis software

Interested candidates should submit:
- **a current CV**
- **a cover letter describing their interest in the position, relevant background and experience, and the names/contact for 3 professional references**
- **university transcripts**
- **Send as PDFs via email to kristy.townsend@maine.edu**
- **More information at ktownsendlab.com**