

Postdoctoral Fellow in Eating Behavior, Neuromodulation, and Neuroimaging

The Holsen Lab in the Departments of Medicine and Psychiatry at Brigham and Women's Hospital/Harvard Medical School is seeking a full-time postdoctoral fellow with a strong background in clinical neuroscience and eating behavior. This is an ideal position for an individual who earned a PhD in a neuroimaging laboratory and is interested in gaining experience in a lab that conducts neuroimaging but also integrates neuromodulation techniques.

Our laboratory focus is on understanding factors that drive appetite, mood-related eating behaviors, and weight change, with a broad goal of ameliorating negative health outcomes and chronic diseases associated with disordered eating. In our work, we explore these themes using multimodal neuroimaging in combination with neuromodulation, neuroendocrine measurements, integrative physiology, and behavioral assessments. We work in close collaboration with colleagues in psychiatry, nutrition, endocrinology, and radiology/functional neuroimaging. You can find out more about our lab [here](https://holsenlab.bwh.harvard.edu/) or at <https://holsenlab.bwh.harvard.edu/>.

The Postdoctoral Fellow will contribute to our work in clinical neuroscience related to reward processing and appetite, assessed via neuromodulation (transcranial magnetic stimulation, TMS) and neuroimaging (fMRI, rsfMRI). Mentoring will be provided primarily by PI Dr. Laura Holsen (Brigham and Women's Hospital), along with co-mentorship from Drs. Mark Halko (McLean Hospital) and Roscoe Brady (Beth Israel Deaconess Medical Center). Under their mentorship, the Postdoctoral Fellow will carry out a broad range of neuroimaging, neuromodulation, and data analytic research activities and procedures as indicated below.

We are looking for someone to join the lab whose expertise is in fMRI neuroimaging but is interested in other modalities, and who is naturally organized, confident with technology and coding, and detail-oriented, and can manage several projects simultaneously and train/mentor research assistants.

Fostering diversity in the scientific research workforce is a key goal of Drs. Holsen, Halko, and Brady. Thus, additional support and mentorship are available for individuals from diverse backgrounds, including those from groups demonstrated to be underrepresented in the biomedical, behavioral, clinical, and social sciences.

PRINCIPAL DUTIES AND RESPONSIBILITIES:

- fMRI and MRI analyses in a lab focused on the neurobiology of eating behavior
- Running 3T MRI scanner consoles
- Integration of MRI, fMRI, and rsfMRI data in the context of TMS
- Working with pre-med or pre-graduate school research assistants and training them on data processing and analysis
- Data processing, analysis, and writing with opportunity for manuscript authorship
- Assisting with grant writing and manuscript preparation including generating graphs and reports
- Working with undergraduate interns and helping to facilitate lab journal club meetings

SKILLS/ABILITIES/COMPETENCIES REQUIRED:

- Experience running neuroimaging studies
- Extensive experience in statistics, fMRI analysis (task and resting state), and coding (MATLAB, Python, R), and ability to work with analysis packages such as CONN, SPM, fMRIPrep
- Experience running an MRI console and facilitating human fMRI study visits
- Must have very strong written and verbal communication skills
- Must be driven to work productively under minimal supervision

- Must be proficient with computers and databases, and be able to troubleshoot and problem-solve independently
- Capable of being friendly and communicative with labmates and study participants, and assertive when confronted with obstacles

EDUCATION:

Ph.D. or M.D./Ph.D. (post residency) in neuroscience (affective, nutritional, or cognitive), biostatistics, engineering, psychology, or related fields

EXPERIENCE:

Postdoctoral research fellow position requires a Ph.D. from a neuroimaging laboratory.

EEO STATEMENT:

Brigham and Women's Hospital is an Equal Opportunity Employer. By embracing diverse skills, perspectives and ideas, we choose to lead. Applications from individuals underrepresented in medicine, protected veterans, and individuals with disabilities are strongly encouraged.

TO APPLY:

Applications should be emailed to Laura Holsen (lholsen@bwh.harvard.edu) and should consist of the following:

- Cover Letter
- Curriculum Vitae
- Statement of Purpose (1-2 pages)
- Names and contact information for 3 recommenders
- Copies of 1-2 representative publications or working papers