# Postdoctoral Research Fellow – Neuroinflammation and Alcohol-Related Liver–Gut–Brain Axis

Location: Beth Israel Deaconess Medical Center, Harvard Medical School, Boston, MA

Start Date: Immediate

Position Type: Full-time, Postdoctoral Research Fellow

### **Position Summary**

At the research laboratory of **Prof. Gyongyi Szabo, MD, PhD**, we are seeking a highly motivated and talented Postdoctoral Research Fellow to join our multidisciplinary team investigating the mechanisms linking neuroinflammation and the alcohol-related effects on the liver–gut axis. The successful candidate will contribute to ongoing projects that explore the molecular pathways and specific cell populations mediating multi-organ communication, in the context of alcohol exposure and related pathologies in relevant neuroinflammation models (Aging, Alzheimer's disease).

This position offers a unique opportunity to work in a collaborative, cutting-edge research environment with access to advanced technologies and cross-disciplinary expertise in neuroscience and immunology. At the Szabo lab (<a href="https://research.bidmc.org/gyongyi-szabo">https://research.bidmc.org/gyongyi-szabo</a>), our translational research projects include in vitro experiments and cell culture systems, in vivo mouse models, patient samples, and Omics data set analyses.

# Responsibilities

- Conduct independent and collaborative research
- Design and execute experiments in vitro and in vivo mouse models
- Analyze and interpret data; prepare manuscripts and presentations for publication and conferences.
- Mentor graduate and undergraduate trainees as appropriate.
- Collaborate closely with other investigators within and outside the lab.

#### Qualifications

- Ph.D. in Neuroscience, Immunology, Physiology, Biomedical Sciences, or a related field.
- Demonstrated experience, with minimum one-year post-doctoral experience, in neuroinflammation, neuroimmunology, or liver-gut-brain axis interactions.
- Background in alcohol-related disease models of mouse, behavior assays, is strongly preferred
- Strong record of peer-reviewed publications.
- Excellent communication, organizational, and teamwork skills.

#### **Preferred Skills**

 Experience with alcohol use-related mouse models of neuroinflammation (Aging, Alzheimer's disease). • Expertise in flow cytometry, confocal microscopy, neuron and glia cells, iPSC cell-culture and differentiation systems, molecular assays, CRISPR, RNA-seq analysis, Extracellular vesicles, and ability to conduct bioinformatics analyses with the help of statisticians.

## **Compensation and Benefits**

Competitive salary and benefits will be provided commensurate with NIH guidelines and institutional policies.

## **Application Instructions**

Interested candidates should submit the following materials as a single PDF to szabolab@bidmc.harvard.edu:

- Cover letter describing research interests and relevant experience
- Curriculum vitae
- Contact information for three professional references

Review of applications will begin immediately and continue until the position is filled.

# **Equal Opportunity Statement**

BIDMC is an Equal Opportunity Employer and encourages applications from individuals of diverse backgrounds and experiences.