Positions: **Postdoctoral Fellow**

Expertise sought: **Human iPSC-Derived Microglia, Brain Organoids, Neuroinflammation, and HIV Research**

Duration: Up to at least 5 Years, based on progress and productivity

Play Scale: **NIH Recommended**

Contact: mxt307@jefferson.edu (Thomas Jefferson University, Philadelphia)

A highly motivated **Postdoctoral Fellow** is sought to join the laboratory investigating the molecular and cellular mechanisms underlying **HIV persistence, neuroinflammation, accelerated aging, and neurodegeneration**. The laboratory utilizes cutting-edge **human induced pluripotent stem cell (iPSC)-derived microglia, cerebral organoids, and advanced genomic approaches** to identify novel therapeutic targets and develop innovative interventions for HIV-associated and age-related neurological disorders.
The successful candidates will participate in exciting multidisciplinary projects focused on understanding how HIV infection, chronic inflammation, and drugs of abuse alter brain function and contribute to neurocognitive impairment, neurovascular dysfunction, and accelerated aging.

Application Materials: Cover letter describing research interests and career goals; 2) Curriculum vitae (CV); 3) Names and contact information for three references; 4) Representative publications.
NOTE: Candidates with experience in **human iPSC-derived microglia, brain organoids, neuroinflammation, HIV biology, single-cell genomics** are particularly encouraged to apply.

Research experience (post-Doc Fellow) in the following areas:

- Human iPSC-derived microglia and other brain cells
- Generation and characterization of cerebral and brain organoids
- HIV infection and persistence in the central nervous system
- Neuroinflammation and inflammasome signaling
- Aging and age-associated neurodegenerative mechanisms
- HIV infection and latency models
- CRISPR/Cas genome engineering
- Single-cell RNA sequencing (scRNA-seq)
- Other common Molecular and cellular biology techniques

Responsibilities (post-Doc Fellow):

- Have a great interest in research and learning
- Come everyday
- Design and conduct independent research projects
- Mentor students, junior and other laboratory personnel
- Analyze and interpret experimental data
- Prepare manuscripts
- Present findings at scientific meetings
- Involved in reagent ordering, storage, and organization.
- Assist with data collection and laboratory organization, and maintain detailed laboratory records
- Provide a very brief daily report in the evening about the lab activity of the day and planning for the next day

Qualifications (post-Doc Fellow):

- Ph.D. in Neuroscience, Cell Biology, Molecular Biology, Immunology, Virology, Stem Cell Biology, Biomedical Sciences, or a related field. The candidate should have strong publication record demonstrating research productivity.