



The Department of Neurosurgery is seeking a highly motivated and dedicated postdoctoral fellow to join our research team focused on translational neuroimaging research studies. This multi-year position is supported by an NIH funded research project. The successful candidate will work closely with a multidisciplinary team of researchers and clinicians to investigate relationships between advanced multi-parametric brain and spinal cord magnetic resonance imaging (MRI) and functional (motor, sensory, and pain) correlates within a clinical population. This collaborative project will be guided by faculty of the Thomas Jefferson University (TJU). She/He will also have the opportunity to explore his/her own independent scientific interest's in brain and spine imaging on a 3T Siemens Prisma scanner. Recent Ph.D. graduates in Physics, Biomedical, Computer and/or Electrical engineering or related fields with MRI experience are encouraged to apply. The ideal candidate should have a strong background in neuroscience, biomedical engineering, biophysics, or a related field with expertise in neuroimaging, MR imaging analysis, statistical analysis, and a passion for translational research. Some prior experience with clinical research is expected. This position provides an intellectually stimulating and collaborative neuroscience and biomedical engineering community with ample opportunities for career development and scientific growth. The post-doctoral fellow will work closely with Dr. Mahdi Alizadeh, Ph.D and other investigators.

**Interested candidates please contact:**

Mahdi Alizadeh, Ph.D. ([mahdi.alizadeh.2@jefferson.edu](mailto:mahdi.alizadeh.2@jefferson.edu))

**Characteristics of a postdoctoral appointment:**

It is expected that postdocs at TJU, with the assistance of their supervisor, will:

- Transition to career independence through the development of professional skills that enable the postdoc to actively pursue a career of his/her own choosing.
- Be supervised by at least one senior scholar who actively promotes the postdoc's professional development.
- Establish an individual development plan (IDP) that incorporates equally the postdoc's career and training goals and the mentor's research goals.

- Pursue basic, clinical, or translational projects so long as effort is focused primarily on research.
- Publish results of the postdoc's research and scholarship during their appointment.
- The postdoctoral appointment is temporary by nature, the aggregate amount of time spent as a postdoc is recommended to not exceed five years (not including family medical leave or maternity/paternity leave).
- As postdocs are important members of the host institution's community, appropriate levels of compensation, health care, and other benefits commensurate with their essential status should be afforded, independent of the postdoc's source of funding.

### **Primary Functions**

- Plan, design and execute complex research studies, procedures and protocols.
- Participate in discovery projects.
- Coordinate research study activities; lead and manage projects.
- Oversee organization, synthesis and analysis of data and findings.
- Prepare scientific reports, outcome findings and scientific manuscripts.
- Participate in meetings with principle investigator and research staff in which you will evaluate/interpret the validity of data, develop methodologies, and design and evaluate lab procedures.
- Maintain supplies, may require negotiation with vendors, and track purchase orders.
- May oversee the work of laboratory personnel including training and development as well as daily work direction, delegation and establishing priorities.
- MRI data acquisition and post processing

### **Knowledge – Skills – Abilities**

Required knowledge: mathematics, statistics, documentation, records management, data utilization, complex problem solving, critical thinking, resource management, and writing skills

Skills and abilities: Computational and Programming skills in Python and Matlab, MR physics and neuroimaging, and manuscript preparation.

### **Application Instructions:**

Please use the link below to access our career page

<https://jeffersonhealth.wd5.myworkdayjobs.com/en-US/ThomasJeffersonExternal>

Then search **JR\_9308059**

