Postdoctoral Fellow

Job ID
39847

Location
Columbia

Full/Part Time
Full-Time

Job Description

Our lab has a focus on ultra-high field (i.e., 7T) magnetic resonance imaging (MRI) and spectroscopy (MRS) of the human brain. One of our projects is the nation-wide, NIH funded “Adult Aging Brain Connectome” (AABC). The AABC is a continuation of the recently completed human connectome project on aging, and an ongoing project that adds 7T MRS to the dataset. The AABC will collect extensive imaging, health, behavioral, socioeconomic, and other data on over 1000 participants at several time points. In these projects, we will acquire and analyze 7T MRS data and maintain the state-of-the art 7T acquisition protocol. This work will take place at the beautiful new NextGen imaging facility at the University of Missouri. We seek a candidate who has image processing expertise, interest in MRS, and a goal to contribute new ideas and directions to the project and research field.

This work involves expertise in the fields of magnetic resonance imaging (MRI) and spectroscopy (MRS), image analysis, and database management. It will also involve writing procedures, manuscripts, and sections of grant proposals.

Position Responsibilities

- MRS data analysis, which will include minimal MRI analysis and critical analysis of data quality
- Receive data from other sites and post results for shared use by the consortium
- 7T MRS and 3T MRI data acquisition in human subjects
- Data storage and organization in databases, preparation of summary of results, preparation of manuscript and presentations
- Adhere to protocols and policies established by the consortium
- Maintain accurate records of research activity
- Adhere to safety protocols and maintain lab in clean and high-functioning condition
- Mentoring other students
- Pursuit of research and other scholarly activities

Qualifications
Required Qualifications

- PhD in physics, biophysics, biomedical engineering, computer science, mathematics or similar field, or MD/PhD
- Experience in image analysis, ideally structural MRI analysis and software programming
- Track record of scientific productivity such as publications

Preferred Qualifications

- Experience acquiring MRI, or ideally MRS data from human subjects
- Experience in MRI technology, MR data analysis and Matlab programming
- Experience acquiring and analyzing MR spectroscopy data
- Research experience in analyzing data obtained with human connectome imaging protocols
- Capable of co-registering MRI data with MRS data acquired from same regions of interest
- Works well in collaborative teams and able to manage an independent research project
- Good communication skills: patient and considerate for working with the elderly

Application Materials

Be prepared to upload a CV/resume and cover letter.

Benefit Eligibility

This position is eligible for University benefits. The University offers a comprehensive benefits package, including medical, dental and vision plans, retirement, and educational fee discounts. For additional information on University benefits, please visit the Faculty & Staff Benefits website at http://www.umsystem.edu/totalrewards/benefits

Diversity Commitment

The University of Missouri is fully committed to achieving the goal of a diverse and inclusive academic community of faculty, staff and students. We seek individuals who are committed to this goal and our core campus values of respect, responsibility, discovery and excellence.

Equal Employment Opportunity

Equal Opportunity is and shall be provided for all employees and applicants for employment on the basis of their demonstrated ability and competence without unlawful discrimination on the basis of their race, color, national origin, ancestry, religion, sex, pregnancy, sexual orientation, gender identity, gender expression, age, disability, protected veteran status, or any other status protected by applicable state or federal law. This policy shall not be interpreted in such a manner as to violate the legal rights of religious organizations or the recruiting rights of military organizations associated with the Armed Forces or the Department of Homeland Security of the United States of America. For more information, call the Vice Chancellor of Human Resource Services/Affirmative Action officer at 573-882-4256.

To request ADA accommodations, please call the Disability Inclusion and ADA Compliance Manager at 573-884-7278.

EEO IS THE LAW

To read more about Equal Employment Opportunity (EEO) please use the following links:

- EEO is the Law English Version
- EEO is the Law Spanish Version
- EEO is the Law Chinese Version

Vaccination Statement
After careful consideration of COVID-19 virus trends and the overwhelming evidence of COVID-19 vaccine safety and effectiveness, the School of Medicine, along with MU Health Care, the Sinclair School of Nursing and the School of Health Professions, recently announced the decision to require COVID-19 vaccinations by Oct. 1, 2021, for all employees, unless granted a medical or religious exemption.

All new hires will be required to submit proof of vaccination prior to your start date. If you would like to request a medical or religious exemption, you must do so upon acceptance of employment so our team has time to review prior to your scheduled start date. You will not be allowed to begin work until you have submitted proof of vaccination or received an approved medical or religious exemption. Thank you for helping us to create the safest environment possible for our colleagues, students and our patients by protecting yourself and others through COVID-19 vaccination.