Postdoctoral Fellowships in MR Spectroscopy Research



Postdoctoral fellowships in magnetic resonance spectroscopy (MRS) research are available in the MRI Research Institute (MRIRI) of the Department of Radiology at Weill Cornell Medicine (WCM) in New York City (NYC). Candidates will focus on developing and applying advanced methodologies for in vivo MRS of the human brain. Potential research projects include:

- Novel pulse sequence and data acquisition design
- Data processing/software tool development
- Novel incorporation of statistics into MRS data analysis
- Applications of advanced MRS in neurological, neuropsychiatric, and neuro-oncological diseases and disorders

Successful candidates will work under the direction of Dr. Mark Mikkelsen.

The recently formed MRIRI is a leading center in developing innovative MRI/MRS methodologies and their applications in biomedicine. Research interests at MRIRI in terms of clinical applications cover a wide range of diseases, including, but not limited to, neurological, cardiovascular, and oncological diseases and disorders. WCM, located on the Upper East Side of Manhattan, has a vibrant biomedical research community and is affiliated with NewYork-Presbyterian Hospital. It also has strong ties with the main Cornell University campus in Ithaca, NY and the Cornell Tech campus in NYC.

Candidates must have obtained a Ph.D. or equivalent in physics, biomedical engineering, computer science, neuroscience, psychology, or related fields at the time of hiring. Though not required, a background in MR physics/imaging and experience with pulse sequence programming are desirable. Experience with computer programming (C/C++, MATLAB, Python, R, etc.) and neuroimaging analysis (AFNI, FreeSurfer, FSL, SPM, etc.) are also desirable but not required. Candidates should have effective communication skills, both verbal and written. They will be expected to participate in both independent and collaborative projects. Attention to detail, organizational capability, and the ability to handle multiple concurrent tasks are all essential. A track record of peer-reviewed publications is desirable.

Salary is commensurate with experience. Positions will be for one year, with the possibility of renewal.

Dr. Mikkelsen will support candidates in pursuing foundation- and government-funded training grants and will provide exposure to numerous training opportunities in clinical and translational neuroimaging research methods.

Interested candidates should email a brief statement of research interests, career goals, and a CV to Dr. Mikkelsen (mam4041@med.cornell.edu).

Diversity is one of WCM's core values and is essential to achieving excellence in patient care, research, and education. We welcome applications from candidates who share our commitment to fostering a culture of fairness, equity, and belonging. WCM is an Equal Employment Opportunity Employer, providing equal employment opportunities to all qualified applicants without regard to race, sex, sexual orientation, gender identity, national origin, color, age, religion, protected veteran or disability status, or genetic information.

We strongly encourage applications from groups that are underrepresented in biomedicine and MRI research, including, but not limited to, gender and ethnic minorities and individuals with disabilities or from disadvantaged backgrounds.