The Department of Radiological Sciences at UCLA is seeking a highly motivated researcher to join the Brain Tumor Imaging Lab as a Postdoctoral Scholar. The successful candidate will work closely with Dr. Jingwen Yao and a cross-disciplinary team to develop and translate novel MRI techniques for brain tumors, movement disorders, epilepsy, and other brain diseases. The research will involve different aspects of biomarker development, including image acquisition and reconstruction, post-processing, quantitative image analysis, pre-clinical investigation, and clinical translation and evaluation.

As a member of the lab, the candidate will participate in studies using multimodal neuroimaging techniques (CEST, QSM, DTI, fMRI, etc.) to explore the physiological and pathological processes involved in neurological disorders. Potential projects include tumor-associated macrophage imaging in glioma, metabolite and iron quantification in Huntington's disease, advanced imaging techniques for personalized targeting of DBS/MRgFUS in movement disorders, epilepsy, and chronic pain.

The UCLA Radiology Department offers access to 40+ clinical MRI scanners across various imaging centers/clinics in the greater Los Angeles region. At the main campus of UCLA, there are 7 clinical/research Siemens scanners at 3T and 1.5T, one clinical GE 3T scanner, as well as one 3T Siemens scanner exclusively for research purposes. In addition, a Siemens MR-PET scanner for clinical/research and a small animal Bruker 3T scanner with high gradient performance will be installed in late 2023. With strong interdisciplinary links between Radiology and various campus and clinical departments, the lab provides a unique opportunity to work with a diverse group of engineers, basic scientists, radiologists, neurologists, and neurosurgeons.

Founded in 1919, UCLA is one of the top public universities in the United States. It is renowned for academic excellence, research achievements, and strong commitment to community service. The campus is located in Los Angeles, providing easy access to iconic destinations such as Hollywood, Beverly Hills, and Malibu beaches. UCLA also boasts a world-renowned health system, including four hospitals and more than 200 medical practices, which ranked #5 for the top hospitals in the US in 2022.

Key Responsibilities:

- Lead independent research projects and support collaborative projects
- Design, implement, and test novel MRI sequences and analysis methods for research and clinical translation
- Author scientific publications and grant proposals
- Supervise trainees and maintain research infrastructure
- Comply with UCLA guidelines for lab safety, animal research, and human subject research
- Develop and update standard operating procedures and best practices for research projects

- Communicate effectively with team members, present findings and progress both verbally and in writing

Qualifications:

- Ph.D. in biomedical physics, biomedical engineering, neuroscience, computer science, or related discipline
- Experience with operation of preclinical and/or clinical MRI systems
- Prior experiences and publications on MRI research
- Proficiency in software programming (MATLAB, C++, Python, etc.)
- Experience of sequence development on Bruker and/or Siemens scanners preferred but not required

Document requirements:

1. Updated CV
2. Statement of research (previous research experience and future research interest)
3. A reprint of two representative publications
4. Statement on contributions to equity, diversity, and inclusion (EDI)
5. Contact information for 3 references. References will only be contacted for final candidates.

This position is available with a competitive salary and full fringe benefits.

If you have any questions, please contact jingwenyao@mednet.ucla.edu with "Postdoctoral Position" in the subject line.

Cultural North Star. The shared values of the DGSOM are expressed in the Cultural North Star, which was developed by members of our community and affirms our unswerving commitment to doing what's right, making things better, and being kind. These are the standards to which we hold ourselves, and one another. Please read more about this important DGSOM program at https://medschool.ucla.edu/cultural-north-star.

The University of California is an Equal Opportunity/Affirmative Action Employer. All qualified applicants will receive consideration for employment without regard to race, color, religion, sex, national origin, sexual orientation, gender identity, disability, age or protected veteran status. For the complete University of California Nondiscrimination and affirmative action policy see: UC Nondiscrimination & Affirmative Action Policy.