Brain Tumor Imaging Laboratory Project Scientist

University of California Los Angeles

Requisition Number: JPF08415

The Brain Tumor Imaging Lab at UCLA is seeking motivated, exceptional Project Scientist with an established background in brain MRI and bioengineering research as well as proficiency in algorithm development, image and signal processing, and statistical analysis with an interest in clinical validation and application. Current projects involve the analysis of multimodal MRI data of brain tumor and movement disorder patients aimed at improving diagnostic accuracy, treatment planning, and predicting treatment response and patient outcome. The ideal candidate will have experience in using existing neuroimaging and signal processing tools and implementing in-house data processing toolboxes and pipeline with an interest in developing biomarkers for brain tumors, movement disorders, and other neurological diseases.

Responsibilities:

• Lead independent research projects and support collaborative projects

• Process multimodal data: structural MRI, fMRI, CEST, diffusion MRI, perfusion MRI, EEG, MEG, etc.

• Design, implement, and test novel MRI sequences and reconstruction algorithms

• Design, implement, and test novel post-processing methods and prediction models

• 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

About THE LAB:

The incumbent 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 involves 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 and epilepsy.

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.

Apply Link: https://apptrkr.com/4163336
Contact: mailto:JingwenYao@mednet.ucla.edu
Subject Heading: BTIL Project Scientist

To Apply: Email (1) an updated CV, (2) statement of research, (3) statement on contributions to equity, diversity, and inclusion (EDI), and (4) contact information for 3 references at https://apptrkr.com/4163336. Only applicants that apply through this website will be considered.

This appointment is subject to amendment based on any changes to applicable collective bargaining agreements.

The posted UC salary scales (https://www.ucop.edu/academic-personnel-programs/_files/2022-23/july-2022-salary-scales/t37-b.pdf) set the minimum pay determined by rank and step at appointment. See Table 37B. The salary range for this position is $68,400 - $180,200

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 unwavering 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.

To apply, please visit: https://apptrkr.com/4163336
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