Post-Doctoral Research Fellows and Research Staff in Advanced Musculoskeletal MR Imaging and Image Processing

Department of Biomedical Engineering, Lerner Research Institute
Cleveland Clinic, Cleveland, Ohio

The Lerner Research Institute, the Imaging Institute, and the Institute of Orthopaedics and Rheumatology at the Cleveland Clinic, is forming an exciting new Program in Advanced Musculoskeletal Imaging (PAMI). PAMI will build upon nationally top-ranked clinical care and research in orthopaedics and rheumatology and outstanding resources for imaging research already available at Cleveland Clinic, and new collaborations across institutes within Cleveland Clinic and with investigators around the world. The mission of PAMI is to advance musculoskeletal imaging, in particular advanced quantitative imaging, in healthcare for orthopaedics and rheumatology through technology development, translational research and education.

PAMI is looking for highly-motivated candidates for two post-doctoral research fellow/research staff positions in the field of musculoskeletal MR imaging and image processing. The research projects include development of novel pulse sequences of in vivo MSK MRI, image processing and analysis, and their clinical applications to musculoskeletal diseases. In particular, the sequence development will include developing quantitative MSK imaging and advanced accelerated MSK imaging techniques. The image processing projects will develop advanced MSK imaging processing tools using classical techniques and cutting edge deep learning techniques. Successful candidates will join a multidisciplinary and dynamic team with rich resources and strong support for a successful career development, and will have access to research dedicated MR systems (Siemens whole body 3T and 7T), and other MR, PET-MR systems across different campus at CCF, as well as large outcome databases for patients in orthopaedics and rheumatology.

Requirements: A PhD degree in physics, biomedical engineering, electrical engineering, computer science, biochemistry or related field; background in MRI or NMR; strong programming skills with C, C++ Matlab; strong communication skills in written and verbal English. Experience in MR pulse sequence programming or advanced image processing algorithm development is a plus.

Applicants should email a CV, along with a brief letter outlining their research background and interests and a list of two to three references to Dr. Xiaojuan Li: lix6@ccf.org

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