The University of Minnesota’s Center for Magnetic Resonance Research (CMRR) at the Department of Radiology has an opening for a Post-Doc or Research Associate in High and Ultrahigh Field Musculoskeletal Imaging for a 4-year period with the earliest starting date of October 1, 2023.

Duties and Responsibilities:

We are currently seeking a Post Doc or Research Associate for Musculoskeletal/Orthopedic research projects. Research topics will include: i) special focus of our program is MSK imaging at 7 Tesla, ii) qualitative and quantitative imaging of cartilage, meniscus, bone pathology and repair, and iii) development and application of sequences capable of capturing the ultrashort T2-components in the musculoskeletal system (e.g., bone, meniscus). The research activities include data acquisition and post-processing utilizing different MRI equipment available at CMRR.

The work will be conducted on a clinical FDA approved 3T, 7T and 10.5T human systems. Higher level data post-processing skills utilizing AI methods is a bonus. In addition, CMRR offers extensive facilities and experience in developing new sequences, hardware, coils and RF modeling to support the goals of this project. It is expected that the applicant will author manuscripts in peer-reviewed journals and abstracts for presentation at conferences. In order to continue support for this position into the future, additional responsibilities will include active participation in grant preparation.

Requirements for this position are:

**Essential Experience:**

- PhD in Engineering, Computer Science, MR Physics, or related field
- Publications in peer-reviewed journals
- Image post-processing in Matlab and other software packages, such as Python

**Preferred Experience:**

- MR pulse sequence development
- MR data post processing, statistical data analysis
- Interest in MR hardware development
- Expertise in AI for image reconstruction, segmentation, data analysis
- Experience in Musculoskeletal Imaging

Questions, please contact: Jutta Ellermann (eller001@umn.edu) or Greg Metzger (gmetzger@umn.edu)

To Apply for the position, click on this link. [https://hr.myu.umn.edu/jobs/ext/357480](https://hr.myu.umn.edu/jobs/ext/357480)