The MR Technology Design Group, led by Jim Pipe in Mayo Clinic’s Department of Radiology, has openings for several postdoc and research scientist positions. Our team is collaboratively designing a comprehensive set of technologies for rapid, spiral-based MR imaging, along with the design of a next-generation MRI scanner with innovative approaches to improve the economics, outcomes, and patient experience of diagnostic care.

**Projects:** We are working on several related projects involving Non-Cartesian pulse sequence methods, B0 mapping and off-resonance correction, system characterization and correction, design of computationally efficient algorithms for parallel imaging and constrained reconstruction, and related areas. There are also some applications of AI being investigated by our group; while this is not the primary focus of our work, candidates may have opportunity to work in this area as well.

**Candidate Qualifications:** Relevant experience in MRI and a PhD in engineering or related field are required. These positions will generally favor candidates with strong backgrounds/interest in some combination of signal processing, MRI pulse sequence development, software design (C, Python, and CUDA), general experimentation, and a high-level system design approach to problem solving.

**Facilities and Environment:** Scan development will primarily occur on Philips 3T and 1.5T systems dedicated to research, as well as a variety of clinical MRI scanners. The lab is housed in the new Discovery Square building (onediscoverysquare.com), part of a ~$5 billion dollar catalyst investment in the city of Rochester (dmc.mn). Mayo is ranked the #1 hospital in the USA, and Rochester is a beautiful small (but rapidly growing) city, consistently ranked as one of the best places to live in the USA. It is an easy, family-friendly place to live, and just a one hour drive south of Minneapolis.

Lab URL: https://www.mayo.edu/research/labs/magnetic-resonance-technology-use-design/

If interested, please send an email with CV to pipe.james@mayo.edu.