

Position Announcement: MRI Scientist

Center for Advanced Diagnostic Research (CADRe), Department of Radiology, Vagelos College of Physicians and Surgeons, Columbia University Irving Medical Center (CUIMC)

The Department of Radiology at the Columbia University Vagelos College of Physicians and Surgeons invites applications for a faculty position as MRI Scientist within the Center for Advanced Diagnostic Research (CADRe). This position is open at all academic ranks, with the potential for a tenure-track appointment depending on the candidate's qualifications and career trajectory.

This role is designed for a PhD-level scientist with expertise in magnetic resonance imaging who will contribute to and expand CADRe's mission through collaborative leadership in MRI sequence development, optimization, selection, and clinical-translational research. The MRI Scientist will work closely with radiologists, engineers, physicists, and clinical investigators to advance innovative MRI methodologies and their application in human studies.

Salary and academic rank will be commensurate with experience and qualifications. Columbia University offers a highly competitive benefits package.

Program Highlights

CADRe is a multidisciplinary research center within Columbia Radiology focused on advancing imaging science, data-driven methodologies, and translational innovation. The center supports a broad portfolio of research spanning MRI physics, pulse sequence development, quantitative imaging, image reconstruction, AI-enabled analysis, and clinical validation.

Columbia Radiology provides access to state-of-the-art MRI infrastructure across multiple clinical and research platforms, supporting close integration between technical development and clinical investigation at NewYork-Presbyterian Hospital and across CUIMC.

Responsibilities

The MRI Scientist will be expected to:

- Develop and sustain an independent and/or collaborative research program in MRI science, quantitative imaging, or related translational methodologies.
- Provide scientific leadership in collaborative settings for MRI pulse sequence development, optimization, and selection in support of research and clinical studies within CADRe.
- Partner with radiologists, clinicians, engineers, and medical physicists to design and implement human MRI research protocols, including early-phase and proof-of-concept studies.
- Contribute to the advancement of novel MRI techniques, including quantitative MRI, advanced contrasts, accelerated imaging, and multimodal integration.
- Support the translation of MRI innovations from technical development to clinical and population-based research applications.

- Collaborate with CADRe investigators on grant development, including multi-investigator and center-level proposals.
- Publish high-impact, peer-reviewed research and present findings at national and international scientific meetings.
- Participate in teaching and mentoring of graduate students, postdoctoral fellows, residents, and junior faculty.
- Contribute to departmental and institutional research initiatives, working in close coordination with CADRe leadership.

Qualifications

Required

- PhD in Biomedical Engineering, Medical Physics, Electrical Engineering, Physics, or a closely related field.
- Demonstrated expertise in MRI physics, pulse sequence development, or quantitative MRI methods.
- Strong record of peer-reviewed publications.
- Experience conducting or supporting human MRI research.
- Ability to work effectively in a highly collaborative, multidisciplinary academic environment.

Preferred

- Experience with clinical-translational MRI studies and protocol development.
- Familiarity with MRI reconstruction techniques, image analysis, or data science approaches.
- Track record of extramural research funding or participation in funded collaborative projects.
- Experience working in a large academic medical center or research-intensive institution.

Salary

Salary range is \$430,000 - \$550,000. Columbia offers a generous benefits package.

Application Instructions

Interested candidates should submit their curriculum vitae, a statement of research interests, and the contact information for three references to

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Environment

The Department of Radiology at Columbia University is home to over 130 full-time faculty and performs more than one million imaging studies annually. The MRI Center at the Neurological Institute of New York offers the Columbia research community access to state-of-the-art imaging on General Electric (GE) 3T Premier systems. The MRI Center is equipped with seven GE Premier scanners, with one system dedicated for research, along with a support staff and technicians solely dedicated to MRI. Using highly specialized techniques, investigators from across the medical center collaborate with the Department of Radiology in a wide range of clinical trials that involve MR imaging.

Columbia University Irving Medical Center (CUIMC) and NewYork-Presbyterian Hospital are internationally recognized for clinical and research excellence. Columbia provides unique opportunities for collaboration across its diverse academic ecosystem and offers an exceptional quality of life in the heart of New York City.

Columbia University is an Equal Opportunity Employer. Outstanding female and underrepresented minority scholars are strongly encouraged to apply.

The above salary range represents Columbia's good faith and reasonable estimate of possible compensation at the time of posting.