Position Announcement: MRI Scientist

Department of Radiology, **Vagelos College of Physicians and Surgeons**, **Columbia University Irving Medical Center (CUIMC)**

The Department of Radiology at Columbia University Vagelos College of Physicians and Surgeons invites applications for **full-time non-tenure-track faculty positions as MRI Scientist**. Appointment will be at the rank of **Assistant Professor, Associate Professor, or Professor**, commensurate with qualifications and record of accomplishment.

We seek a **PhD MRI scientist** who will expand the technical development and clinical translation of MRI methods within the department's research enterprise. The successful candidate will establish, or bring, an **extramurally funded research program** and serve as an MRI methods lead on collaborative studies with radiologists, clinicians, medical physicists, engineers, and data scientists. Areas of interest include, but are not limited to, pulse sequence development, quantitative and multiparametric MRI, accelerated acquisition and reconstruction, AI-enabled image analysis, and clinical validation of new techniques.

Columbia Radiology supports MRI research across multiple clinical and research platforms at CUIMC and NewYork-Presbyterian Hospital, with close integration between technical development and clinical investigation.

Responsibilities

The MRI Scientist will be expected to:

- Lead an **extramurally funded research program** in MRI methods, quantitative imaging, or related translational science, both independently and within multi-investigator teams.
- Serve as MRI methods lead or co-investigator on departmental and institutional grants, including NIH, foundation, and industry-sponsored research.
- Design and implement **human MRI research protocols** with radiologists, clinicians, engineers, and medical physicists, from feasibility and proof-of-concept studies through multi-site validation.
- Develop, optimize, and implement **novel MRI techniques**, such as quantitative mapping, advanced contrast mechanisms, accelerated imaging, and multimodal integration, on clinical and research scanners.
- Disseminate findings through peer-reviewed publications and presentations at national and international meetings.
- Teach and mentor graduate students, postdoctoral fellows, residents, and junior faculty, and contribute to departmental and institutional service.

Qualifications

Required

- PhD or equivalent doctoral degree in Biomedical Engineering, Medical Physics, Electrical Engineering, Physics, or a closely related field.
- Expertise in MRI physics and methods development, demonstrated by peer-reviewed publications.
- Experience designing or conducting **human MRI research**.
- Record of, or clear potential for, extramural research funding appropriate to rank (see below).
- Ability to work effectively in a collaborative, multidisciplinary academic environment.

Preferred

- Experience leading clinical-translational MRI studies, including protocol development and IRB-approved human research.
- Hands-on experience with vendor pulse sequence programming environments and research agreements.
- Expertise in accelerated MRI, such as compressed sensing or deep learning reconstruction, and in quantitative image analysis.
- Experience with multi-site or industry-partnered imaging studies.
- Experience in a large academic medical center or research-intensive institution.

Expectations by Rank

- **Assistant Professor:** A productive publication record in MRI methods or applications and strong potential to establish an independently funded research program.
- **Associate Professor:** A sustained record of extramural funding as PI or MPI, nationally recognized contributions to MRI science, and demonstrated mentorship.
- **Professor:** An international reputation in MRI science, sustained leadership of funded research programs, and a record of leadership in mentoring and professional societies.

Salary

Salary range: $140,000 to $300,000, commensurate with rank and experience. Columbia offers a generous benefits package.

Application Instructions

Interested candidates should submit a curriculum vitae, a statement of current and planned research, up to three representative publications, and the names and contact information of three references to:

- Stella Kang, MD, MS
  Professor of Radiology
  Vice Chair of Clinical Research

Department of Radiology
Columbia University Irving Medical Center
sk5603@cumc.columbia.edu

Review of applications will begin immediately and continue until the position is filled.

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 / Disability / Veteran.

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