**About our Group**
The mission of the Center for Advanced Imaging Innovation and Research (CAI²R) at New York University is to connect basic research on biomedical imaging with routine patient care. The center—located in the heart of Manhattan—is embedded in the Department of Radiology and brings together over 100 researchers, including basic MR scientists, clinical researchers, and research technicians.

**About the Project**
We are seeking to develop low-field MRI (Hyperfine 64mT and Siemens 0.55T) methods to bring brain imaging closer to patients worldwide, and to increase MRI’s role in preventative health. For this purpose, we explore new imaging avenues that are less focussed on visual image quality, but rather on robust imaging end-point metrics like brain atrophy and tumor or lesion detection. We aim to develop and evaluate an integrative end-to-end approach with data acquisition, image reconstruction, segmentation, and analysis tailored to one another. The project is highly collaborative and embedded in an interdisciplinary research team, on the interface between technical development and clinical application.

**Available Postdoctoral Researcher Positions**
We are looking for two postdoctoral researchers who will work closely with us and with each other:

- **Data acquisition:**
  The successful candidate will perform numerical optimizations, implement pulse sequences, and perform imaging experiments. Preference will be given to candidates with experience in MRI simulations and/or pulse sequence programming, but we also encourage applications from candidates with a strong general MRI background and an interest in learning these skills.

- **Machine-learning based image analysis workflow:**
  The successful candidate will develop and validate machine-learning based workflows from raw MRI data to quantitative end-point measures, such as brain atrophy. This pipeline will include image reconstruction and segmentation, as well as representation learning methods. Experience with machine learning is required for this position, and a background in MR image analysis and processing is highly preferred.

We also expect the successful candidates to engage in collaborations with our clinical and industrial partners in order to evaluate the developed methods in the clinical environment workflow.

**Requirements for these positions include**
- PhD in physics, biomedical sciences, computer science, or a related field
- MRI research experience
- Programming skills, preferably in MATLAB, Python, Julia, and/or C++
- Experience with pulse sequence programming (Siemens) is a plus for the first position
- Experience with PyTorch is a plus for the second position

**Salary and Benefits**
The starting salary is $70,000 per annum and benefits include health, dental, and vision insurance, a prescription drug plan, commuter plans, as well as subsidized housing based on availability. We welcome both domestic and international applicants and provide support for immigration services.

**To Apply**
To apply for the position or to inquire more information, please contact

- Jakob Assländer (jakob.asslaender@nyulangone.org), and/or
- Patricia Johnson (patricia.johnson3@nyulangone.org), and/or
- Jelle Veraart (jelle.veraart@nyulangone.org)

Please include your CV, a letter of interest, and 2-3 references. Any additional information that tells us more about you is optional, but welcome.

We are committed to diversity and inclusion in all aspects of recruiting and employment. All qualified individuals are encouraged to apply and will receive consideration without regard to race, color, gender, gender identity or expression, sexual orientation, national origin, age, religion, creed, or disability.