**Open Positions: INNOVATION FELLOWS**

**Scanners of the Future, and the Future of Scanning**

In times to come, the field of medical imaging will look very different than it does today. Disruptive forces such as artificial intelligence (AI) are changing how we acquire, reconstruct, and interpret images. Abundant sensors and cheap electronics are changing the way we think about the design of both imaging and sensing devices.

The Center for Advanced Imaging Innovation and Research (CAI²R) in the Department of Radiology at NYU Grossman School of Medicine is working on developing disruptive imaging and sensing technologies that are intelligent, robust, accessible, and cheap. The goal of these efforts is to democratize imaging, bringing it closer to the patient, and revolutionizing its role in preventative health and patient care.

We are seeking talented and enterprising individuals to join our concerted effort to rethink medical scanners and the paradigms by which they operate.

Our initial efforts will concentrate on Magnetic Resonance (MR) scanners. We are looking for highly motivated, self-driven people with experience in a) MR data acquisition and image reconstruction, and/or b) deep learning models for imaging and non-imaging data, and/or c) sensor integration. Such individuals will join our dynamic interdisciplinary team of physicists, engineers, computer scientists, AI scientists, and radiologists. They will report directly to Drs. Daniel K. Sodickson (Vice-Chair for Research) and Hersh Chandarana (Associate Chair for Clinical and Translational Research), who lead our Scanners of the Future program.

While we are open to traditional postdoctoral fellowships or research scientist positions, we have also designated a small number of positions for “Innovation Fellows.” These fellows will be given a high degree of responsibility for strategic projects, and contracts for longer than the usual 1-2 years will be considered. Innovation Fellows will also be protected from many of the usual demands and metrics of academic evaluation, in order to allow them to focus on innovation. Successful fellows will have special opportunities for advancement, either as faculty or as senior research scientists.

We have a particular interest in the recruitment and mentorship of young scientists from under-represented backgrounds for this core strategic program, and we encourage such individuals to apply.

**Job Responsibilities**

- Investigate disruptive MR scanning technologies that will enable development of cheaper and more accessible MR scanners, outfitted with suitable arrays of ancillary sensors.
- Develop novel methods in data acquisition, image reconstruction, machine learning, and sensor integration that will enable powerful new imaging capabilities using these scanners and sensors.
Qualifications

Required Qualifications:
- PhD (or, in exceptional cases, MS or BS) in a relevant field (physics, engineering, mathematics, computer science) and experience with relevant programming languages (Python, Matlab, C/C++, or similar). Capacity for both independent work and collaboration within a multidisciplinary team are a must.
- Strong publication record in top-tier journals/conferences for relevant fields (physics, engineering, mathematics, computer science).

Preferred Qualifications:
- Experience in MR image acquisition and reconstruction and/or Machine Learning.

About Us

The Research Division of our Department of Radiology comprises approximately 150 full-time staff dedicated to imaging research and clinical translation. CAI²R (pronounced "care") is our NIH-supported National Center for Biomedical Imaging and Bioengineering. We work in interdisciplinary, matrixed teams that include diverse academic stakeholders as well as industry partners such as Siemens and Facebook. Joining our team means becoming part of a close community that values cross-pollination of ideas, celebrates creativity, and nurtures an environment conducive to breakthrough innovations.

Learn more about our mission, our research, our team, and our research facilities.

Timeline, Salary, and Benefits

Ideally, we expect the appointed candidate to start in 2021 or early 2022. The initial appointment will be for two or more years (depending upon the type of appointment, as mentioned earlier), with options to renew, depending on mutual agreement. NYU Langone Health offers competitive pay and benefits.

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.

To Apply

To apply for the position, please contact

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