



Center for
Advanced Imaging
Innovation and Research

Postdoctoral Position in Renal Diffusion MRI

NYU Grossman School of Medicine is one of the nation's top-ranked medical schools. For over 175 years, NYU Grossman School of Medicine has trained thousands of physicians and scientists who have helped to shape the course of medical history and enrich the lives of countless people. An integral part of NYU Langone Health, the School of Medicine at its core is committed to improving the human condition through medical education, scientific research, and direct patient care.

The Center for Biomedical Imaging (CBI) is located in midtown Manhattan, New York City. It hosts the **Center for Advanced Imaging Innovation and Research (CAI²R)**, and is embedded within the NYU Department of Radiology. This arrangement brings together a vast amount of human and technological resources in basic MR science (physics, engineering, mathematics) and clinical applications (radiology, medicine, neurology, oncology, etc.). Four Siemens MRI scanners are available on-site (two 3T scanners, one 7T scanner, and one 3T PET/MR scanner), as well as a cyclotron / radiochemistry lab, a wet lab, and a dedicated RF laboratory.

JOB DESCRIPTION: We invite applications for a postdoctoral position in the Center for Biomedical Imaging (CBI), and Center for Advanced Imaging & Innovation (CAI²R) in the Radiology Department of NYU Langone Health, working in advanced quantitative imaging of the kidney and kidney tumors. The successful candidate will join a multi-disciplinary team of physicists, image processing scientists, radiologists, nephrologists, surgeons, and technologists and work on renal diffusion MRI with joint supervisors Eric Sigmund, PhD and Hersh Chandarana, MD. The project aims to comprehensively manage the renal mass population – not only for oncologic control but also for the equally important renal functional stability. Salary is commensurate with experience and includes a comprehensive benefits package. Subsidized housing within walking distance to the CBI will be offered depending on availability. Initial appointment will be for two years with potential renewals for subsequent years. Women and under-represented minority candidates are encouraged to apply.

Job Responsibilities will include (but are not limited to): Optimize and carry out methods of acquisition / analysis, image processing, and reporting of advanced diffusion-weighted MRI of renal tissue and renal masses. Perform histologic image processing to extract quantitative cancer markers for correlation with MRI metrics. Perform quantitative correlations with clinical assessments of renal function and histologic biomarkers of renal cancers. Present results at international conferences and report findings in peer-reviewed publications.

Minimum Qualifications: Candidates should have (or expect to shortly receive) a PhD in a relevant field. (physics, engineering, mathematics, etc.) and experience with relevant programming languages (C/C++, Matlab, Python or similar). Capacities for both independent work and collaboration within a multidisciplinary team are a must.

Preferred Qualifications: Experience in renal imaging, diffusion MRI or both is highly desirable. A record of peer-reviewed journal publications is recommended. Motivated individuals will have the opportunity to engage in independent research within the context of the study.

Please send questions for further information or applications (in pdf format) containing (1) CV, (2) short statement of research interests in the context of prior work, (3) Contact information of 2-3 references

to

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