

Post-Doc Fellow, Research, MRI (65748)

NorthShore University HealthSystem (NorthShore) is a premier integrated healthcare delivery system consistently ranked as a Top 15 Teaching Hospital in the United States. Headquartered in Evanston, Ill., NorthShore is a non-for-profit organization comprised of four hospitals – Evanston, Glenbrook, Highland Park and Skokie. The system includes a 950+ physician multispecialty group practice with 130 locations across Chicagoland. NorthShore has annual revenues of \$2.1 billion and employs more than 10,500 people. When you work for NorthShore, you will be part of an organization that encourages its employees to achieve career goals and maximize their professional potential.

Position Overview

This post-doctoral fellow will support active magnetic resonance imaging (MRI) research being conducted at Evanston Hospital located in Evanston, IL. This is a full-time position and is benefits eligible. Hours will be scheduled on first shift.

The post-doctoral fellow will conduct cutting-edge research into advanced non-contrast magnetic resonance imaging methods to assess the anatomy and function of the neurovascular circulation. Qualified candidates should possess a PhD in engineering, physics, computer science or related discipline with a background in MRI. Applicants should have a track record of scientific productivity as evidenced by prior abstract and journal publications.

Responsibilities

In this role, you will:

- Manage, organize and plan the experimental work of the laboratory, with the approval of the principal investigator.
- Design, implement and validate novel magnetic resonance imaging (MRI) for assessing the anatomy and function of the neurovascular circulation.
- Operate Lab/Section-specific equipment, which will include an MRI scanner and associated research equipment.
- Regularly review scientific literature. Evaluate and recommend applicable techniques and procedures.
- Analyze and prepare results of research in conjunction with the principal investigator(s).
- Co-author scientific papers for presentation and publication.
- As requested, teach others to perform technically difficult experiments requiring advanced knowledge of complicated procedures and techniques.
- Consult with professional research personnel in matters of research design, experimental techniques, instrumentation, and scientific inference from research results.
- Perform related duties as required or assigned.

Qualifications

Our ideal candidate will have:

- Doctoral Degree (PhD or MD)
- PhD degree in engineering, physics, computer science or other related fields
- Strong background in magnetic resonance imaging (MRI), with knowledge of MRI imaging physics and reconstruction
- Experience with MRI pulse sequence programming or reconstruction
- Knowledge of C++ programming and higher-level languages such as Matlab or Python
- Ability to prepare and author scientific manuscripts for journal publication
- Prior experience and ability to develop proposals to secure external research funding
- Familiarity with current medical and scientific literature and research findings in related research areas
- Ability to solve technical and laboratory problems related to research

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EOE: Race/Color/Sex/Sexual Orientation/ Gender Identity/Religion/National Origin/Disability/Vets, VEVRRRA Federal Contractor.

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