

Required Qualifications (as evidenced by an attached resume):

Ph.D. (foreign equivalent or higher) from an accredited institution in MR Physics, Medical Biophysics, Medical Engineering, Imaging Science, or a related field. Two (2) years of full-time hands-on-experience (e.g., installing or developing MRI pulse sequences) within the last three years.

Preferred Qualifications:

Experience with Siemens MR systems, including Siemens IDEA and ICE certification (or ability to obtain), and MRI certification by the American Board of Medical Physicists. Experience with multidisciplinary collaboration across a wide range of scientific disciplines. Experience in integrating EEG, EMG, pupillometry, and other physiological measurements in the MR scanner environment. Experience with neuroimaging analysis software, including use of FSL, SPM, FreeSurfer, AFNI, MATLAB and/or Python-based toolboxes. MR pulse sequence programming.

Brief Description of Duties:

Stony Brook University's SCAN (Social, Cognitive, and Affective Neuroscience) Center is recruiting a full-time medical physicist or bioengineer with expertise in Magnetic Resonance Imaging (MRI). The position involves at least fifty percent service but allows for independent research (R&D) in coordination with the Center Director, and the possibility of a (non-salaried) courtesy appointment with appropriate Departments. The ideal candidate will provide theoretical and technical support to faculty and researchers on MR related projects from developing and testing to implementing novel MR neuroimaging technologies and methods, as well as advanced quantification methods applied to human MR research, with an emphasis on Magnetic Resonance Spectroscopy (MRS) and functional brain imaging. The successful candidate will contribute to facilitating collaborative research and development of novel MR applications and participate in quality improvement and value initiatives. The ideal candidate would also work with faculty with expertise in multimodal methods to develop and support state-of-the-art image-processing techniques and support the integration of other neuroimaging (e.g., EEG) or stimulation techniques (e.g., TMS) with fMRI and MRS.

The successful incumbent will have:

- Excellent oral and written communication skills.
- Track record of collaborative research and publications in the field of magnetic resonance imaging and magnetic resonance spectroscopy.
- Ability to work cooperatively and collegially in a diverse environment.
- Expertise in the fundamentals MR physics, MR acquisition, signal processing, and MR reconstruction and processing.
- Ability to optimize MR protocols, analyze data, and interpret results.
- Working knowledge of diverse MR technologies such as structural T 1 -weighted MRI, multinuclear (³¹P and ¹H) MRS), diffusion weighted imaging (DWI), fMRI, quantitative MRI, susceptibility-weighted Imaging (SWI), ASL.
- Ability to interact with a variety of MR users representing various levels of technical interest and expertise.
- Ability to work cooperatively and collegially in a diverse environment.

Duties:

• Support advanced MR technologies in structural MRI and assist researchers and faculty in their MR R&D needs or develop novel R&D solutions with Director's approval.

- Opportunity to supervise faculty, post-doctoral fellows, graduate students, and research coordinators during their day-to-day operations of the MR scanner.
- Maintain and optimize the performance of our MRI systems and oversee quality control, and contribute to the definition, application, and maintenance of standard operating procedures.
- Other duties or projects as assigned as appropriate to rank and departmental mission.

Special Notes:

This is a full-time appointment. FLSA Exempt position, not eligible for the overtime provisions of the FLSA. Minimum salary threshold must be met to maintain FLSA exemption.

In addition to the employee's base salary, this position is eligible for \$3,087 UUP annual location pay, paid biweekly.

Essential Position: This has been designated as an essential position based on the duties of the job and the functions performed. Positions that are designated as such may be required to report to work/remain at work even if classes are canceled, and the campus is working on limited operations in an emergency.

Evening and weekend work may be required at times.

Resume/CV and cover letter should be included with the online application.

Stony Brook University is committed to excellence in diversity and the creation of an inclusive learning, and working environment. All qualified applicants will receive consideration for employment without regard to race, color, national origin, religion, sex, pregnancy, familial status, sexual orientation, gender identity or expression, age, disability, genetic information, veteran status and all other protected classes under federal or state laws.

If you need a disability-related accommodation, please call the university Office of Equity and Access (OEA) at (631) 632-6280 or visit <u>OEA</u>.

In accordance with the Title II Crime Awareness and Security Act a copy of our crime statistics can be viewed<u>here</u>.

Visit our WHY WORK HERE page to learn about the total rewards we offer.

Application to be submitted through Stony Brook University web site: MRI Physicist Job Number: 2400593