Staff Scientist 1 (Facility Head), Clinical MRI

The National Institute on Aging (NIA), a major research component of the National Institutes of Health (NIH) in the Department of Health and Human Services (DHHS), is recruiting for a Staff Scientist 1 (Facility Head) for human Magnetic Resonance Imaging (MRI) studies within the Clinical Research Core (CRC) in Baltimore, Maryland. The core was established in 2012 to support experimental imaging goals of intramural investigators and their collaborators. The mission is to offer research services supporting multi-disciplinary translational aging projects, including providing state-of-the-art magnetic resonance methodologies in order to enhance translational and clinical research on aging. Studies carried out in the facility include proton structural imaging, brain functional MRI, body and tissue composition studies, brain and muscle spectroscopy, including heteronuclear spectroscopy, and proton relaxometry. MRI acquisitions are correlated with a wide range of biological and functional outcomes in order to explore the effects of structural, functional and biochemical tissue changes that occur with aging and age-associated disease. All MRI imaging is performed on a recently upgraded research-dedicated 32-channel 3T Philips Ingenia MRI system, capable of both proton and heteronuclear spectroscopy.

The Facility Head will provide support and services for longitudinal studies of aging including, but not limited to, the Baltimore Longitudinal Study of Aging (BLSA), the longest running study of aging in the world. They also will support studies in the major NIA/Intramural Research Program (IRP) areas of clinical research and controlled trials, including randomized controlled clinical trials. Presently the focus is on musculoskeletal, cardiovascular, neurological (with specific emphasis on imaging studies related to studying cognitive health in aging), and endocrinological systems.

The successful applicant is expected to play a central role in the design and implementation of magnetic resonance imaging and spectroscopy experiments to advance investigator-initiated research. The Facility Head will participate in all aspects of data acquisition, analysis, and interpretation, including training users and ensuring both their safety and safety of participants. They will directly oversee a contract MR Physicist, several technical staff, and be expected to advise postdoctoral fellows involved in imaging protocols. In addition, they will work closely with collaborators both within and outside the IRP and establish new efforts and collaborations that will enhance the research portfolio of the NIA. The Facility Head will liaise closely with the animal MRI facility. Furthermore, the Facility Head will be responsible for day-to-day management of the 3T MRI Facility, including overseeing and updating, as needed, standard operating procedures, specification of new equipment and software, quality control, and coordinating maintenance with Philips Healthcare and other providers.
It is preferred that the individual have a Ph.D. in physics or engineering, or related fields, with significant MRI experience. An ability to work with MRI technologists and familiarity with standard operating procedures for human MR imaging and patient safety are necessities of the job. Additional requirements include extensive knowledge of current and emerging MRI and Magnetic Resonance Spectroscopy (MRS) techniques and applications to humans, two- and three-dimensional imaging protocols, and proton and heteronuclear spectroscopy for biomedical applications. Experience with pulse programing, especially in the Philips platform, is highly desirable. Functional and structural neuroimaging is a significant portion of imaging research presently being conducted within NIA/IRP and relevant experience is therefore expected. As part of the CRC, the appointee will form collaborations with multiple NIA laboratories that require MR imaging studies and will have the opportunity for significant interactions and collaborations with the Magnetic Resonance Imaging and Spectroscopy Section that is involved in basic and small animal MR research at the NIA.

Salary is commensurate with professional experience and accomplishments, and a full Civil Service package of benefits (including retirement, health, life and long-term care insurance, Thrift Savings Plan participation, etc.) is available. All employees of the Federal Government are subject to the conflict-of-interest statutes and regulations, including the Standards of Ethical Conduct. Additional information regarding the NIA Intramural Research Program and MRI Facility is available at: https://www.nia.nih.gov/research/labs and https://www.nia.nih.gov/research/labs/mri-facility-translational-research.

To apply, please send a cover letter, curriculum vitae, bibliography, statement of research interest and three letters of recommendation to: Angela Prazak, Intramural Program Specialist; Office of the Scientific Director, Vacancy # NIA-IRP-21-05-AP, via email at niairpjobs@mail.nih.gov. Applications will be accepted until September 23, 2021.

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The NIH is dedicated to building a diverse community in its training and employment programs and encourages the application and nomination of qualified women, minorities, and individuals with disabilities.