A postdoctoral position in musculoskeletal magnetic resonance is available, shared between the Longitudinal Study Section and the Magnetic Resonance Imaging and Spectroscopy Section at the National Institute on Aging (NIA) of the National Institutes of Health, located in Baltimore, Maryland. The work will center on spectroscopic and imaging studies of muscle in human subjects, mainly in the context of the Baltimore Longitudinal Study of Aging, one of the landmark studies of the National Institute on Aging. Investigation of diffusion in the assessment of muscle quality and age-related muscle loss (sarcopenia) is a particular focus for this position, as are bioenergetic studies using the 31P nucleus. Results will be correlated with a wide range of other biological and functional outcomes to explore the basis and consequences of structural and metabolic changes that occur with age and with age-associated disease. Other research opportunities may be available depending upon the interests and background of the successful candidate.

The research associated with this position will be performed primarily using our 3T whole-body Philips Achieva MRI system, capable of both proton and heteronuclear spectroscopy. Other MRI instrumentation at the NIA consists of a triple-resonance vertical wide-bore 9.4T Bruker Avance III spectrometer with microimaging and solids capability and a double-resonance Bruker 7T/30 cm Biospec Avance system for preclinical studies. These instruments are owned by the NIA, are used only for research and ample scan time is available on them.

A background in MR imaging or NMR spectroscopy of muscle or connective tissue is preferred, although applications are also invited from individuals with experience in other areas of biological MRI and NMR. In addition, experience with methods development and pulse programming on clinical MR instruments is highly desirable. All applicants must have Ph.D. level training and experience in magnetic resonance. The appointment will be as an IRTA Postdoctoral Fellow for US citizens or as a Visiting Fellow for non-citizens. Accordingly, applicants must have fewer than five years of postdoctoral experience. The successful applicant will be guaranteed a stipend for two years (including family health insurance coverage) with the option to renew annually upon mutual agreement, up to a maximum of five years.

Interested individuals should e-mail their CV and the names, telephone numbers, and e-mail addresses of at least three references to: Dr. Richard Spencer, Chief, Magnetic Resonance Imaging and Spectroscopy Section, NIH/NIA, BRC Room 04B116, 251 Bayview Boulevard, Baltimore, MD 21224; Tel. 410-558-8226; e-mail: spencer@helix.nih.gov

Relevant websites:
http://www.nia.nih.gov/research/labs/tgb/longitudinal-studies-section

The NIH is an equal opportunity employer. Minorities and women are especially encouraged to apply.