Postdoctoral Fellow, MRI of Skeletal Muscle and Muscle Disease
Carle Health Urbana, Illinois

The Stephens Family Clinical Research Institute at Carle Health would like to hire a Postdoctoral Fellow in the area of magnetic resonance imaging (MRI) and MR spectroscopy (MRS) of skeletal muscle and muscle disease.

**Position Summary:** The position is in the Carle Clinical Imaging Research Program, a multi-faculty research group focused on clinical and translational biomedical imaging research. Carle and the University of Illinois at Urbana-Champaign jointly own and operate a 7T Siemens MAGNETOM Terra MRI scanner, which is used for both research and clinical imaging. Other imaging resources include two 3T Siemens MRI scanners, ultrasound, and near-infrared spectroscopy.

The postdoctoral fellowship is a two-year position funded by an NIH research grant held by Dr. Bruce Damon. The principal goal of the project is to develop diffusion tensor MRI and related methods for applications in skeletal muscle physiology and biomechanics, with a particular focus on muscle disease. The postdoctoral fellow will lead studies aimed at investigating the typical relationships between skeletal muscle structure and function and how they are altered in muscular dystrophy. The ideal candidate will have a doctoral degree in a biomedical science or engineering field; experience in musculoskeletal, neuroscience, and/or cardiac applications of biomedical MRI; have outstanding organizational skills and work habits, including the ability to work independently; and have strong computational and quantitative skills.

**Education Requirements:** Doctoral degree in biomedical science or engineering field

**Experience Requirements:** Four years of graduate-level experience with in vivo biomedical imaging

**Specialized Knowledge and Skill Requirements:**

- Experience in acquiring and analyzing in vivo biomedical imaging and spectroscopy data, with a preference for MRI/MRS
- Preference for candidates with experience in either musculoskeletal, cardiovascular, or neuroscience applications of biomedical imaging
- Preference for candidates with experience in human research
- Experience in programming in scientific computational software packages, such as MATLAB, Python, R, etc.
- Outstanding communication, organizational, and interpersonal skills
- Ability to envision, organize, and complete complex tasks with limited direct supervision

**Essential Standard Job Functions:**

- Provides expertise in designing, planning, and executing research studies involving biomedical imaging and the musculoskeletal system
- Plans and conducts library and literature searches
- Regularly consults with Principal Investigator on progress
- Acquires, maintains, and analyzes research data according to ethical and scientific standards
- Presents findings and participates in professional development programs at scientific conferences, etc.
- Writes manuscripts as primary author and contributes sections of manuscripts as secondary author
- Assists Principal Investigator with grant submissions
- Participates in scientific collaborative activities with other investigators
- Assists in supervising and training junior members of research team

**To Apply:** Please submit your CV and cover letter in addition to a statement of research to Katie Schroeder, Provider Career Liaison at Katie.schroeder@carle.com