The Department of Radiology at the University of Mississippi Medical Center seeks to fill the position of MRI physicist. Position duties include the development, acquisition, optimization and analysis of advanced neuro MRI, along with cardiac, body and MSK MRI. There is a strong emphasis on interdisciplinary collaboration and translation, as well as support of clinical services and funded research groups.

This position includes clinical, research, educational and advisory responsibilities. In this position, the MRI physicist will:

• Participate in MRI scanning of the full age range of pediatric and adult patients.
• Serve as a member of the Advanced Neuroimaging Core specializing in development, optimization and implementation of advanced magnetic resonance imaging techniques, including resource and software requirements.
• Work closely with research and radiology sections to grow clinical and research programs in advanced imaging. Work to optimize existing clinical and research MRI sequences on Siemens MRI scanners and platforms.
• Serve as a member of the Imaging Research Office to provide feedback on MRI sequence feasibility, study design and execution. Work on new research protocols in MRI, with focus on funded research and clinical trials.
• Perform pulse programming, advanced reconstruction and analysis for advanced MR imaging. Work with vendors to evaluate, acquire and install new and novel MR sequences.
• Implement specialized MRI techniques and protocols for various patient age groups and targeted disease populations in clinical and research programs. Support MR imaging research collaboration with investigators in multiple specialties and institutes.
• Develop and support research projects in MR imaging that will lead to publications and extramural grants. Present at scientific meetings and conferences and publish results in peer-reviewed journals.
• Remain up-to-date with innovations in MRI technology and its clinical applications. Maintain relationships with professional societies, the MRI physics community and outside research organizations.
• Assist with the department’s MRI Safety Program, particularly with regard to safety calculations for implanted medical devices and surgical hardware.
• Advise on new MRI equipment hardware and software capabilities. Participate in capital budget preparation and equipment specifications for MRI purchases.
• Provide education and training for radiologists, MRI technologists and trainees from departments throughout the Medical Center.
• Assist with ACR MRI testing and accreditation and with regulatory compliance for the Joint Commission, OSHA and other regulatory groups.
• Support the institution in any other matters related to MRI applications, training, safety and research.
Education:
• Ph.D. or equivalent in physics, engineering, or related field
• American Board of Medical Physics and/or American Board of Radiology Certification in MRI (board eligibility while actively pursuing certification is acceptable)

Experience:
• 2 years of MRI experience required, 5 years of experience preferred
• Familiarity with clinical hospital environment
• Pulse programming experience on multiple platforms
• Strong relationships with MRI vendors and researchers at various sites
• Competent with neuroimage processing software
• Understanding of deep learning techniques
• Knowledge of image-based statistics and medical biostatistics
• Familiarity with PACS and hospital informatics

Additional Information:
Academic appointment and salary based on experience and qualifications. This position can be tenure track.

Application
Please email your CV to Dr. Robert Morris at rwmorris@umc.edu