Postdoctoral Fellowship Positions for (1) Quantitative MRI and (2) Artificial Intelligence

About the Positions
We are looking for enthusiastic, self-motivated individuals who are able to work independently in a collaborative multidisciplinary team. The successful candidates will work closely with Dr. Yongsheng Chen, on the following ongoing projects: 1) Multiparametric quantitative MRI of peripheral nerves for developing monitoring biomarker in patients with peripheral neuropathies. 2) Automated segmentation of human muscle and nerve fascicles using machine learning. 3) Quantitative MRI of mice sciatic nerve in vivo to monitor demyelination and axonal loss over time. The successful candidates are highly encouraged to apply NIH K grants with full support from the team with expertise in MR physics, Radiology, Computer Science, Myelin Biology, and Clinical Neurology. The positions are secured by funds from NIH and Wayne State for a two-year period with very competitive compensation. A third-year support is available depending on the fellow’s performance.

Qualifications
- PhD in Biomedical Engineering, Physics, Computer Science, or similar programs.
- Experience in MRI, MATLAB programming, Python programming, and Statistical Analysis.
- Experience in Siemens MR pulse sequence programming, quantitative MRI methods, clinical research using qMRI, and deep learning-based medical image segmentation is preferred.

MR Research Facility at Wayne State
The MR Research Facility (MRRF) at Wayne State has focused on developing novel MRI methods and applications in neurodegenerative disorders led by Prof. E. Mark Haacke over the past 20 years. These technical developments include, to name a few: susceptibility weighted imaging (SWI), methods for magnetic resonance angiography (MRA), methods for quantitative susceptibility mapping (QSM), and more recently a multiparametric quantitative MRI method for fast imaging of the brain referred to as strategically acquired gradient echo (STAGE) imaging. The MRRF operates a research dedicated human 3T scanner (Siemens Verio), and a preclinical 7T scanner (Bruker BioSpec, ParaVision 360 software). The Verio will be replaced later this year by a Siemens Cima.X 3T scanner which has the strongest whole-body gradients in the field at 200 mT/m with a slew rate of 200 T/m/s and the XA line software.

To apply, please send a one-page cover letter, full CV, and contact of two references to:
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Wayne State University provides equal employment opportunities (EEO) to all employees and applicants for employment without regard to race, color, religion, sex, national origin, age, disability or genetics. The university encourages applications from women, people of color and other underrepresented people. Wayne State is an affirmative action/equal opportunity employer.