MRI/Multimodality Imaging Scientist

MR Solutions is a highly successful and innovative UK developer and manufacturer of preclinical MRI equipment for medical research. Products include cryogen-free MRI scanners ranging from 3 T to 9.4 T, which can also be accessorized with PET and SPECT technologies. The company was recently awarded two 'Queens Awards' for its innovation and performance.

MR Solutions has an open position for an MRI/Multimodality Imaging Scientist. The successful candidate will be based in the Mallinckrodt Institute of Radiology at the Washington University School of Medicine in St. Louis, Missouri, USA. The Institute operates two MR Solutions preclinical imaging systems: a 3 T/7 T multifield simultaneous MRI/PET scanner and a 7 T MRI scanner. The imaging scientist will contribute to collaborations between the Institute and MR Solutions, with a focus on developing robust state-of-the-art radiological scientific applications and enhancing the hardware and software performance of our onsite imaging systems.

Job Title: MRI/Multimodality Imaging Scientist

Main Duties:

- Assist and collaborate with local users of the MR Solutions scanners.
- Develop and implement advanced robust imaging protocols and pulse sequences for the MR Solutions scanners.
- Train users, on-site and remote, in operation of the MR Solutions scanners.
- Coordinate and perform scanner demonstrations for MR Solutions clients.
- Support the MR Solutions team by providing real-world experience, advice, and consultation.

Desired Skill and Proficiency:

- Training and experience in MRI: preferably hands-on, in vivo, preclinical studies.
- A higher degree in a physical science (e.g., physics, engineering, medical physics, chemistry).
- Independent work ethic (re self-planning and organizational abilities).
- Good communication skills (re written and oral English).
- Experience and interest in writing and optimizing MRI pulse sequences.
- Experience and interest in MRI data processing and analysis.
- Familiarity with hardware optimization such as RF coil and amplifier tuning.
- Familiarity with use of an oscilloscope and network analyzer.
- Familiarity with one or more of C/C++, Python, and MatLab programming.
- Familiarity/experience with PET imaging.