Postdoctoral Research Fellowship in MRI Susceptibility Mapping

We are seeking a talented and highly motivated postdoctoral researcher to join the Magnetic Resonance Imaging Group in the UCL Department of Medical Physics & Biomedical Engineering, London, UK. You will have a central role in an exciting research programme developing, optimising and applying new MRI electromagnetic tissue properties mapping (QSM) acquisition sequences and processing techniques in phantoms, healthy volunteers and Alzheimer’s disease patient studies.

You will work within the MRI group, led by Dr Karin Shmueli, a pioneer of quantitative magnetic susceptibility mapping (QSM), whose research focuses on developing and optimising magnetic susceptibility-related techniques for a variety of applications, aiming to improve disease diagnosis and monitoring of therapies. Dr Shmueli has obtained European Research Council funding for this position as part of a research programme to develop QSM and electrical conductivity (MR-EPT) MRI techniques for structural and functional neuroimaging.

You will carry out your research as part of a collaborative, multidisciplinary team of physicists, biomedical engineers and clinicians. You will be based primarily within the UCL Department of Medical Physics and Biomedical Engineering and do most of your MRI experiments using up-to-date 3-Tesla MRI systems in local UCLH Hospitals including the National Hospital for Neurology and Neurosurgery in Queen Square. Two 7-Tesla MRI systems have just been installed in London, so there may also be opportunities to apply for high-field research time where relevant.

You must have a PhD, or be about to submit a PhD, in MRI physics, engineering or a related subject. A strong background in MRI physics and expertise in computer programming in a language such as Matlab or C/C++ are essential. Experience in acquisition, reconstruction, processing and analysis of MRI data are required. Experience in QSM, MRI pulse sequence development, and/or conducting and analysing functional MRI studies would be advantageous. You will also have excellent problem-solving, interpersonal, communication, self- and time-management skills, and the ability to work effectively both in a team and independently.

The position is available immediately (with an expected start date ASAP) and is initially funded for 24 months with renewal subject to satisfactory completion of a 9-month probation period and performance. Salary range is: £35,965 to £44,674 per annum (inclusive of London allowance), Grade 7 or 8.

If you have any scientific or informal queries please contact Dr Karin Shmueli, at k.shmueli@ucl.ac.uk.

You should apply for this position as soon as possible through UCL's online recruitment site http://www.ucl.ac.uk/hr/jobs, where you can download a detailed job description and person specification, using reference numbers: 1861115 or by searching for “Susceptibility Mapping” under job title.