University of Nottingham
UK | CHINA | MALAYSIA

Job title	Senior Research Fellow	Job family and level	Research and Teaching, Level 5
School/ Department	School of Medicine, Mental Health and Clinical Neurosciences	Location	Queen's Medical Centre

Purpose of role

The purpose of this role will be to lead and deliver individual and collaborative research in the area of Neuroimage Analysis and Computational Magnetic Resonance Imaging (MRI), and make a contribution to the direction of research programmes in the School of Medicine.

You will join an established team, led by Professor Stam Sotiropoulos (https://conilab.nottingham.ac.uk), whose main areas of research interest include the development of innovative neuroimaging technologies for mapping the brain at a systems level. The team has a track record in brain connectivity mapping using diffusion MRI, with a portfolio of research programmes funded by the European Research Council (ERC), the US National Institutes of Health (NIH) and UKRI. They are part of the Sir Peter Mansfield Imaging Centre (SPMIC), birthplace of MRI and soon to be home of the ultra-high field (11.7T) UK national facility.

You will be responsible for generating new intellectual understanding/knowledge through the application of knowledge and for developing ideas for application of research outcomes.

You will sustain and pursue a research plan in imaging-based computational neuroanatomy and brain connectivity mapping, and will develop new concepts and ideas. Where appropriate, you will develop and win support for innovative research development proposals and funding bids, either for basic science or knowledge exchange.

The School of Medicine recognise the importance of continuous professional development and therefore the importance of providing opportunities, structured support and encouragement to engage in professional development each year.

To find out more about the School of Medicine, its values, vision, teaching and research, please see our further information leaflet.

	Main responsibilities (Primary accountabilities and responsibilities expected to fulfil the role)	% time per year
1	**Research Responsibilities:** • To take the lead on, plan, develop and conduct individual and/or collaborative research objectives, projects and proposals either as an individual or as part of a broader programme.	60%

	• Be responsible for resolving problems to meet research objectives and deadlines. • To manage the application of a range of methodologies, approaches and techniques appropriate to the type of research personally being pursued. Where appropriate investigate and devise research methods and approaches • To acquire, analyse, interpret and evaluate research findings/data using approaches, techniques, models and methods selected or developed for the purpose. • Be responsible for managing allocated research budgets and the use of research resources to ensure that effective use is made of them. • Line management of research staff. • Produce research output which will be considered to be excellent in Research Excellence Frameworks (REF).	
2	**Engagement, Communication and Continuation Responsibilities:** • To contribute to the management and administrative functions as appropriate. • To establish a national reputation and regularly disseminate and explain research findings through leading peer-reviewed national publications (on a sustained basis), conferences and other appropriate media. • To build relationships and collaborations with internal and external contacts, nationally and if appropriate internationally to complete research projects and to advance the discipline. • To generate income by developing and winning support for innovative research proposals and funding bids.	30%
3	**Teaching:** • You are expected to make a contribution to teaching that is in balance with wider contributions to research and other activities. • When required, supervise, examine and act as the personal tutor to undergraduate and postgraduate taught and research students within area of expertise	10%
4	**Other:** • Any duties as required in accordance with the nature and grade of the post.	N/A

Person specification

	Essential	Desirable
Skills	• Excellent oral and written communication skills, including the ability to communicate with clarity on complex and conceptual ideas to those with limited knowledge and understanding as well as to peers, using high level skills and a range of media. • Sufficient breadth or depth of specialist knowledge in the discipline to develop research programmes and methodologies. • Ability to devise, advise on and manage research programmes. • Ability to manage resources and an understanding of management processes. • High level analytical capability to facilitate conceptual thinking, innovation and creativity. • Ability to build relationships and collaborate with others, internally and externally. • Advanced Computing and High-Performance Computing Skills (C / C++ / Matlab / Python / shell scripting).	• Strong publication record in neuroimaging/brain connectivity methods development. • Record of ability to successfully collaborate for delivering research projects and outputs, nationally and internationally. • Ability to lead the development of (and maintain) research methodology for others to use in scientific and/or clinical applications.
Knowledge and experience	• Experience of developing research methodologies and devising models, approaches, techniques, critiques and methods for medical image analysis. • Extensive research experience within subject specialism. • Experience and achievement in chosen field, reflected in growing and consistent national reputation. • Demonstrable substantial contribution to high quality publications, considered to be within Research Excellence Frameworks (REF). • Extensive experience and demonstrated success in delivering research results.	• A growing international reputation in their field. • Experience, achievement and growing reputation in the discipline, reflected in relevant national committee memberships, and/or involvement in national research events. • Track record in gaining support for significant externally funded research and consultancy projects e.g. with industry, commerce, public bodies. • Experience of supervising junior colleagues / PhD students.
Qualifications, certification and training (relevant to role)	• PhD or equivalent in brain image analysis with a computational background (such as engineering, physics, computer science, neuroscience)	• Higher education teaching qualification or evidence of engagement with the process.

		• Membership of a professional body where appropriate.
Other	▪ Willingness to adopt the vision and values of the School of Medicine.	

Expectations and behaviours

The University has developed a clear set of core expectations and behaviours that our people should be demonstrating in their work, and as ambassadors of the University's strategy, vision and values. The following are essential to the role:

Valuing people	Understands that it is essential to provide a structure that people can thrive in. Knows how to communicate with people to create a healthy working environment and get the best out of people.
Taking ownership	Communicates vision clearly, providing direction and focus. Knows how to create a productive environment where people are inspired and can work cross-departmentally in partnership.
Forward thinking	Has the ambition to be a pioneer in own area, anticipating the future change, needs and challenges. Knows how to innovate within their work context and champions others to be inspired to be part of this ambition
Professional pride	Keeps up to date on latest thinking, trends and work practices. Supports team to be thought leaders; willing to challenge if obstacles get in the way.
Always inclusive	Establishes far reaching partnerships, well beyond own area across a broad range of networks. Understand role to pay due regard to the needs of the whole community.

Key relationships with others

Line manager

Professor of Computational Neuroimaging

Role holder

Senior Research Fellow

Key stakeholder relationships

Colleagues / Junior Research Fellows

Students