



Job title	Research Fellow (Title will be 'Research Associate' where an appointment is made before PhD is completed)	Job family and level	Research and Teaching Level 4 (Appointment will be Level 4 career training grade where an appointment is made before PhD has been completed)
School/ Department	School of Medicine, Mental Health & Clinical Neuroscience	Location	The East Midlands Campuses of the University of Nottingham

Purpose of role

The purpose of this role will be to undertake research in **brain tumour imaging**. In this post, you will apply **advanced imaging methods, including metabolic and physiological magnetic resonance imaging to understand the progressive evolution of glioblastoma**. This includes planning and conducting work using methodologies and techniques appropriate to the type of research and being responsible for writing up work for publication. The project will require you to handle and process imaging data from patients and, working in collaboration with others in the university, genomic and metabolomic measures, exploiting novel data analytic methods to explore the physiological basis for imaging measures and apply machine learning in a radiological context.

You will have the opportunity to use your initiative and creativity to identify areas for research, develop research methods and extend your research portfolio.

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	<p>Research Responsibilities:</p> <ul style="list-style-type: none"> To manage, plan and conduct own research activity using recognised approaches, methodologies, and techniques within the research area. To resolve problems, in meeting research objectives and deadlines in collaboration with others. To identify opportunities and assist in writing bids for research grant applications. Prepare proposals and applications to both external and/or internal bodies for funding, contractual or accreditation purposes. 	60 %



2	<p>Engagement, Communication and Continuation Responsibilities:</p> <ul style="list-style-type: none"> To write up research work for publication and/or contribute to the dissemination at national/international conferences, resulting in successful research outputs. To collaborate with academic colleagues on areas of shared interest for example, course development, collaborative or joint research projects. 	30 %
3	<p>Teach, supervise, examine and personal tutoring:</p> <ul style="list-style-type: none"> You are expected to make a contribution to teaching that is in balance with wider contributions to research and other activities. 	10%
4	<p>Other:</p> <ul style="list-style-type: none"> Any other duties appropriate to the grade and level of the role 	N/A

Person specification

	Essential	Desirable
Skills	<ul style="list-style-type: none"> Excellent oral and written communication skills, including the ability to communicate with clarity on complex information. Ability to creatively apply relevant research approaches, models, techniques and methods. Ability to build relationships and collaborate with others, both internally and externally. High analytical ability to analyse and illuminate data, interpret reports, evaluate and criticise texts and bring new insights. Ability to assess and organise resource requirements and deploy effectively. Demonstrable skills in advanced MRI processing. 	<ul style="list-style-type: none"> Demonstrable skills in using medical image analysis toolboxes such as FSL and SPM. Experience with tumour segmentation. Experience with radiomics/feature extraction.
Knowledge and experience	<ul style="list-style-type: none"> Some practical experience of applying the specialist skills and approaches and techniques required for the role, e.g. use of medical imaging software. Experience in use of research methodologies and techniques to work within area, e.g., processing medical imaging data and 	<ul style="list-style-type: none"> Principles of MRI, including acquisition of physiological measures, e.g. perfusion. Machine learning methods, including application to medical imaging and deep learning approaches.



	<p>performing statistical analysis to answer a hypothesis.</p>	<ul style="list-style-type: none"> • Previous success in gaining support for externally funded research projects. • Experience of developing new approaches, models, techniques or methods in research area.
Qualifications, certification and training (relevant to role)	<ul style="list-style-type: none"> • PhD or equivalent in a physical, medical or life science discipline with direct experience of medical imaging or the equivalent in professional qualifications and experience in research area OR near to completion of a PhD. 	
Statutory, legal or special requirements	<ul style="list-style-type: none"> • The role holder may be required to undergo an enhanced DBS check. 	
Other	<ul style="list-style-type: none"> • 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** Is friendly, engaging and receptive, putting others at ease. Actively listens to others and goes out of way to ensure people feel valued, developed and supported.
- Taking ownership** Is clear on what needs to be done encouraging others to take ownership. Takes action when required, being mindful of important aspects such as Health & Safety, Equality, Diversity & Inclusion, and other considerations.
- Forward thinking** Drives the development, sharing and implementation of new ideas and improvements to support strategic objectives. Engages others in the improvement process.
- Professional pride** Is professional in approach and style, setting an example to others; strives to demonstrate excellence through development of self, others and effective working practices.
- Always inclusive** Builds effective working relationships, recognising and including the contribution of others; promotes inclusion and inclusive practices within own work area.

Key relationships with others

