



Job title	Research Associate/Fellow 'Modelling dementia progression'	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 / Precision Imaging Beacon (Unit 1)	Location	Medical School, Precision Imaging Beacon, Queen's Medical Centre, Nottingham

Purpose of role

The purpose of this role will be to assist and support the Neuroinformatics research team in carrying out neuroimaging analysis, run simulations, and drafting reports.

The Research Associate/Fellow will perform the processing of neuroimaging data from the UK Biobank and ADNI imaging databases, network analysis of derived brain connectivity data, and simulations of network changes. Using this approach you will develop network biomarkers of cognitive decline during healthy ageing and disease progression for dementia.

You will join an established team, led by Professor Marcus Kaiser, whose main areas of research interest include computational models to inform diagnosis and intervention of brain disorders.

	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. 	80%
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 	10%

	Main responsibilities (Primary accountabilities and responsibilities expected to fulfil the role)	% time per year
3	Teaching: <ul style="list-style-type: none"> ▪ To supervise undergraduate and/or postgraduate students projects as appropriate. ▪ To participate in the assessment of student knowledge and co-supervise projects at Masters level. ▪ You are expected to make a contribution to teaching that is in balance with wider contributions to research and other activities. 	10%
4	Other: <ul style="list-style-type: none"> ▪ Any duties as required in accordance with the nature and grade of the post. ▪ We 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 	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 ▪ Publications in peer-reviewed journals or conference proceedings 	<ul style="list-style-type: none"> ▪ First-author publications in peer-reviewed journals
Knowledge and experience	<ul style="list-style-type: none"> ▪ Some practical experience of applying the specialist skills and 	<ul style="list-style-type: none"> ▪ Experience of developing new approaches, models, techniques or methods in neuroimaging.

	<p>approaches and techniques required for the role.</p> <ul style="list-style-type: none"> ▪ Experience in use of research methodologies and techniques to work within area. ▪ Experience in handling neuroimaging data (DTI, rs-fMRI, and MRI) ▪ Experience with large data analysis, such as UK-Biobank, SBCD 	<ul style="list-style-type: none"> ▪ Experience in the analysis of brain connectivity data ▪ Experience in running computer simulations ▪ Developing of image analysis pipelines ▪ Knowledge of evidence synthesis and imaging-based meta-analyses
Qualifications, certification and training (relevant to role)	<ul style="list-style-type: none"> ▪ PhD or equivalent in relevant subject area or the equivalent in professional qualifications and experience in the neurosciences, psychology, computing, mathematics, engineering, or physics OR near to completion of a PhD 	
Other	<ul style="list-style-type: none"> ▪ Willingness to adopt the vision and values of the School of Medicine 	



The University of Nottingham is focused on embedding equality, diversity and inclusion in all that we do. As part of this, we welcome a diverse population to join our work force and therefore encourage applicants from all communities, particularly those with protected characteristics under the Equality Act 2010.

The School of Medicine holds a Silver Athena SWAN award in recognition of our achievements in promoting and advancing these principles. Please see <http://www.nottingham.ac.uk/medicine/about/athena-swan.aspx>



The University is a signatory of the Declaration on Research Assessment (DORA). As such we commit to focus on the scientific content of publications (where requested or provided as part of the recruitment and selection process) as a basis for review of quality, and consideration of value and impact of research conducted, rather than any proxy measures such as Journal Impact Factor.

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 always equitable and fair and works with integrity. Proactively looks for ways to develop the team and is comfortable providing clarity by explaining the rationale behind decisions.
- Taking ownership** Is highly self-aware, looking for ways to improve, both taking on board and offering constructive feedback. Inspires others to take accountability for their own areas.
- Forward thinking** Driven to question the status quo and explore new ideas, supporting the team to "lead the way" in terms of know-how and learning.
- Professional pride** Sets the bar high with quality systems and control measures in place. Demands high standards of others identifying and addressing any gaps to enhance the overall performance.
- Always inclusive** Ensures accessibility to the wider community, actively encouraging inclusion and seeking to involve others. Ensures others always consider the wider context when sharing information making full use of networks and connections.

Key relationships with others

