



Job title	Research Fellow (Title will be 'Research Associate' where an appointment is made before PhD is completed)	Job family and level	Research & Teaching Level 4 (Appointment will be Level 4 Career Training Grade where an appointment is made before PhD has been completed)
School/ Department	Life Sciences	Location	QMC, Medical School

Purpose of role

This is a 3-year project funded by UKRI MRC Advanced Pain Discovery Platform (APDP). The purpose of this role based in Nottingham will be to support the Dr. Federico Dajas-Bailador and Prof Vicky Chapman research teams in developing research objectives and proposals and conducting research towards the identification and targeting via ASOs of new candidate pain mediators in joint pain and osteoarthritis. Osteoarthritis (OA) joint pain is a leading cause of disability and shortening of adult-working life in the UK, with >30% of those over age 45 having sought treatment. Despite this, analgesic treatments are currently limited.

The work is part of a wider collaborative project led by Dr Jones (Institute of Inflammation and Ageing, University of Birmingham), and including colleagues at the University of Bath (Prof Mark Lindsay), the HDR Alleviate Pain Data Hub (Dundee), the Royal Orthopaedic Hospital (Prof Edward Davis) and Eli Lilly Global Pain Discovery.

The post holder will be expected to undertake independent research as well as working as part of a team and will include using approaches or methodologies and techniques appropriate to the type of research and will be responsible for writing up their work in order to contribute to published outcomes. The role holder will have the opportunity to use their initiative and creativity to identify areas for research, develop research methods and extend their research portfolio. The candidate should enjoy teamwork and should have excellent communication skills.

The overall aims of the project are to identify novel candidate pain-mediating genes and networks by modelling of the underlying cellular crosstalk mechanism between synovial fibroblasts and neurones that mediates nociceptor growth and function and elucidate shared mechanisms with other pain disorders. Work in Nottingham will employ state of the art primary sensory neuron cultures grown in compartmentalised microfluidic chambers to determine the efficacy of novel ASOs in reducing the growth and excitability of sensory afferent terminals.

	Main responsibilities (Primary accountabilities and responsibilities expected to fulfil the role)	% time per year
1	To plan and conduct research using recognised approaches, methodologies and techniques within the research area and support the development of research objectives and proposals for own and/or collaborative research area.	30
2	To analyse and interpret data, evaluate and criticise texts and bring new insights to research area.	20

3	To contribute to writing up research findings for conferences and publication.	15
4	To assist with the preparation of applications to both external and/or internal bodies for funding.	10
5	To build internal and/or external contacts with academic and industry colleagues to develop knowledge and understanding, forming relationships for future collaborations.	15
6	To co-ordinate the operational aspect of research, for example, arranging meetings and contribute to collaborative decision making with colleagues in area of research.	5
7	To provide guidance as required to support staff and students, where appropriate in own area of expertise.	5

Person specification

	Essential	Desirable
Skills	<ul style="list-style-type: none"> ▪ Well-developed technical and methodological skills in the subject area. ▪ Excellent molecular cell biology skills (RNA extraction, qPCR, cloning and protein expression). ▪ Evidence of the capacity to write high quality reports and peer-reviewed papers for publication, and of the capacity to present work effectively to a variety of professional and academic audiences at meetings and conferences. ▪ Evidence of ability to take a leading role in the development and execution of research projects. ▪ Innovative thinker with high level of analytical skills. ▪ The ability to assess and evaluate concepts/theories to develop original solutions and particular knowledge of, and expertise in, research methodologies appropriate to their area of scholarship. ▪ Excellent problem-solving abilities. ▪ Ability to communicate complex information clearly at all levels. ▪ Good organisational skills contributing to the planning and organising of the research programme and/or specific research project. ▪ Evidence of good oral communication skills; flexible independent working; initiative; and the ability to work as part of a multi-disciplinary team. 	
Knowledge and experience	<ul style="list-style-type: none"> ▪ In-depth subject knowledge in their areas of scholarship. Specifically, evidence of substantial experience in the field of neuronal culture and Ca²⁺ dynamics. ▪ Experience of neuronal primary cultures. ▪ Experience in fluorescent microscopy techniques for the detection of Ca²⁺ dynamics in neuronal models. ▪ A published track-record (at a level commensurate with experience). ▪ A substantial research background, of strong relevance to the aims of programme of work. 	<ul style="list-style-type: none"> ▪ Experience of the supervision of other members of staff (e.g. technicians, biomedical scientists), undergraduate and postgraduate students ▪ Experience in pain research and osteoarthritis. ▪ Experience of work with visualisation of RNAs in tissue samples (RNAScope). ▪ Experience of work with RNAs and or ASOs in cellular models. ▪ Experience in the extraction of RNA from cellular and tissue samples.

Qualifications, certification and training (relevant to role)	<ul style="list-style-type: none"> ▪ BSc or equivalent in a relevant discipline. ▪ PhD or close to completion 	<ul style="list-style-type: none"> ▪ Qualification in project management (PRINCE2)
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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 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 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

