



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, Translational Medical Sciences Unit	Location	University of Nottingham Biodiscovery Institute, University Park Campus

Purpose of role

To develop, characterise and validate a 3D intestinal organoid platform that can model bacterial and viral host-pathogen interactions. You will be expected to plan and conduct work using approaches or methodologies and techniques appropriate to the type of research and will be responsible for writing up their work for publication.

You will report to Dr Nicholas Hannan who is the lead investigator on the grant.

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

	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. ▪ The post holder will work with iPSCs and primary intestinal tissue biopsy and culture intestinal organoids in a 3D culture system. ▪ Host pathogen interactions using live bacteria, bacterial toxins and virus will also make up a significant part of the research duties along with downstream evaluation of cellular physiological and functional phenotyping. 	70 %
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 	20 %

3	<p>Teaching:</p> <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	<p>Other:</p> <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 	

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. ▪ High analytical ability to analyse and illuminate data, interprets reports, evaluate and criticise texts and bring new insights. ▪ Ability to creatively apply relevant research approaches, models, techniques and methods. ▪ Ability to assess and organise resource requirements and deploy effectively. ▪ Ability to build relationships and collaborate with others, both internally and externally. 	<ul style="list-style-type: none"> ▪ Ability to foster a research culture and commitment to learn in others.
Knowledge and experience	<ul style="list-style-type: none"> ▪ Experience with human stem cells, either embryonic or induced pluripotent stem cells including their maintenance and differentiation. ▪ Experience with culture and manipulation of 3D organoid culture systems ▪ Experience with QPCR, flow cytometry, confocal microscopy and cellular assays for proliferation, viability and cellular functionality of the gut. 	<ul style="list-style-type: none"> ▪ Experience working and communicating within a consortium or research project involving multiple teams ▪ Previous success in gaining support for externally funded research projects. ▪ Experience of developing new approaches, models, techniques or methods in research area. ▪ Experience culturing either primary or stem cell derived intestinal organoids ▪ Experience with host pathogen modelling using cell lines and live pathogens ▪ Experience working in a containment level 3 (CL3) research laboratory and/or an excellent understanding of CL3 working requirements. ▪ Experience working with hypoxic cell culture systems. ▪ Experience culturing bacteria and virus and applying these to cells.
Qualifications, certification and training (relevant to role)	<ul style="list-style-type: none"> ▪ PhD (or near completion) in stem cell biology/host pathogen interactions and experience in research area. 	
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

