University of Nottingham
UK | CHINA | MALAYSIA

Role profile

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	Location	University Park Campus, BioDiscovery Institute, Nottingham

Purpose of role

To have specific responsibility for research, for developing research objectives and proposals for a research project on multicellular modelling of gastrointestinal tissues/tumours for drug discovery. You will be expected to plan and conduct work using approaches, methodologies, and techniques appropriate to the type of research and will be responsible for writing up your work for publication.

The primary aim of this position is to develop a three-dimensional mini-ring model derived from colorectal cancer patients for screening of anti-cancer drugs. This model will be utilised for high-throughput drug screening, specifically targeting the tumour microenvironment. You will join an established team, led by Dr Abdolrahman Shams Nateri, whose main area of research is focused on mechanisms, multi-omics, and translational research using ex-vivo multicellular human tissue from patients with cancers, with a particular emphasis on personalised medicine.

While your primary focus will be in these areas, 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 recognises the importance of continuous professional development and therefore the importance of providing opportunities, structured support and encouragement to engage in professional development each year.

	Main responsibilities (Primary accountabilities and responsibilities expected to fulfil the role)	% time per year
1	**Research Responsibilities:** ▪ To manage, plan and conduct own/supervised research activity using recognised approaches, methodologies, and techniques within the bioengineering and biomedical and regenerative medicine applications of 3D culture models/ research area. ▪ Analyse data, interpret reports, evaluate, and criticise texts and bring new insights to research area. ▪ Assist in the preparation of scientific reports and publications for the grant programme. ▪ 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	70%

	and/or internal bodies for funding, contractual or accreditation purposes.	
2	**Engagement, Communication and Continuation Responsibilities:** ▪ Prepare research work for publication and/or contribute to the dissemination to relevant groups including external bodies and conferences, resulting in successful research outputs. ▪ To collaborate with the nominated Research Nurse, clinicians, and academic colleagues involved in this research project. ▪ To continue developing professional research skills, keeping knowledge up to date through attendance at seminars and conferences, and initiate internal/external collaborations where appropriate. ▪ Develop research objectives and proposals for own and/or collaborative research area. ▪ Co-ordinate the operational aspect of research networks, for example, arranging meetings and updating web sites etc. and contribute to collaborative decision making with colleagues in area of research. ▪ Work in conjunction with others in the research team to achieve objectives and make an active contribution to the success of the team. Provide support, guidance, and supervision to other staff, where appropriate in own area of expertise.	20%
3	**Teach, supervise and examine:** ▪ You are expected to make a contribution to teaching that is in balance with wider contributions to research and other activities.	10%
4	**Other:** ▪ Any other duties appropriate to the grade and level of the role. ▪ 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.	N/A

Person specification

	Essential	Desirable
Skills	▪ Laboratory skills of cell culture or organoid culture models and imaging. ▪ Evidence of sufficient breadth or depth of research methodologies and techniques to work in the required research area (cancer biology and drug screening). ▪ Ability to creatively apply relevant research approaches, models, techniques and methods in tumour microenvironment and 3D cancer modeling. ▪ High analytical ability to analyse and illuminate data, interpret reports, evaluate, and criticise texts and bring new insights. ▪ Excellent oral and written communication skills, including the ability to communicate with clarity on complex information. ▪ Ability to build relationships and collaborate with others, both internally and externally. ▪ Ability to assess and organize resource requirements and deploy effectively.	▪ Laboratory skills and methodologies in tumour microenvironment and 3D cancer modelling. ▪ Laboratory skills and methodologies for secretome analysis and modulators of extracellular matrix programming. ▪ Data handling skills (imaging data, gene expression analysis data etc.).
Knowledge and experience	▪ Experience in cell cultures models and imaging. ▪ Experience in molecular and cellular biology techniques and gene/ proteins expression analysis (qPCR, Immunostaining, ELISA, and FACS analysis). ▪ Evidence of sufficient level of knowledge relevant to this position obtained from recent publications. ▪ Experience in use of research methodologies and techniques to work within area.	▪ Experience of developing new approaches, models, techniques or methods in tumour microenvironment and 3D cancer modeling research area. ▪ Experience in proteome, transcriptome, secretome profile assays and analyses (library constructions, omics data handling and analyses). ▪ Relevant publication records in the research area. ▪ Previous success in gaining support for externally funded research projects.
Qualifications, certification and training (relevant to role)	▪ PhD (or close to completion) or equivalent in relevant subject area or the equivalent in professional qualifications and experience in research area.	

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