

## Research Fellow

**School or Department:** School of Science and Technology - Biosciences

**Grade & Salary:** Grade G (£33,045 - £38,026 p.a. pro rata)

### Role Description:

The Research Fellow at the Department of Biosciences will support the delivery of the MRC-funded project focused on developing and evaluating microRNA-based nanoscale delivery systems for inflammatory bowel disorders. The Research Fellow will bring strong research capability and will have specific responsibility for planning, conducting, and writing up research.

### Duties & Research Responsibilities of the role:

- Manage, plan and conduct own research activity using recognised approaches, methodologies, and techniques within the research area.
- Contribute to the undertaking of general laboratory duties such as ordering consumables/chemicals, maintenance of key laboratory equipment, where appropriate.
- Resolve problems, in meeting research objectives and deadlines in collaboration with others.
- 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.
- Write up research work for publication and/or contribute to the dissemination at national/international conferences, resulting in successful research outputs.
- Build relationships with both internal and external collaborators to exchange information, develop collaborative projects and identify potential opportunities for future collaboration
- Maintain awareness of IP opportunities and help prepare patent documents.
- Collaborate with academic colleagues on areas of shared interest for example, course development, collaborative or joint research projects.
- Contribute to teaching that is in balance with wider contributions to research and other activities.
- Guide and mentor PhD and Graduate student members within the research group.

Our current research portfolio has a particularly strong record in the application of novel technologies across interdisciplinary domains. Experience in metabolomics, microbiology, cell culture, organoid and organ-on-chip technologies is therefore essential or highly desirable for this role.



**Our Principles, Our Ways:**

Our Ways represents a commitment to making a difference, taking bold steps, and maintaining moral standards. It's about proactively creating positive change while prioritising integrity and accountability in all our actions. We encourage colleagues to strive towards Our Ways with the following behaviours:

<b>Our Ways</b>		
<b>We change lives.</b>	<b>We are bold.</b>	<b>We do the right thing.</b>
Relationships with others	Adaptability	Planning and delivering work
Delivering through others	Problem solving	Accountability
	Developing yourself	

**Personal Attributes:**

Attributes	Essential	Desirable
Knowledge	<p>Strong research track record in basic molecular and cell biology work</p> <p>Strong analytical skills including the ability to analyse and interpret data and reports and ability to bring new insights</p> <p>Present work effectively to a variety of professional and academic audiences at meetings and conferences</p> <p>Strong background in microbial and cell biology</p> <p>Excellent in information technology and computing</p>	<p>Organ-on-chip technologies</p> <p>Metabolomics data analysis</p> <p>Animal models of disease</p>
Skills	<p>Excellent oral and written communication skills, including the ability to communicate with clarity on complex information</p> <p>Ability to creatively apply relevant research approaches, models, techniques and methods</p> <p>Ability to build relationships and collaborate with others, both internally and externally</p> <p>High analytical ability to analyse and illuminate data, interpret reports, evaluate and criticise texts and bring new insights</p> <p>Ability to assess and organise resource requirements and deploy effectively</p>	<p>Developing new approaches, models, techniques or methods in research area</p>



	Ability to work independently and in a team	
Experience	<p>Practical experience of microbial and cell culture techniques</p> <p>Experience in cell-based and microbe-based assays</p> <p>Practical experience of organoid propagation and expansion</p> <p>Experience in use of cell imaging techniques</p>	<p>Experience in metabolomics and especially 3D OrbiSIMS</p> <p>Experience in working with animal models</p> <p>Worked in interdisciplinary teams, collaborations with medical and industrial partners</p> <p>Previous success in gaining support for externally funded projects</p> <p>Anaerobic bacterial cultures especially <i>C. difficile</i></p>
Qualifications	PhD in microbiology, molecular biology, metabolomics, biomedicine or pharmacy	