

THE UNIVERSITY OF MANCHESTER

PARTICULARS OF APPOINTMENT

FACULTY OF BIOLOGY, MEDICINE & HEALTH

FACULTY OFFICE BIOLOGY, MEDICINE & HEALTH

FACULTY OFFICE - BMH – ADMINISTRATION

RESEARCH TECHNICIAN IN POLLUTION IMPACT ON PREGNANCY

VACANCY REF: BMH-026825

Salary:	Grade 4 £27,344 pro rata, per annum, depending on relevant experience
Hours:	28 hours per week
Duration:	Fixed Term from January 2024 until 31 st of October 2025, with the possibility of extension depending on research funding availability
Location:	Oxford Road, Manchester

Enquiries about the vacancy, shortlisting and interviews:

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Introduction to the University of Manchester and the Faculty of Biology, Medicine and Health

The University of Manchester is the largest single-site university in the UK with around 38,000 students and more than 11,000 staff. We aim to become one of the top 25 research universities in the world and are committed to delivering an outstanding teaching and learning experience; contributing to the social and economic success of local, national and international communities; producing the highest calibre graduates; and developing our staff to be amongst the very best of their peers.

To achieve our ambitious goals we aim to attract and retain the very best people to work across a range of academic disciplines and support functions.

The Faculty of Biology, Medicine and Health

The integrated structure of our faculty enables a truly translational approach to biology, medicine and health - from pure discovery science through to clinical application and patient care. It also encourages collaborative working, enabling staff to deliver innovative, world-leading research that has a very real and positive impact on people's lives, as well as high-quality education and training to over 11,000 undergraduate and postgraduate students.

Our Strategic Partnerships

The faculty has established a number of key strategic partnerships that underpin its ambitions to develop ground-breaking research.

Working alongside six local NHS Trusts, the Faculty is a key member of the <https://mft.nhs.uk/withington/research/manchester-academic-health-science-centre-mahsc/> - a federation of equal partners that unites leading healthcare providers with world-class academics and researchers. It aims to be a global centre for the delivery of applied health research and education and provide leadership for our local and regional health systems.

We also play a leading role in <https://healthinnovationmanchester.com/>, which was launched in September 2015, as part of the UK Government's decision to devolve health and social care responsibilities to Greater Manchester. HInM offers a unique opportunity to bring together health and social care, academic and life science related business resources across the region to deliver an innovative health ecosystem that can help accelerate innovation into our local health and social care systems, enhance our global scientific standing and act as a magnet for inward investment.

Key partnerships in the charitable sector include Cancer Research UK; Diabetes UK; and the Wellcome Trust; and the faculty also has research and funding links to a number of commercial organisations including Unilever, AstraZeneca, GlaxoSmithKline and Boots, who help us to bring new drugs and products to the market.

Working for the University of Manchester

The University of Manchester strives to make our community a welcoming, caring and enthusiastic one, fuelling ambition with opportunities and support to help us all achieve our personal and professional goals.

Our diverse job opportunities include an attractive <https://www.staffnet.manchester.ac.uk/people-and-od/benefit/> with family-friendly policies that provide for flexible working. We care deeply about career and personal development, offering a structured induction programme for new staff, an annual performance and development review, staff training for all career stages and mentoring opportunities to support your career development.

We have a genuine commitment to <http://www.manchester.ac.uk/connect/jobs/equality-diversity/awards/> for our staff and students, and are proud to employ a workforce that reflects the diverse community we serve.

As a global institution, situated at the heart of a lively, <http://www.manchester.ac.uk/study/experience/student-life/city/>, we welcome applicants of all nationalities. To help international job applicants plan for life in the UK, we have put together some useful <http://www.staffnet.manchester.ac.uk/employment/joining-the-university/international-staff/> travel to the UK, accommodation and a number of other practical considerations.

Background to the Post

A post has become available for a research technician to work on an externally funded research project investigating the effects of airborne pollutants on pregnancy. This post will focus pollutant effects on in vitro models of human placenta.

The ideal candidate will have previous experience of reproductive biology and cell culture and will work at The Maternal and Fetal Health Research Centre in St. Mary's Hospital.

The overall purpose of the role is to provide technical support with minimal supervision, in a range of project-specific research activities including: the running and trouble-shooting of experiments; the maintenance, use and teaching of research-associated equipment. To assist team members in ensuring that staff and students operate safe working practices ensuring health and safety compliance within the laboratories.

You will work with Dr Peter Ruane and will also be expected to take part in meetings with the sponsor, write written reports and generally make a positive contribution to the running of the lab.

Key Responsibilities, Accountabilities or Duties

- Carry out and assist staff and students with standard experimental protocols as directed by your supervisor, this will include (i) reagent preparation, (ii) tissue sample collection, dissection and culture, (iii) tissue sectioning, immunostaining and microscopy, (iv) cell culture (v) protein and RNA detection methodology (ELISA, western, qPCR).
- Operate and assist staff and students in the operation of laboratory equipment.
- Liaise with research midwives to collect placental samples.
- Assist with monitoring general consumable stock levels and procurement of consumables and equipment. Take delivery of goods and store in accordance with local and statutory guidelines.
- Assist in the smooth running of the laboratories including general housekeeping duties.
- Assistance in the preparation and collation of accurate data.
- Keep accurate records using paper and computer-based systems.
- To assist with the operating of a range of computer software packages including image analysis software, spread sheets, word processing and other general data processing systems including a database for logging samples.
- Take delivery of goods and store in accordance with local and statutory guidelines.
- Work in compliance with relevant Health and Safety regulation, Data Protection Act and University policy legislation and regulations, e.g. Human tissue Act, Equality & Diversity, etc.
- Assist in carrying out of risk assessments for the preparation and use of reagents, chemicals, equipment and procedures by self and others in your research group.
- Any other reasonable duties commensurate with the post.
- Several of these duties overlap with similar projects within the research group and it is anticipated that roles and responsibilities will be shared between technicians.

Personal Specification

Essential Knowledge, Skills, Experience and Qualifications

- A qualification at QCF level 6 (such as a bachelor's degree) in a relevant biological or biomedical science subject, OR, QCF level 2 passes (such as GCSEs) in English and Mathematics and at least one Science subject and substantial relevant experience of working in a research laboratory
- Relevant and specific laboratory experience in tissue and cell culture, and in the use and maintenance of related equipment
- Previous experience of fluorescence microscopy
- Knowledge of and compliance with relevant Health and Safety regulation, the Data Protection Act, Standard Operating Procedures and risk assessments including COSHH risk assessments
- The ability to communicate effectively with people at all levels, both verbally and in writing and the ability to work flexibly within an interdisciplinary team
- Meticulous laboratory technique and the ability to execute complex experiments independently if required
- Competent computer skills including relevant scientific and analytical software e.g. Word, Excel, GraphPad Prism
- The ability to work independently and use own initiative
- Have a keen interest in seeing observations made in the laboratory to translate into new therapies for patient benefit
- Demonstrate pro-activity and ability to multi-task, prioritise, handle projects and deliver outputs on time without direct supervision
- A flexible but meticulous and methodical approach to work and a willingness to undertake a variety of tasks
- Willingness to work flexible hours
- Ability and enthusiasm to learn new skills
- Willingness to undertake any necessary training
- Willingness to attend and contribute to research group and staff meetings

Desirable Knowledge, Skills, Experience and Qualifications

- Higher Education Qualification such as a bachelor's or Master's degree or Higher National Certificate or Diploma in a relevant science subject
- Reproductive biology research experience
- Experience in the following laboratory techniques: human tissue dissection and culture, tissue processing and sectioning, immunostaining, western blotting, qPCR, ELISA
- Knowledge of specific legislation e.g. the Human Tissue Act (2004)