

Job Description

Postdoctoral Research Assistant in Vascular Biology

Faculty of Health and Social Care



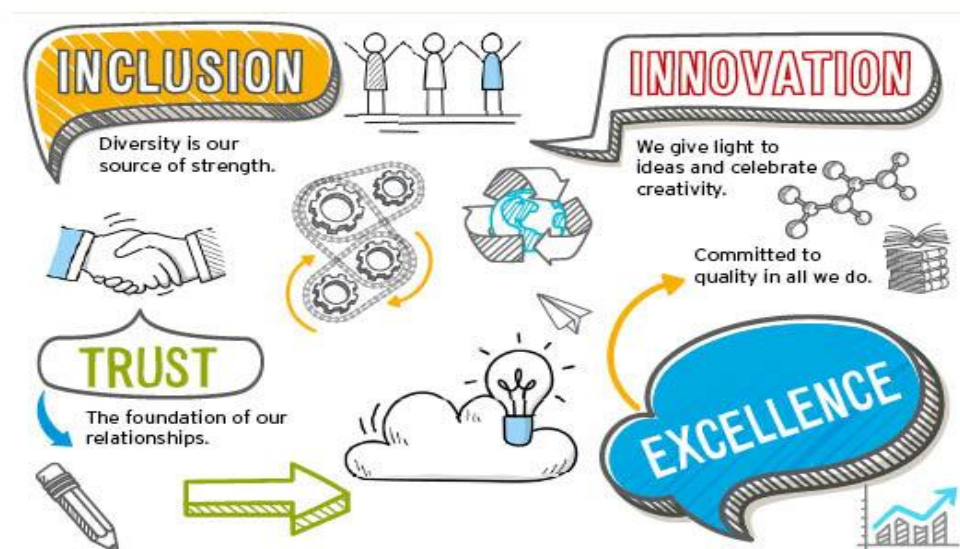
Brief summary of the role

Role title:	Postdoctoral research assistant in vascular biology
Grade:	7
Faculty or Directorate:	Faculty of Health and Social Care
Service or Department:	School of Pharmacy, Optometry and Medical Sciences
Location:	Main campus
Reports to:	Dr Kirsten Riches-Suman
Responsible for:	N/A
Work pattern:	Full time for a fixed term of 30 months

About the University of Bradford

Values

At the University of Bradford, we are guided by our core values of Excellence, Trust, Innovation, and Inclusion. These values shape our approach and our commitment to making diversity, equity, and inclusion part of everything we do – from how we build our curriculum to how we build our workforce. It is the responsibility of every employee to uphold the university values.



Equality, Diversity, and Inclusion (EDI)

At the University of Bradford, we are guided by our core values of Excellence, Trust, Innovation, and Inclusion. These values shape our approach and our commitment to making diversity, equity, and inclusion at the heart of everything we do.

We foster a work environment that's inclusive as well as diverse, where staff can be themselves and have the support and adjustments to be successful within their role.

We are dedicated to promoting equality and inclusivity throughout the university and have established several networks where individuals can find support and safe places fostering a sense of belonging and acceptance. We are committed to several equality charters such as Athena Swan, Race Equality Charter, Disability Confident and Stonewall University Champions Programme..

Health, safety, and wellbeing

Health and Safety is a partnership between employee and employer each having responsibilities, as such all employees of the University have a statutory duty of care for their own personal safety and that of others who may be affected by their acts or omissions.

It is the responsibility of all employees that they fulfil a proactive role towards the management of risk in all of their actions. This entails the risk assessment of all situations, the taking of appropriate actions and reporting of all incidents, near misses and hazards.

Managers should note they have a duty of care towards any staff they manage; academic staff also have a duty of care towards students.

All colleagues will need to ensure you are familiar with any relevant Health and Safety policies and procedures, seeking advice from the Central University Health and Safety team as appropriate.

We are registered members of the University Mental Health Charter. This visibly demonstrates our commitment to achieving cultural change in student and staff mental health and wellbeing across the whole university, whilst supporting the vision of our People Strategy to create a culture and environment of transformational diversity, inclusion and social mobility, creating a place where our values come to life and are evident in our approach.

Information governance

Employees have a responsibility for the information and records (including student, health, financial and administrative records) that are gathered or used as part of their work undertaken for the University.

An employee must consult their manager if they have any doubts about the appropriate handling of the information and records with which they work.

All employees must always adhere to data protection legislation and the University's policies and procedures in relation to information governance and information security.

Employees will be required, when and where appropriate to the role, to comply with the processing of requests under the Freedom of Information Act 2000.

Criminal record disclosures and working with vulnerable groups

Depending on the defined nature of your work and specialist area of expertise, the University may obtain a standard or enhanced disclosure through the Disclosure and Barring Service (DBS) under the Rehabilitation of Offenders Act 1974.

All employees of the University who have contact with children, young people, vulnerable adults, service users and their families must familiarise themselves, be aware of their responsibilities and adhere to the University's policy and Safeguarding Vulnerable Groups Act 2006.

The University is committed to protect and safeguard children, young people and Vulnerable Adults.

Suitable applicants will not be refused positions because of criminal record information or other information declared, where it has no bearing on the role (for which you are applying) and no risks have been identified against the duties you would be expected to perform as part of that role.

Role holder: essential and desirable attributes

Qualifications

Essential	<ul style="list-style-type: none">• PhD in biological science related subject
Desirable	<ul style="list-style-type: none">• PhD and/or post-doctoral experience in vascular biology or computational biology / bioinformatics

Experience, skills, and knowledge

Essential	<ul style="list-style-type: none">• Excellent practical laboratory skills• Knowledge and experience of cell and molecular biology techniques including primary cell culture, RNA and DNA isolation, barcoding, light microscopy, confocal microscopy and immunocytochemistry• Knowledge and understanding of bioinformatic approaches for handling and analyzing large datasets including familiarity with at least one programming language (bash, R, python or equivalent).• Understanding of the Human Tissue Act and the ethical implications of research involving humans• Knowledge of safe laboratory practice, standard operating protocols and COSHH procedures• Ability to manage, plan and implement own workload and projects to meet deadlines• Excellent communication skills (both written and verbal)
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Desirable	<ul style="list-style-type: none"> • Experience with tissue dissection, processing and staining • Experience in culturing smooth muscle and endothelial cells • Experience in analysing RNA-Seq and methylome data • Experience of working with people as research participants or in clinical settings
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Personal attributes

Essential	<ul style="list-style-type: none"> • A collaborative approach to scientific research that treats colleagues with respect and dignity, and a commitment to engaging in positive working relationships • Understanding of the University's commitment to Equality and Diversity • Appreciation of the importance of public engagement in driving inclusivity and role modelling for scientific careers
Desirable	<ul style="list-style-type: none"> • Experience of working with communities to increase engagement in science or research

Main purpose of the role

The purpose of this post is to carry out original research into the molecular and cellular mechanisms that underpin vascular dysfunction in gestational diabetes. Working with partners in the NHS and other academic institutions, you will also examine what role ethnicity may play in the type or severity of vascular changes. It is supported by a Medical Research Council (MRC) project grant awarded to Dr Kirsten Riches-Suman and as well as working with patients, you will perform extensive tissue and cell culture work, and bioinformatics analyses to address the project outcomes.

Main duties and responsibilities

Note: The list below may vary to include other reasonable requests (as directed by university management) which do not change the general character of the job or the level of responsibility entailed

1. Understand, plan and complete research tasks with a high degree of technical skill and accuracy. This includes (but is not limited to) collection and processing of tissue, cell culture work, bioinformatic analysis and measurement of vascular health parameters.
2. Ongoing and prompt interpretation of collected data to inform and direct future experimental processes and the generation of original ideas.
3. Accurate recording of data and maintenance of research activity and progress records (including curation of bioinformatic pipelines and workflows).
4. Show independence in planning your own day-to-day work matters, ensuring that all the interlinked aspects of the project are completed in a timely and efficient manner.
5. Troubleshoot and explore alternative solutions if research problems arise.
6. Take appropriate actions to control and reduce risks in the laboratory environment by contributing to risk assessments, standard operating procedures, COSHH and biological risk documentation, and role-modelling excellent and safe laboratory practice to others.
7. Continue your professional development by liaising with other academics or health practitioners regarding the programme of research, building collaborative research networks to share innovations and ideas to drive research forward
8. Demonstrate excellent written and oral communication skills; ranging from day-to-day communication of research issues and contribution to lab meetings, to presenting at national / international conferences and preparing research publications and follow-on funding applications.
9. Be a proactive and supportive team member, assisting in the training of more junior members of the team with practical and analytical advice, and contributing to a positive, respectful working environment to ensure all colleagues feel valued and research objectives are met.

10. As a university citizen supporting key student events throughout the year such as Open days, clearing, enrollment, and Graduation. (Essential for all roles)
11. Any other duties commensurate with the grade and nature of the post.