Candidate Information

Position:	Research Fellow
School/Department:	School of Medicine, Dentistry and Biomedical Sciences
Reference:	25/112780
Closing Date:	Monday 1 September 2025
Salary:	£41,519 to £46,704 annum
Anticipated Interview Date:	Monday 15 September 2025
Duration:	12 months

JOB PURPOSE:

An experienced and highly motivated post-doctoral scientist is being sought to join Dr. Chris Watson's research group based in the Wellcome-Wolfson Institute for Experimental Medicine. The recruited post-doctoral scientist will contribute to a research program investigating novel therapeutics and biomarkers for heart failure currently supported by the British Heart Foundation, Northern Ireland Chest Heart & Stroke, and Horizon 2020.

We seek applicants with prior experience working with clinical samples and in murine phenotyping who are proactive, team-oriented, and eager to apply diverse experimental approaches to advance our understanding of cardiac health. Strong interpersonal skills and a passion for collaborative research are essential. Applications are invited from highly motivated, efficient and organised individuals with a strong commitment to research and collaborative science. The successful candidate will have a strong background in in vivo murine phenotyping and will be seeking to lead an ambitious cutting-edge research project in a well-supported environment. The successful candidate will have a demonstrated background in cardiovascular disease, epigenetics, biomarker work, or closely related fields in biomedicine with an excellent PhD degree awarded. The candidate should be committed to developing a dynamic, academic career in science and have excellent communication skills in written and spoken English.

Further information:

https://pure.qub.ac.uk/persons/chris-watson/

https://www.qub.ac.uk/research-centres/wwiem/

MAJOR DUTIES:

1. Conceive experimental strategies to achieve high level project aims in discussion with other members of the team.
2. Oversee management of a transgenic mouse colony, including genotyping, with assistance from facility animal technicians.
3. Plan, conduct and analyse cardiac phenotyping of transgenic and wild-type mice subject to either an agonist induced hypertension or diabetic model of heart failure.
4. Plan, conduct and analyse cardiovascular related research in areas of DNA methylation, biomarker discovery/validation, and novel therapeutic testing under supervision within a research programme. Techniques may include RNA sequencing, proteomics, DNA methylation profiling, cell culture, tissue histology, transfection, Western blotting, ELISA, PCR, bioinformatics.
5. Collect, process, and analyse clinical samples as part of ongoing studies.
6. Maintain up-to-date knowledge of the field of interest at the cutting edge and communicate same to the group.
7. Present regular progress reports on research to members of the research group, other groups within the University and to external audiences nationally and internationally to disseminate and publicise research findings.
8. Prepare, in consultation with co-authors, material for publication in national and international journals and presentations at international conferences.
9. Assist grant holder in the preparation of funding proposals and applications as well as project progress reports to external bodies.

10. Carry out routine administrative tasks associated with the research projects/group to ensure that projects are completed on time and within budget and that the group functions efficiently. These might include organisation of project/group meetings and documentation, financial control, stock management/procurement, risk assessment of research activities and development of SOPs. Carry out routine administrative tasks associated with the day-to-day running of the research group in a communal lab setting.
11. Carry out school/undergraduate/post-graduate student and visiting researcher training and supervision, demonstrating, tutoring or lecturing duties within the post holder's area of expertise and under the guidance of a member of academic staff.
12. Participate in, and in some cases lead, outreach activities on behalf of the group.
13. Contribute to communal activities of the Institute/University e.g. sustainability initiatives.
14. Participate in local research-related activities such as journal clubs, training sessions, seminar series etc.
15. Assist in assessment of research communications and data, particularly within the group.
16. Additional research and/or laboratory related duties including outreach activities, within the general range of the post and competence of post holder.

ESSENTIAL CRITERIA:

1. Have or be about to receive (laboratory work complete) a PhD in molecular biology, cell biology, pharmacology or a related area of biomedicine.
2. Significant recent experience in in vivo murine phenotyping.
3. Extensive, recent, hands-on experience of using at least 3 standard molecular biology techniques (such as, but not limited to Western blotting, Real-Time PCR, histopathology etc) to answer biological questions in cell and mouse models.
4. Have experience working with clinical samples/data.
5. Experience teaching/supervising /mentoring postgraduate/undergraduate/school students and visiting researchers in the laboratory.
6. Methodical approach to project management and meticulous in regards to experimental procedures and record keeping.
7. Highly motivated, efficient, organised and show a commitment to, and interest in, research topic.
8. Competent in maintaining knowledge of cutting-edge of field of expertise.
9. Competent in delivering effective oral and poster presentations.
10. Competent in communicating stipulated research skills essential to the post in CV/job application.
11. Strong ability to work from own initiative.
12. Strong capacity to meet deadlines.
13. Excellent team working skills in multiple internal and external team settings.
14. Leadership qualities.
15. Excellent problem-solving skills.
16. Irregular hours including evening, weekend and other out-of-hours working will be a component of the research at times.
17. Must be willing to travel to national and international meetings and collaborative laboratories.

DESIRABLE CRITERIA:

1. Home Office personal licence including modules A, B and C.
2. Experience in DNA methylation analysis, biomarker work, in vivo models of heart disease, and working with clinical samples would be of benefit.
3. Recent hands on experience of transgenic mouse colony management.
4. Experience of cardiovascular phenotyping of mouse models.
5. Experience in mouse echocardiography.
6. Previous experience of studying epigenetics in cells, mice, and humans.
7. Previous experience in bioinformatics/analysis of sequencing data.
8. Experience working with clinical samples/data.
9. Experience teaching lab members as well as undergraduate lectures/tutorials/practicals.
10. Research project management training.
11. Up-to-date knowledge of fields of murine phenotyping, heart failure biology.
12. Experience working in outreach settings.