

Candidate Information

Position: Research Fellow

School/Department: School of Medicine, Dentistry and Biomedical Sciences

Reference: 25/112775

Closing Date: Monday 15 September 2025
Salary: £41,519- £44,035 per annum
Anticipated Interview Date: Wednesday 1 October 2025
Duration: Available until 31 August 2027

JOB PURPOSE:

We are seeking a driven and enthusiastic postdoctoral researcher to join an innovative research project in the field of cardio protection during radiotherapy for cancer. This role offers the opportunity to work at the forefront of cardio-oncology science, combining sophisticated small animal radiation models, single-cell transcriptomics and state-of-the-art echocardiography.

The successful candidate will join a collaborative, interdisciplinary team of clinicians and translational scientists under the supervision of Dr Gerard Walls as part of a British Heart Foundation-funded project. Motivated applicants with experience in murine phenotyping are sought for this exciting position, where a passion for collaborative research will be essential for evaluating this critical problem for Oncology patients.

This project will use a range of wildtype, co-morbidity and tumour models to build preliminary data supporting a novel cardiac radio protecting drug, combining functional, histopathological, transcriptomic and cytokine analyses, including validation work in collaboration partners at Washington University in St Louis.

The candidate will have the opportunity to gain supervisory experience relating to more junior members of the Walls laboratory team, leadership and management skills regarding laboratory resources and professional development through the QUB Postdoc Society.

In summary, this position will be ideal for a scientist who wishes to apply hybrid approaches to answer important research questions directly related to holistic cancer care. The successful candidate will have recent strong experience in mouse models and a background in either radiation or cardiovascular science, with the capability to lead this pioneering cardio-oncology research project in a supportive environment.

MAJOR DUTIES:

- 1. Develop and execute rigorous experiments under the supervision of Dr Walls and other principal investigators to obtain robust data. Evaluate and interpret these data using appropriate statistical techniques and prepare results in suitable formats for dissemination through academic channels.
- 2. To work as part of a collaborative team of cell biologists, clinicians and physicists to ensure optimal progression of the project at all times and to contribute to the achievement of project milestones.
- 3. To present regular progress reports on research to members of the research project team and, as appropriate, to other internal or external audiences to disseminate and publicise research findings.
- 4. To write up results in a timely manner and take a leadership role in writing research manuscripts for publication in high quality journals. To maintain data files appropriate for Institutional Data Repository.
- 5. The appointed individual will be encouraged to formulate, write and submit grants for fellowship awards, project and travel support.
- 6. To attend and present new experimental data at national and international meetings as appropriate.
- 7. To carry out routine administrative tasks associated with the research project to ensure that project/s are completed on time and within budget.

- 8. To assist with the supervision of postgraduate students, honours or summer students on mini-projects, to develop their supervisory skills.
- 9. To read academic papers, journals and textbooks and keep up-to-date with developments in the cardio-oncology and radiotherapy specialisms and to maintain awareness of the context of the research project.
- 10. Any other reasonable duties including public engagement and outreach activities, within the general gambit 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 (*must be obtained within 3 months of commencement of employment).
- 2. Substantial relevant recent experience of in vivo murine phenotyping.
- 3. Previous track record of high quality research in the field radiation biology research or cardiovascular science.
- 4. Experience in standard biomedical laboratory techniques including tissue culture and immunohistochemistry.
- 5. Must have published paper(s) in quality journals to a level commensurate with research experience.
- 6. Evidence of proactive organisational capabilities including meeting deadlines.
- 7. Sufficient breadth and depth of specialist knowledge in the discipline and of research methods and techniques to work within established research programmes.
- 8. Evidence of excellent communication skills in day-to-day work.
- 9. Ability to communicate complex information clearly to range of audiences via oral, poster and Powerpoint presentations.
- 10. Ability to build contacts and participate in internal and external networks and research presentations.
- 11. Qualities indicative of good leadership and management skills.
- 12. Team worker, highly motivated, supportive of junior colleagues within the group.
- 13. Ability to assess and organise resources.
- 14. Ability to work hours required of the research which may include evenings or weekends.

DESIRABLE CRITERIA:

- 1. 1st Class undergraduate degree.
- 2. Experience in mouse echocardiography.
- Evidence of scientific writing skills.
- 4. Familiarity of modern radiotherapy treatment.
- 5. Familiarity with contemporary cardiovascular paradigms including cardiac remodelling.
- 6. Evidence of participation in training/mentoring of students or junior staff.
- 7. Commitment to professional development, as evidenced by scientific memberships.
- 8. Research project management training.
- 9. Experience teaching lab members as well as undergraduate lectures/tutorials/practicals.

ADDITIONAL INFORMATION:

Informal enquiries can be directed to: Professor David Grieve - d.grieve@qub.ac.uk.