

Candidate Information

Position: Research Assistant
School/Department: School of Medicine, Dentistry and Biomedical Sciences
Reference: 25/112981
Closing Date: Monday 1 December 2025
Salary: £35,136 per annum
Anticipated Interview Date: Tuesday 16 December 2025
Duration: Available until 3 November 2027

JOB PURPOSE:

This collaboration between Queen's University Belfast and Oxford University, invites applications for a Research Assistant to join the Radiation Biology Group and the Prostate Centre of Excellence (ProEx) at the Johnston Cancer Research Centre (JCRC), Queen's University Belfast. The post-holder will focus on optimising the sequence and timing of novel PSMA targeted alpha- and beta-radionuclide combination therapies in metastatic prostate cancer, with a particular focus on investigating mechanisms of action to inform the design of a phase 1 clinical trial. These studies will be coupled with functional genomics analysis (RNA-seq) of 2D and in vivo modelling and validation.

The position involves assisting in the planning, delivery, and analysis of pre-clinical studies aimed at improving treatment outcomes through novel radionuclide therapy combinations.

MAJOR DUTIES:

1. Assist in the design, development and refining of experiments related to the project under the supervision of the line manager in order to obtain reliable data, then evaluate and interpret the results using methodologies and techniques appropriate to the area of the research.
2. To undertake experiments with alpha- and beta-radionuclides in combination with chemotherapies using in vitro and in vivo prostate cancer models.
3. Carry out analyses, critical evaluations, and interpretations using methodologies and other techniques appropriate to area of research.
4. To regularly present results to the research group as part of routine peer review.
5. Maintain collaborative links with project partners.
6. Write up results in a timely manner and contribute to research manuscripts, in consultation with the supervisor.
7. Present regular progress reports on research to members of the research group and to external audiences to disseminate and publicise research findings.
8. Assist in formulating, writing and submitting grants for project and travel support in association with the line manager.
9. Attend and present new experimental data at national and international meetings in consultation with the line manager.
10. Carry out undergraduate supervision/demonstrating/teaching duties under direction.
11. Carry out routine administrative duties as requested.
12. Read academic papers, journals and textbooks to keep abreast of developments in own specialism and related disciplines.

ESSENTIAL CRITERIA:

1. Minimum of upper second class undergraduate degree in a relevant area.
2. Relevant, research experience in an area of radiation biology or closely related with a focus on drug/radiotherapy combinations.
3. Expertise in a range of cell/radiation biology techniques including:
 - In vitro tissue culture
 - Protein Biology (Western blotting, Flow Cytometry)
 - Whole cell assays (clonogenic survival, viability)
 - Molecular biology techniques (DNA damage and repair assays and immunohistochemistry).

4. Evidence of R&D experience having a record of dissemination and publication of scientific work appropriate for career stage.
5. Sufficient breadth and depth of specialist knowledge in the discipline and of research methods and techniques to work within established research programmes.
6. Advanced skills in data analysis and presentation.
7. Ability to communicate complex information clearly.
8. Ability to build contacts and participate in internal and external networks.
9. Must demonstrate good team working and communication skills.
10. Ability to assess and organise resources.
11. Must be willing to work with in vivo models of cancer following the guidelines of the Animals (Scientific Procedures) Act 1986.
12. Must be available and willing to undertake R&D activities outside normal hours.
13. Must be prepared to travel for technical training as appropriate to collaborators within the UK.
14. Must be willing and able to travel to national and international meetings.

DESIRABLE CRITERIA:

1. Hold or about to obtain (submitted) a PhD in Cancer Biology, Cell/Molecular Biology or a closely related discipline.
2. Experience in molecular radiotherapy.
3. Experience with in vivo models and have a UK Personal Animal Licence (PIL).
4. Experience in working with subcutaneous xenograft tumour models and IP techniques.
5. Computational biology experience – accession of raw sequencing data, processing and evaluation based on differential expression and functional annotation of dysregulated networks.
6. Evidence of publications in peer-reviewed journals.