

Candidate Information

Position:	Research Fellow
School/Department:	School of Medicine, Dentistry and Biomedical Sciences
Reference:	24/112304
Closing Date:	Monday 9 December 2024
Salary:	£39,922 per annum
Anticipated Interview Date:	Thursday 19 December 2024
Duration:	Available until 30 June 2027

JOB PURPOSE:

To undertake and assist with laboratory-based investigations of the role of photon FLASH radiotherapy in the management of prostate cancer.

This research fellow will work as part of an interdisciplinary team funded by a Prostate Cancer UK Research Innovation Award.

A range of in vivo procedures and biological assays will be used to interrogate the mechanisms of response in prostate cancer tumour and normal tissue models using a first-of-its kind photon FLASH platform at the PGJCCR.

The researcher will work in collaboration with other members of the Advanced Radiotherapy Group and the Prostate Cancer Centre of Excellence (ProEx) to gather evidence supporting the future translation of photon FLASH in the treatment of prostate cancer.

MAJOR DUTIES:

- 1. To design, develop and execute experiments related to this project under the supervision of Prof Butterworth and other senior investigators to obtain reliable experimental data, to evaluate and interpret these data using appropriate methodologies, and prepare results in suitable formats for dissemination through academic channels.
- 2. To conduct high quality in vivo experiments in accordance with Department of Health approval and implementation of the 3Rs principles in experimental work.
- 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 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.
- 5. 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.
- 6. The appointed individual will be encouraged to formulate, write and submit grants for fellowship awards, project and travel support.
- 7. To attend and present new experimental data at national and international meetings as appropriate.
- 8. To carry out routine administrative tasks associated with the research project/s to ensure that project/s are completed on time and within budget.
- 9. To assist with the supervision of postgraduate students, honours students, or summer students on mini-projects, to develop their supervisory skills.
- 10. To read academic papers, journals and textbooks and keep up to date with developments in own specialism and related disciplines and to maintain awareness of the context of the research project.
- 11. Any other reasonable duties including public engagement and outreach activities, within the general ambit of the post and competence of post holder.

ESSENTIAL CRITERIA:

- 1. Have or be about to obtain* a PhD in radiation biology, biophysics, biomedical science or a related subject. (*must be obtained within 3 months of the closing date for the post).
- 2. Significant, relevant research experience.
- 3. Experience in cellular and molecular techniques including tumour biology, cell culture, confocal microscopy and immunofluorescence, clonogenic assays.
- 4. Must have published paper(s) in quality journals to a level commensurate with research experience.
- 5. Experience in radiation biology research.
- 6. Experience with in vivo models and hold a Personal Licence for in vivo experimentation.
- 7. Evidence of proactive organisational capabilities.
- 8. Sufficient breadth and depth of specialist knowledge in the discipline and of research methods and techniques to work within established research programmes.
- 9. Evidence of communication skills.
- 10. Ability to communicate complex information clearly.
- 11. Ability to build contacts and participate in internal and external networks and research presentations.
- 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. Previous track record of high-quality research in the field of cancer research.
- 3. Evidence of scientific writing skills.
- 4. Experience working with radiation response modelling.
- 5. Evidence of participation in training/mentoring of students or junior staff.
- 6. Commitment to professional development, as evidenced by Scientific memberships.

ADDITIONAL INFORMATION:

Informal queries may be directed to Kevin Prise k.prise@qub.ac.uk