Candidate Information

Position:	Research Fellow
School/Department:	The Johnston Cancer Research Centre
Reference:	26/113539
Closing Date:	Monday 31 August 2026
Salary:	£42,972 - £51,270 per annum
Anticipated Interview Date:	Wednesday 7 October 2026
Duration:	Fixed Term - Full Time; Available for 36 months or until 31 August 2029 whichever is soonest

JOB PURPOSE:

The Role

We are seeking a highly motivated Postdoctoral Research Fellow to lead independent and collaborative projects investigating mechanisms of therapy resistance and lineage plasticity in prostate cancer.

The successful candidate will develop and apply molecular, genomic, and functional approaches to study adaptive tumor states and identify novel therapeutic vulnerabilities. Projects may involve:

- chromatin and transcriptional regulation,
- RNA biology and splicing regulation,
- lineage plasticity modeling,
- single-cell and spatial genomics,
- functional perturbation screening,
- therapeutic development and translational validation.

The position offers substantial opportunities for scientific independence, collaborative leadership, and the development of high-impact translational research programs.

The Lab

The Rubin Laboratory focuses on the molecular mechanisms that drive therapy resistance and lineage plasticity in advanced prostate cancer. Our work integrates functional genomics, chromatin biology, RNA processing, single-cell sequencing, spatial profiling, and translational model systems to identify new therapeutic vulnerabilities in aggressive disease.

Current major research themes include:

- lineage plasticity and adaptive tumor states,
- chromatin remodeling and transcriptional control,
- stress adaptation and DNA repair,
- minor intron splicing and RNA-processing vulnerabilities,
- single-cell and spatial tumor-state profiling,
- development of state-directed therapeutic strategies.

The laboratory integrates mechanistic biology with translational precision oncology approaches, using patient-derived models, organoids, genetically engineered mouse models, functional perturbation screens, and advanced multi-omic technologies.

MAJOR DUTIES:

1. Design and execute independent research projects in accordance with the aims of the Rubin Laboratory, using methodologies, critical evaluations, interpretations, analyses and other techniques appropriate to this type of research.
2. Lead experimental studies using in vitro and in vivo cancer models.

3. Perform and interpret genomic and functional analyses.
4. Contribute to the development of novel experimental approaches and analytical frameworks.
5. Sustain a high quality publication record by publishing in leading international peer-reviewed journals and/or monographs or edited collections as appropriate to discipline and by presenting at conferences.
6. Develop research proposals and funding bids either solely or in collaboration with others, including as principal investigator, where appropriate.
7. Supervise PhD students, other students undertaking project / dissertation work and assist in supervision of more junior research and technical staff.
8. Work as part of a collaborative team of multidisciplinary scientists, clinicians and physicists to ensure optimal progression of the project at all times, and contribute to the achievement of project milestones and programme development.
9. Develop links with relevant industries and external bodies to encourage technology transfer opportunities, create opportunities for future research projects and contribute to University, School and JCRC outreach strategy.
10. Contribute to teaching as appropriate in this research focused role.
11. Carry out routine administrative tasks associated with the research project to ensure that project/s are completed on time and within budget.
12. 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 Cancer Biology, Molecular Biology, Genomics, Computational Biology, or related discipline. (*must be obtained within 3 months of commencement of employment).
2. Relevant undergraduate degree.
3. A minimum of three years' research experience in a relevant field.
4. Recent, relevant publications in peer reviewed/refereed journals/monographs that are recognised as being high quality to a level commensurate with research experience.
5. Expertise in one or more of the following:
   - cancer biology,
   - chromatin biology,
   - transcriptional regulation,
   - RNA biology/splicing,
   - functional genomics,
   - single-cell genomics,
   - prostate cancer biology.
6. Experience with mammalian cell culture and molecular biology techniques.
7. Ability to contribute to broader management and administrative processes.
8. Sufficient breadth and depth of specialist knowledge in the discipline and of research methods and techniques to work within established research programmes.
9. Excellent organisational and research project management skills.
10. Strong analytical and communication skills.
11. Ability to communicate complex information clearly to range of audiences via oral, poster and Powerpoint presentations.
12. Ability to build contacts and participate in internal and external networks and research presentations.
13. Leadership capability.
14. Proven ability to work independently and drive research progress.
15. Demonstrable evidence of being a collaborative, supportive, team worker.
16. Ability to work flexibly where required by the research which may include evenings or weekends.
17. Must be prepared to travel for relevant local, national and international conferences/workshops, networks or technology developments.

DESIRABLE CRITERIA:

1. 1st Class undergraduate degree in relevant subject.
2. Research project management training.
3. Experience with CRISPR screening or perturbation systems.
4. Experience with ChIP-seq, ATAC-seq, CUT&RUN, RNA-seq, or single-cell sequencing.
5. Experience with mouse models or organoid systems.

6. Experience in therapy resistance or lineage plasticity research.
7. Computational or bioinformatic experience.
8. Experience teaching undergraduate lectures/tutorials/practicals.
9. Commitment to professional development, as evidenced by scientific memberships.

ADDITIONAL INFORMATION:
Informal enquiries may be directed to Emma Allott at e.allott@qub.ac.uk