

Candidate Information

Position: Research Assistant

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

Reference: 25/113015

Closing Date: Monday 22 December 2025

Salary: £35,136 per annum

Anticipated Interview Date: Tuesday 13 January 2026

Duration: 12 months

JOB PURPOSE:

To be an active member of the research team under the leadership of Dr Emma Allott assisting in the planning and delivery of a Cancer Research UK funded project 'Repurposing statins for precision prevention of PTEN-null prostate cancer'. The project seeks to understand molecular mechanisms contributing to the epidemiological association between statins and lower risk of fatal and PTEN-null prostate cancer. This will involve culture of prostate cancer cell lines, treatment with statins and/or inducers/inhibitors of the unfolded protein response, and functional assays to evaluate the effects including proliferation, clonogenics, apoptosis, reporter, and imaging assays. It will also involve RNA extraction from statin treated cell lines for RNA sequencing, followed by curation and analysis of these data.

MAJOR DUTIES:

- 1. Undertake basic research activities that may include laboratory experiments (such as, cell culture and statin treatment of premalignant and malignant prostate cell lines, Western blotting and immunofluorescence staining for unfolded protein response pathway proteins, cell viability assays), computer-based data analysis (including analysis of RNA sequencing data generated from cell lines), critical evaluation and interpretation of results in the context of relevant published literature, in consultation with the supervisor.
- 2. Present regular progress reports on research to the supervisor, to members of the research group or to external audiences to disseminate and publicise research findings.
- 3. Write up results of own work and contribute to the production of research reports, publications and proposals.
- 4. Carry out routine administrative duties as requested, e.g. arranging research group meetings, ordering supplies as needed and with permission of the supervisor.
- 5. Read academic papers, journals and textbooks to keep abreast of developments.
- 6. Carry out any other duties designated by the supervisor and which fall within the general ambit of the post.

ESSENTIAL CRITERIA:

- 1. Degree or equivalent in subject relevant to research activity, including biomedical science, biotechnology or related subject area.
- 2. Specific, relevant laboratory experience in molecular prostate cancer biology, including experience with cell culture, molecular biology techniques (including PCR, Western blot, flow cytometry), simple statistics and data visualisation techniques.
- 3. Experience with RNA extraction from prostate cancer cell lines and human prostate tissues, and in data curation and management of resulting RNA sequencing data, including differential gene expression analysis
- 4. Ability to troubleshoot and contribute to method improvement where required.
- 5. Ability to interact with research colleagues and support staff
- 6. Ability to analyse data and communicate results effectively.
- 7. Well developed analytical and problem solving capability.
- 8. Well developed communication and interpersonal skills.
- 9. Good organising skills, ability to plan and meet deadlines
- 10. Demonstrable intellectual ability and scientific integrity.

DESIRABLE CRITERIA:

- 1. Have completed or be about to complete a PhD in a molecular cancer biology (wet lab) research area.
- 2. Have a post graduate qualification in bioinformatics or related field.
- 3. Experience in cancer research, particularly prostate cancer.