



## Candidate Information

<b>Position:</b>	Research Fellow
<b>School/Department:</b>	Patrick G Johnston Centre for Cancer Research
<b>Reference:</b>	22/109822
<b>Closing Date:</b>	Monday 6 June 2022
<b>Salary:</b>	£34,304 per annum
<b>Anticipated Interview Date:</b>	16 June 2022
<b>Duration:</b>	Fixed Term available until 31/08/2025

### JOB PURPOSE:

A postdoctoral position within the Patrick G Johnston Centre for Cancer Research, co-supervised by Dr Nick Orr and Dr Yaser Atlasi, to study the role of germline genetic variation in mediating predisposition to breast cancer. The successful applicant will use high-throughput assays (e.g., STARR-seq) to identify functional enhancer elements at breast cancer susceptibility loci and molecular biology techniques (including CRISPR activation screening) to perturb candidate causal regulatory elements that influence effector-gene expression in cell-line models of breast cancer.

### MAJOR DUTIES:

1. To design, develop and execute studies related to the project, obtain reliable data, evaluate and interpret the results using methodologies and techniques appropriate to the area of the research, under the supervision of the PI.
2. Generate and maintain in vitro cancer models.
3. Provide reports and take a leadership role in writing manuscripts and publication of the research findings in national and international journals.
4. Presentations at national and international conferences.
5. Participate in writing applications for new sources of funding.
6. Preparation of applications for fellowship awards, and travel support.
7. Present regular progress reports on research to members of the research group or to external audiences to disseminate and publicise research findings.
8. Carry out routine administrative tasks associated with the research project/s to ensure that project/s are completed on time and within budget. These might include organisation of project meetings and documentation, financial control, risk assessment of research activities.
9. Carry out undergraduate and/or postgraduate student supervision within the post holder's area of expertise and under the guidance of a member of academic staff.
10. Read academic papers, journals and textbooks to keep abreast of developments in own specialism and related disciplines.
11. Any other reasonable duties within the general ambit of the post.

### ESSENTIAL CRITERIA:

1. Hold or about to hold a PhD in cancer biology, molecular biology, cell biology, biochemistry, or a related discipline.
2. At least 3 years relevant research experience in the fields of cancer biology, functional genomics, or cancer predisposition.
3. Experienced in maintenance of in vitro cell culture models, including derivation of cell-lines from primary tissue.
4. Experience of using CRISPRa/i technology for assessing functional enhancer activity.
5. Experience with Next-Generation Sequencing technologies.
6. Experience with a range of molecular and cellular biology techniques, such as PCR, Western blot, cloning.
7. Ability to contribute to broader management and administrative processes.
8. Contribute to the School's outreach programme by links with industry, community groups etc.
9. Sufficient breadth and depth of specialist knowledge in the discipline and of research methods and techniques to work within established research programmes.
10. Team worker, highly motivated, supportive of junior colleagues within the group.

11. Ability to communicate complex information clearly.
12. Ability to build contacts and participate in internal and external networks.
13. Demonstrable intellectual ability.
14. Ability to assess and organise resources.
15. Willingness to work irregular hours when necessary for the progress of the research project.

**DESIRABLE CRITERIA:**

1. 1st Class undergraduate degree in biochemistry, molecular biology, or related discipline.
2. Knowledge of breast cancer predisposition genetics as mediated by common susceptibility polymorphisms.
3. Basic bioinformatic skills in analysis of NGS data.
4. Ability to work in a team and as an individual.
5. Experience of undergraduate and postgraduate research supervision / mentorship.
6. Experience of working within multi-institutional collaborative studies.
7. Experience of public communication of science to lay audiences.