

## Candidate Information

<b>Position:</b>	Research Fellow
<b>School/Department:</b>	Centre for Cancer Research and Cell Biology
<b>Reference:</b>	20/108299
<b>Closing Date:</b>	Wednesday 26 August 2020
<b>Salary:</b>	£33,797 to £40,322 per annum.
<b>Anticipated Interview Date:</b>	Monday 7 September 2020
<b>Duration:</b>	This is a fixed term contract until 13 February 2021

### JOB PURPOSE:

Specifics of Project: Recent advances by in molecular profiling analysis have identified molecular subtypes in CRC, based on previously defined histological subtypes (Consensus Molecular Subtypes; CMS) and neoplastic epithelial biology (ColoRectal Intrinsic Subtypes; CRIS). This molecular subtyping involves a combination of molecular biology, computational analysis and pathological assessment, enabling an integrated evaluation of multiple layers of molecular information. Our lab has unparalleled access to molecular data from the tumour datasets used to develop both CMS and CRIS, as part of the S:CORT programme ([www.scort.org.uk](http://www.scort.org.uk)) and emerging molecular profiles from state-of-the-art pre-clinical models of disease that, for the first time, recapitulate human tumour subtype in 2D/3D cell lines, organoids and mouse models (PDX and GEMM), as part of our leading role in the ACRCelerate programme (<http://www.beatson.gla.ac.uk/ACRCelerate/teams.html>).

The post holder will utilise the unique data from our human tissue samples and mouse tumour models to develop new, and refine existing, molecular subtypes in CRC through a combination of translational bioinformatics and molecular biology. Overall, this project aims to unveil the interplay between the epithelial tumour and surrounding immune/stromal cells to ultimately improving our understanding of CRC.

### MAJOR DUTIES:

1. To design, develop and execute molecular stratification studies related to the project in order to obtain reliable data, then evaluate and interpret the results using methodologies and techniques appropriate to the area of the research.
2. Carry out analyses, critical evaluations, and interpretations using methodologies and other techniques appropriate to area of research.
3. To regularly present results to the research group as part of routine peer review.
4. Initiate and maintain collaborative links with various project partners.
5. To write up results in a timely manner and take a leadership role in writing research manuscripts.
6. To present regular progress reports on research to members of the research group and to external audiences to disseminate and publicise research findings.
7. To formulate, write and submit grants for fellowship awards, project and travel support.
8. To attend and present new experimental data at national and international meetings.
9. Assist grant holder in the preparation of funding proposals and applications to external bodies.
10. May be required to carry out undergraduate supervision within the post holder's area of expertise and under the guidance of a member of academic staff.
11. Assists with the supervision of postgraduate students or summer students on mini-projects, which will help develop their own supervisory skills.
12. 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.
13. Read academic papers, journals and textbooks to keep abreast of developments in own specialism and related disciplines.
14. Any other reasonable duties within the general ambit of the post.

**Planning and Organising:**

1. Plan for specific aspects of research programmes. Timescales range from 1-6 months in advance and contribute to research group planning.
2. Plan for the use of research resources, laboratories and workshops where appropriate.
3. Plan own day-to-day activity within framework of the agreed research programme.
4. Plan to meet deadlines for journal publications and to prepare presentations and papers for conferences.
5. Coordinate and liaise with other members of the research group over work progress.

**Resource Management Responsibilities:**

1. Ensure research resources are used in an effective and efficient manner.
2. Provide guidance as required to support staff and any students who may be assisting with research.
3. Take shared responsibility for the upkeep of lab equipment and replenishment of lab stocks and exercise due diligence when using equipment.
4. Support the development and training of support staff and students.

**Internal and External Relationships:**

1. Communicate openly with lab colleagues the latest research findings/results.
2. Develop contacts with other labs within the research community at Queen's and look to identify potential cross-discipline collaborations.
3. Liaise on a regular basis with colleagues from national and international research group.
4. Build internal contacts and participate in internal networks for the exchange of information and to form relationships for future collaboration.
5. Join external networks to share information and ideas.
6. Contribute to the School's outreach programme by establishing links with local community groups, industries etc.
7. Join national and international scientifically relevant societies.

**ESSENTIAL CRITERIA:**

1. Hold (or about to obtain) a PhD in molecular cancer biology, bioinformatics or a related discipline.
2. At least three years relevant research experience (including PhD experience).
3. Experience with transcriptional data analysis and/or bioinformatics.
4. Experience with colorectal cancer biological signalling.
5. Publication of peer-reviewed papers that include a large component of bioinformatics analysis.
6. Understanding of biological signalling in cancer.
7. Ability to contribute to broader management and administrative processes.
8. Contribute to the School's outreach programme by links with industry, patient advocacy 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. Ability to communicate complex information clearly.
11. Ability to build contacts and participate in internal and external networks.
12. Demonstrable intellectual ability.
13. Ability to assess and organise resources.
14. Team worker, highly motivated, supportive of junior colleagues within the group.

**DESIRABLE CRITERIA:**

1. 1st Class or 2.1 undergraduate degree.
2. Scientific memberships eg. AACR, EACR, IACR, BACR.
3. Postdoctoral track record of national/international collaboration.
4. Single-cell data analysis.
5. Programming experience.
6. Evidence of involvement in successful programmes and grant applications.
7. Presentations at national/international meetings.

**ADDITIONAL INFORMATION:**

Background: Available immediately to work as part of the Health Data Research UK (HDRUK) Substantive Site at Queen's University Belfast, within the colorectal cancer Molecular Pathology Research Group ([www.dunne-lab.com](http://www.dunne-lab.com)). HDRUK is the national institute for health data science in the United Kingdom. Queen's University Belfast together with its partner Swansea University constitutes one of the six substantive sites of HDRUK – HDR Wales–Northern Ireland.

The Research Fellow will join our internationally renowned research team based in the Patrick G Johnston Centre for Cancer Research.

The successful candidate will become a HDRUK Fellow and will be part of a UK-wide fellow community and participate in HDRUK Summer Schools and other training activities with HDRUK partner organisations including the Medical Research Council (MRC).