



## Candidate Information

<b>Position:</b>	Research Fellow
<b>School/Department:</b>	Centre for Cancer Research and Cell Biology
<b>Reference:</b>	19/107864
<b>Closing Date:</b>	Wednesday 13 November 2019
<b>Salary:</b>	£33,797 to £36,914 per annum
<b>Anticipated Interview Date:</b>	Tuesday 3 December 2019
<b>Duration:</b>	Available until 30 November 2022

### JOB PURPOSE:

The Research Fellow will work on the role of p53 in regulating cell death and tissue homeostasis. This exciting cell/molecular biology and functional genomics position is within Functional Genomics Group in the Centre for Cancer Research and Cell Biology. Using a combination cell and molecular biology phenotypic assays and functional genomics analyses (e.g. ChIP-seq, RNA-seq, ATAC-seq) of 2D and 3D models the post-holder will investigate novel cell death regulatory function of p53 induced complexes homeostasis and cell death.

The post will report to Dr Simon McDade and project co-supervised by Prof Daniel Longley.

### MAJOR DUTIES:

1. To design, develop and execute experiments related to the project under the supervision of Dr Simon McDade 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.
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.

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

**ESSENTIAL CRITERIA:**

1. Hold or be about to obtain a PhD in molecular biology or a related discipline.
2. At least three years relevant research experience.
3. Experienced in a range of molecular and cellular biology techniques, such as Western blot, immunoprecipitation, flow cytometry, in vitro pull-downs and apoptosis detection techniques, Nucleic acid extraction, RT-PCR, Western blotting, immunofluorescence/IHC.
4. Tissue culture experience including working with single-cells (e.g. scRNA-seq, Flow-cytometry).
5. Experience with genomic data generation (For example ChIP-seq, RNA-seq, ATAC-seq, Microarray) transcriptional profiling.
6. Experience with genomic data analysis.
7. Publication record commensurate with stage of career.
8. Ability to contribute to broader management and administrative processes.
9. Contribute to the School's outreach programme by links with industry, patient advocacy groups etc.
10. Must demonstrate good team working and communication skills.
11. Sufficient breadth and depth of specialist knowledge in the discipline and of research methods and techniques to work within established research programmes.
12. Ability to communicate complex information clearly.
13. Ability to build contacts and participate in internal and external networks.
14. Evidence of having presented work at national and international conferences (poster and/or oral).
15. Demonstrable intellectual ability.
16. Ability to assess and organise resources.
17. Team worker, highly motivated, supportive of junior colleagues within the group.
18. Organised and attentive to detail and ability to meet deadlines.
19. Must be willing to work irregular hours when necessary for the progress of the research project.
20. Must be willing and able to travel to national and international meetings.

**DESIRABLE CRITERIA:**

1. 1st Class undergraduate degree in science.
2. Experience in the area of drug resis.
3. Computational/Bioinformatic experience including genomic data analysis.
4. Capillary electrophoresis nucleic acid quality control Bioanalyser/Tapestation etc.).
5. Experience with 3D and/or primary cell culture.
6. Experience working with software packages: R/Shiny/Python.
7. Experience with high-performance-computing cluster.
8. Evidence of senior author publications commensurate with stage of career.