Candidate Information

Position:	Research Fellow
School/Department:	Patrick G Johnston Centre for Cancer Research
Reference:	22/110153
Closing Date:	Monday 26 September 2022
Salary:	£35,333 per annum
Anticipated Interview Date:	Tuesday 11 or Thursday 13 October 2022
Duration:	Available until 30 September 2024

JOB PURPOSE:

Applications are invited for a highly motivated research fellow to work on investigating the nucleotide biosynthesis pathways within cancer cells, with a particular focus on how nucleotide pool dysregulation drives genome instability, cancer drug resistance and regulates the immune tumour microenvironment.

These exciting translational cell/molecular biology positions will be located within the Patrick G Johnston Centre for Cancer Research and are part of an exciting academic-industry collaboration developing and understanding the clinical implications of novel cancer therapeutics. The successful candidate will employ a combination of cell, molecular and biochemistry-based analyses (e.g., assay development, LC-MS, cell survival, siRNA, high throughput drug screen, RNAseq, immunological assays and co-culture) in 2D, 3D and in vivo models. The post is funded for 24 months and will be directly supervised by Dr Melissa LaBonte-Wilson and Dr Robert Ladner.

MAJOR DUTIES:

1. To design, develop and execute experiments related to the project under the supervision of Drs LaBonte-Wilson and Ladner 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. Present regular progress reports on research to members of the research group or to external audiences to disseminate and publicise research findings.
4. Maintain up-to-date knowledge of the field of interest at the cutting edge and communicate this to the group.
5. Initiate and maintain collaborative links with various project partners.
6. To write up results in a timely manner and take a leadership role in writing research manuscripts.
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. Provide training to and supervision of other members of the research group in related projects, as required, including PhD, MSc, BSc and/or summer students.
11. Comply with Health and Safety procedues affecting self and others to ensure the work area is clean and safe at all times.
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. Carry out occasional undergraduate supervision, demonstrating or lecturing duties within the post holder's area of expertise and under the direct guidance of a member of academic staff.
14. Any other reasonable duties within the general ambit of the post.

ESSENTIAL CRITERIA:

1. Hold or be about to obtain a PhD in molecular biology, biochemistry- or cancer immunology related area of cancer.

2. At least three years of relevant lab-based research experience to include:
   • Training in tissue culture based handling and maintenance of cancer cell models and/or immune cells.
   • Relevant experience in a range of molecular, cellular and biochemistry techniques (e.g., Cell culture, co-culture, Western blot, qRT-PCR, Flow cytometry, LC-MS, si- or shRNA, apoptosis assays, high-parameter flow cytometry, and/or Immunofluorescence/IHC).
   • Experience in cancer and immune cell culture and co-culture assays.
   • Experience in immunological assays (e.g. ELISA, cytokine/chemokine arrays).
   • Publication record commensurate with stage of career.
3. Methodical approach to project management and meticulous in regards to experimental procedures and record keeping.
4. Ability to contribute to broader management and administrative processes.
5. Contribute to the School's outreach programme by links with industry, patient advocacy groups etc.
6. Must demonstrate good team working skills.
7. Ability to prioritise own work within a general plan to meet deadlines.
8. Sufficient breadth and depth of specialist knowledge in the discipline and of research methods and techniques to work within established research programmes.
9. Experience to train junior staff and allocate work.
10. Ability to communicate complex information clearly.
11. Ability to build contacts and participate in internal and external networks.
12. Evidence of having presented work at national and international conferences (poster and/or oral).
13. Demonstrable intellectual ability.
14. Highly ambitious, self-motivated, very efficient and organized.
15. Excellent team working skills in multiple internal and external team settings.
16. Must demonstrate a strong commitment to and interest in research topic.
17. Must be willing to work irregular hours when necessary for the progress of the research project.
18. Must be willing and able to travel to national and international meetings, and if necessary collaborative laboratories.

DESIRABLE CRITERIA:

1. MSc degree in cancer biology, or related area.
2. Experience working with (or analysis of samples from) advanced models of cancer or 3D tissues e.g., 3D organoids, ex-vivo or in vivo.
3. Experience with tissue processing/pathology, staining (IHC/IF), imaging and analysis.
4. Evidence of active UK Home Office Personal License (Modules 1-3).
5. Experience in the area of gastrointestinal or lung focused area of cancer research.
6. Experience with genetic modification of mammalian cell types using CRISPR/Cas9 systems and/or CRISPR screens.
7. Well-developed understanding of relevant regulations and procedures including SOP, Risk Assessments, Health and Safety requirements and COSHH.
8. Experience working in outreach settings.