

Candidate Information

Position: Research Fellow

School/Department: Patrick G Johnston Centre for Cancer Research

Reference: 22/109735

Closing Date: Monday 9 May 2022
Salary: £34,304 per annum.
Anticipated Interview Date: Thursday 19 May 2022

Duration: Fixed term contract available until 30 November 2023.

JOB PURPOSE:

Applications are invited for a highly motivated postdoctoral research fellow to work on the modulation of epigenetics to improve efficacy of ADT/Radiotherapy in poor-prognostic prostate cancers. This exciting cell/molecular biology and functional genomics position is in the Patrick G Johnston Centre for Cancer Research. The successful candidate will use a combination of functional genomics analyses (e.g., ChIP-seq, RNA-seq, ATAC-seq, CRISPR-Screens) of 2D, 3D and in vivo models. The post will be directly supervised by Dr Simon McDade and Dr Melissa LaBonte-Wilson.

MAJOR DUTIES:

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

ESSENTIAL CRITERIA:

- 1. Hold or be about to obtain a PhD in genomics related area.
- 2. At least three years relevant lab-based research experience to include:
 - Significant experience with epigenomic data generation (e.g., ChIP-seq, RNA-seq, ATAC-seq) including sample and library preperation.
 - Significant experience with genomic data analysis including use of genomics data analysis pipelines and downstream analysis, integration and visualisation.

- 3. Experience with CRISPR gene editing.
- 4. Relevant experience in a range of molecular and cellular biology techniques (e.g., Cell culture, Western blot, RT-PCR, Flow cytometry and/or Immunofluorescence/IHC).
- 5. Publication record commensurate with stage of career.
- 6. Methodical approach to project management and meticulous in regards to experimental procedures and record keeping.
- 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. Must demonstrate good team working and communication skills.
- 10. Sufficient breadth and depth of specialist knowledge in the discipline and of research methods and techniques to work within established research programmes.
- 11. Experience teaching/supervising/mentoring postgraduate/undergraduate students and/or visiting researchers in the laboratory.
- 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. Highly ambitious, self-motivated, very efficient and organized.
- 17. Excellent team working skills in multiple internal and external team settings.
- 18. Must demonstrate a strong commitment to and interest in research topic.
- 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, and if necessary collaborative laboratories.

DESIRABLE CRITERIA:

- 1. MSc degree in cancer biology, genomics data/bioinformatics or related area.
- 2. Experience with CRISPR Screens.
- 3. Experience working with (or analysis of samples from) advanced models of cancer or 3D tissues e.g., 3D organoids, ex-vivo or in vivo.
- 4. Evidence of senior author publications commensurate with stage of career.
- 5. Computational/Bioinformatic experience including working with software packages: R/Shiny/Python.
- 6. Experience in the area of prostate cancer research.
- 7. Experience working with single-cells (e.g., scRNA-seq, high parameter Flow-cytometry).
- 8. Experience creating and updating SOP, Risk Assessments, COSSH.
- 9. Experience working in outreach settings.