

Candidate Information

Position: Research Fellow - Acute Myeloid Leukaemia **School/Department:** Patrick G Johnston Centre for Cancer Research

Reference: 20/108535

Closing Date: Monday 1 March 2021

Salary: £33,797 to £35,845 per annum Anticipated Interview Date: Wednesday 10 March 2021

Duration: This post is available until 31 March 2022

JOB PURPOSE:

This research position will focus on the molecular mechanisms associated with DNA repair in acute myeloid leukaemia (AML). The post is funded by Leukaemia UK and is available for 12 months from 1st April 2021 and will involve interaction with scientists within the Blood Cancer and the DNA repair groups within PGJCCR.

MAJOR DUTIES:

- 1. To design, develop and execute experiments related to the above titled project under the supervision of Professor Ken Mills, Dr Kienan Savage and Dr Katrina Lappin in order to obtain reliable data of publication quality. Additionally, to use methodologies and other techniques appropriate to the area of the research to evaluate and interpret results.
- 2. To investigate the molecular and cellular effects of mutations on DNA repair deficiency using appropriate model systems and next generation sequencing.
- 3. To present regular progress reports on research to members of both the Blood Cancer Research and DNA Repair Research Groups, internal and external audiences and to disseminate and publicise research findings.
- 4. Initiate and maintain links with collaborators within QUB and in other institutions both nationally and internationally.
- 5. To write up results in a timely manner and take a leadership role in writing research manuscripts and in helping to draft future grant proposals.
- 6. Carry out routine administrative tasks associated with the research projects to ensure they are completed on time and within budget.
- 7. Read academic papers, journals and textbooks to keep abreast of developments in own specialism and related disciplines.
- 8. To support the formulation, writing and submission of grants for project grants and travel support.
- 9. To attend and present new experimental data at national and international meetings.
- 10. To carry out undergraduate supervision or demonstrating duties within area of expertise and under the direct guidance of a member of academic staff.
- 11. To assist the supervision of postgraduate students or summer students on mini-projects.
- 12. Any other reasonable duties within the general ambit of the post and competence of post holder.

Planning and Organising:

- Day-to-day planning of experiments.
- 2. Short-term (1-3 month) planning of research within framework of the project.
- 3. Ongoing organisation and strategy to achieve targets with contingency planning.
- 4. Plan well in advance to meet deadlines for journal publications and conference presentations.
- 5. Organise informal meetings, communicate directly with other lab members and supervisor.
- 6. Develop hypotheses for future fellowship and grant applications.

Resource Management Responsibilities:

1. Support the development and training of support staff and students by making available their research experience and expertise.

2. Take shared responsibility for the upkeep of lab equipment and replenishment of lab stocks and exercise due diligence when using equipment.

Internal and External Relationships:

- 1. Communicate freely with lab colleagues the latest research findings/results.
- 2. Develop contacts with other labs at QUB and identify possible cross-discipline collaborations.
- 3. Join national and international scientifically relevant societies and network at conferences.
- 4. To work with Leukaemia UK in promoting their activities associated with their funded research.

ESSENTIAL CRITERIA:

- 1. Have or about to obtain a PhD in Haematology, Biochemistry, Pharmacy or molecular biology related subject.
- 2. Three years' relevant research experience to include at least three of the following:
 - Culture and in-vitro, treatment and viral infection of primary cells and cell lines;
 - · Experience in tissue culture and cellular analysis including fluorescence microscopy and flow cytometry;
 - Use of biochemical and molecular biology techniques including protein analysis, cell cycle and apoptosis, colony assays, quantitative PCR, fluorescence microscopy, genome editing using CRISPR and cloning;
 - Bioinformatic analysis of RNA-seq data.
- 3. Must have published paper(s) in quality journals to a level commensurate with their research experience.
- 4. Sufficient breadth and depth of specialist knowledge in the discipline and of research methods and techniques to work within established research programmes.
- 5. Ability to communicate complex information clearly.
- 6. Ability to build contacts and participate in internal and external networks.
- 7. Demonstrable intellectual ability.
- 8. Ability to assess and organise resources.
- 9. Highly motivated, commitment to scientific research.
- 10. Good laboratory practice, organised and attentive to detail and ability to meet deadlines.
- 11. Must be willing to work irregular hours when necessary for the progress of the research project.
- 12. Must be willing and able to travel to national and international meetings and collaborator facilities.

DESIRABLE CRITERIA:

- 1. 1st Class undergraduate degree in science or pharmacy.
- 2. Hold a personal animal licence.
- 3. Scientific memberships eg. AACR.
- 4. Previous experience in haematology/DNA repair or cancer biology.
- 5. Previous track record of high quality research in the field of haematology/ DNA repair / cancer biology.
- 6. Experience in bioinformatics.
- 7. At least one first author paper in a high impact factor journal.
- 8. Supervision of under-graduate students.
- 9. Evidence of participation in training/mentoring of students or scientific organisation.
- 10. Conference presentation poster and/or oral.