

## **Candidate Information**

**Position:** Research Fellow

School/Department: Centre for Cancer Research and Cell Biology

**Reference:** 19/107306

Closing Date: Wednesday 17 April 2019

Salary: £33,199 per annum
Anticipated Interview Date: Wednesday 1 May 2019

**Duration:** Two posts are available, one until 30 September 2020 & one until 31 December

2020

#### JOB PURPOSE:

Applications are invited from highly motivated scientists for two Post-doctoral Research position focusing on the identification of potential repurposed drugs for paediatric blood cancers. These are funded by the Children with Cancer and Leukaemia Group (CCLG) and will involve interaction with scientists within the Blood Cancer group within CCRCB

### **MAJOR DUTIES:**

- 1. To design, develop and execute experiments related to the above titled project under the supervision of Professor Ken Mills, 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. The two posts will either:
  - a. validate and further identify candidate novel and repurposed molecules to target paediatric blood cancers using appropriate model systems involving complex combination drug screening approaches (18 months) or;
  - b. validate and determine the mechanisms for combining apoptosis inducing agents for paediatric AML (15 months)
- 3. To present regular progress reports on research to members of the Blood Cancer Research Group, 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 formulate, write and submit grants for fellowship awards, project 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 organization 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:**

- 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 the CCLG 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 and fluorescence microscopy.
  - In vitro drug screens preferably involving large scale single agent and combination screening
  - Phospho-proteomics and/or RNA sequencing
- 3. A publication record commensurate with 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 and network with research and external partners.
- 6. Highly motivated, commitment to scientific research. Good laboratory practice, organised and attentive to detail and ability to meet deadlines.
- 7. Must demonstrate a willingness to commit themselves for the length off the project
- 8. Must be willing to work irregular hours when necessary for the progress of the research project
- 9. 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. Previous experience in haematology/cancer biology.
- 3. Previous track record of high quality research in the field of haematology/cancer biology.
- 4. Experience in bioinformatics
- 5. Hold a personal animal licence
- 6. At least one first author paper in a high impact factor journal.
- 7. Supervision of under-graduate students
- 8. Evidence of participation in training/mentoring of students or scientific organization.
- 9. Conference presentation poster and/or oral
- 10. Scientific memberships eg. BSH, ASH, AACR.