



## Candidate Information

<b>Position:</b>	Research Fellow
<b>School/Department:</b>	School of Medicine, Dentistry and Biomedical Sciences
<b>Reference:</b>	24/112016
<b>Closing Date:</b>	Monday 15 July 2024
<b>Salary:</b>	£39,222 - £47,631 per annum
<b>Anticipated Interview Date:</b>	Tuesday 30 July 2024
<b>Duration:</b>	21 months

### JOB PURPOSE:

To undertake original research into the molecular mechanisms of resistance to therapy in Multiple Myeloma, also to discover candidate novel drug targets and new indications for existing chemical compounds – leading to journal publications and intellectual property.

### MAJOR DUTIES:

1. To produce network analyses of therapy response for Multiple Myeloma drug discovery.
2. Design and implementation of bioinformatics workflows.
3. Consolidate and produce computational code for integration and analysis of relevant datasets, to enable effective research progress.
4. Engage proactively with the industrial partner to ensure translation of results, maintaining appropriate confidentiality around intellectual property.
5. To develop and continuously update knowledge of literature relevant to the areas of research, including awareness of new tools and approaches.
6. Supervise and provide technical advice to others in the group as appropriate (e.g. students).
7. To work as part of a team and have excellent communication with colleagues.
8. Produce data for first author publication in reputable international peer-reviewed journals.
9. Contribute to the development of ideas for future research work and to the writing of funding applications, if requested.
10. Any other reasonable duties within the general scope of the post and competence of post-holder.

### ESSENTIAL CRITERIA:

1. Hold (or be about to obtain\*) a PhD in research in an appropriate area. (\*must be obtained within 3 months of the closing date for the post).
2. Hold an undergraduate or postgraduate degree (or equivalent) in a relevant subject (e.g. Computer Science, Biology, Physics, Biochemistry, Bioinformatics).
3. Significant, relevant experience to include:
  - Demonstrated ability to learn and apply new computational tools and techniques
  - Proven track record of research success.
  - Experience in at least one of Perl, Python, Java, R or C/C++.
4. Good oral and written communication.
5. Ability to plan, organise & prioritise work and meet deadlines.
6. Excellent attention to detail.
7. Ability to communicate complex information clearly and efficiently.
8. Self-motivated and able to work well as part of a group. Including to keep colleagues informed of developments and research progress. Also to maintain positive and productive working relationships.
9. To show initiative and work independently when required.
10. Willing to communicate research results to the scientific community both within the UK and abroad, as appropriate.

**DESIRABLE CRITERIA:**

1. Doctoral degree in the area of computational biology or bioinformatics.
2. First class undergraduate degree.
3. Successful completion of research with a strong computational element.
4. Leading the writing of scientific peer-reviewed journal publications.
5. Strong publication track record.
6. Experience contributing to applications for peer reviewed research funding.
7. Familiarity with standard computational biology tools and resources.
8. Fluent in cancer biology.
9. Expertise in one or more of: biological network inference/analysis/visualisation, risk stratification, network pharmacology, analysis of time course data, transcriptome data analysis, network controllability analysis, bioinformatics workflows.
10. Multiple programming languages.
11. SQL database design and administration.
12. Website development.
13. High Performance Cluster computing.
14. Ability to learn new techniques quickly and work to a very high standard.

**ADDITIONAL INFORMATION:**

Informal Enquiries to Stephen McMahon: [stephen.mcmahon@qub.ac.uk](mailto:stephen.mcmahon@qub.ac.uk)