Candidate Information

Position:	Research Assistant
School/Department:	Pharmacy
Reference:	22/109688
Closing Date:	Monday 25 April 2022
Salary:	£28,756 per annum
Anticipated Interview Date:	5 May 2022
Duration:	Available until 31 March 2024

JOB PURPOSE:

To be an active member of an exciting industry-academia collaborative research programme/team assisting in the development of research protocols, planning and delivery of the research activity in the area of high throughout enzyme screening and assay development, so that the overall research objectives of the project are met. This project involves close collaboration with computational chemists and biologists from Almac and Queen's, which offers exceptional opportunities to meet industrial clients and participate in knowledge transfer activities.

The successful candidate, will be based primarily at the School of Pharmacy, QUB, but will also be expected to spend time at Almac as required to fulfil the commitments of the post, will be responsible for assay development, screening and characterisation of novel enzymes, establishing and maintaining analytical laboratory capacity and contributing to the day-to-day activities of the research group and research consortium.

MAJOR DUTIES:

1. To develop experimental protocols for screening and characterisation of novel enzymes (transaminases, CREDs etc) of industrial relevance.
2. To develop analytical methods and protocols for high throughput enzyme screening.
3. Design, develop and refine experiments in order to obtain reliable data.
4. Carry out analyses, critical evaluations, and interpretations using methodologies and other techniques appropriate to area of research.
5. Present regular progress reports on research to members of the research group or to external audiences to disseminate and publicise research findings.
6. Prepare, often in consultation with supervisor, material for publication in national and international journals and presentations at international conferences.
7. Prepare, in consultation with academic and industry supervisors, material for internal and funding agency reports.
8. Assist grant holder in the preparation of funding proposals and applications to external bodies.
9. 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.
10. 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.
11. Read academic papers, journals and textbooks to keep abreast of developments in own specialism and related disciplines.

ESSENTIAL CRITERIA:

1. An Honours degree at 2.1. or equivalent in Chemistry, Pharmacy, Molecular Biology or a closely related area. These could include Microbiology, Biochemistry or Biological Sciences.
2. At least 1 year post-graduate research experience in enzymology (including enzyme characterisation) and chemical analysis (HPLC/LC-MS/MS/NMR) related research activity.
3. At least 1 year experience of enzyme screening/assay development and chemical analysis.

4. Experience of designing and running enzyme activity assays (for proteases, lipases, transaminases, CREDs or biocatalytic enzymes of industrial relevance).
5. Demonstrated experience of chemical analysis of biocatalytic enzymes (HPLC/LC-MS/MS/NMR.
6. Interest in teaching at undergraduate/postgraduate level.
7. Ability to contribute to broader management and administrative processes.
8. Contribute to the School's outreach programme by links with industry, community groups etc
9. Sufficient breadth and depth of specialist knowledge in the discipline and of research methods and techniques to work within established research programmes.
10. Ability to communicate complex information clearly.
11. Ability to build contacts and participate in internal and external networks.
12. Demonstrable intellectual ability.
13. Ability to assess and organise resources.

DESIRABLE CRITERIA:

1. Be awarded a PhD degree in the field of microbial enzymology, chemical biology or biotechnology or similar with a significant enzymology/chemical analysis/assay development content commensurate with the desirable experience.
2. Have, or be about to obtain, a PhD in microbial enzymology, chemical biology or biotechnology or a closely related discipline with a significant analytical chemistry/assay development content.
3. Experience in preparing SOPs for laboratory protocols related to assay development/screening activities.
4. Experience in use of data analysis software e.g. SigmaPlot, GraphPad Prism.
5. Experience of presentation of research outcomes.
6. Experience of interacting with industrial partners and/or industrial experience in the biopharma or biotech sectors.
7. Experience of high-throughput and automated technologies for chemical analysis.