

Candidate Information

Position:	Research Fellow in ChemoProteomics
School/Department:	Biological Sciences
Reference:	23/111466
Closing Date:	Monday 8 January 2024
Salary:	£37,841 per annum
Anticipated Interview Date:	Thursday 18 January 2024
Duration:	Fixed term until 14 November 2028

JOB PURPOSE:

A motivated postdoctoral scientist is sought to join the Chemoproteomics Research Team being established in the School of Biological Sciences at Queen's University Belfast. The successful candidate will undertake a role in the planning and delivery of research activities focused on cutting-edge chemoproteomics, global proteomics, ubiquitinomics, and phosphoproteomics in conjunction with our partners Almac discovery and our partners in Medicine at QUB.

This role will focus on the establishment of a dedicated state-of-the-art chemo-proteomics Centre of Excellence (CoE). Ultimately leading to identification and characterisation of chemical probes targeting reactive nucleophiles in endogenous proteins in live cells. As well as global proteomic profiling and identification of key substrates of chemical probes and molecular glues in live cells.

The successful candidate will have a demonstrated track record in mass spectrometry-based proteomics research and should have completed or be about to obtain a PhD in biological sciences, molecular biology or a related field. The successful candidate will have responsibilities in independent research, supervision, planning, day-to-day lab management, collaborations and outreach. The post is available immediately.

MAJOR DUTIES:

1. Develop, plan, and deliver research in the area of quantitative proteomics and chemoproteomics.
2. Assist in method development and maintenance of advanced liquid chromatography mass spectrometry instrumentation.
3. Participate in method development in the area of quantitative proteomics and chemoproteomics, sample preparation, and automation (OpenTrons OT-2).
4. Contribute research effort to support our partners within Medicine at QUB and Almac discovery in the area of quantitative proteomics, biological sample preparation and the design, establishment and running of biological experimentation.
5. Present regular progress reports on research to members of the research group or to external audiences to disseminate and publicise research findings.
6. Contribute to the supervision and training of post-graduate/undergraduate students and visiting researchers.
7. Prepare, in consultation with supervisors, material for publication in scientific journals and presentations at national and international conferences.
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 projects/group to ensure that projects are completed on time and within budget and that the group functions efficiently. These might include organisation of project/group meetings and documentation, financial control, stock management/procurement, risk assessment of research activities and development of SOPs. Carry out routine administrative tasks associated with the day-to-day running of the research group in a communal lab setting.
10. Read academic papers, journals and textbooks to keep abreast of developments in own specialism and related disciplines.

ESSENTIAL CRITERIA:

1. Degree in Biological Sciences or related subject area.
2. Have or about to obtain a PhD in Biological sciences, molecular biology or related sciences.

3. Relevant research experience of running proteomic/peptidomic samples using mass spectrometry.
4. Experience in the general maintenance and technical troubleshooting of mass spectrometry instruments.
5. Experience in the preparation of scientific publications / reports commensurate with research activity and career stage.
6. Experience with running liquid chromatography systems for the preparation of biological samples for mass spectrometry.
7. Experience in sample preparation and separations for mass spectrometry-based proteomics.
8. Experience with biological sample preparation and processing.
9. Evidence of research experience of in vitro cell manipulation.
10. Evidence of design, establishment and carrying out a range of bioassays.
11. Ability to contribute to broader management and administrative processes.
12. Methodical approach to project management and meticulous in regard to experimental procedures and record keeping.
13. Sufficient knowledge in the research methods and techniques to work within established research programmes.
14. Competent in giving effective and informative oral and poster presentations.
15. Ability to communicate complex information clearly.
16. Ability to build contacts and participate in internal and external networks.
17. Strong ability to work from own initiative and to work independently within the context of a research team.
18. Commitment to high quality research.
19. Demonstrable intellectual ability.
20. Ability to assess and organise resources.
21. Irregular hours including evening, weekend and other out-of-hours work may be a component of the research at times.
22. Must be willing to travel to national and international meetings and collaborative laboratories as required on an ad-hoc basis.

DESIRABLE CRITERIA:

1. Practical experience in processing, recording and handling large data sets.
2. Experience with data analysis techniques and/or software.
3. Experience in managing digital records and project management tools.
4. Experience of research interactions with industry.