

## Candidate Information

<b>Position:</b>	Research Fellow in Nucleoside Chemistry
<b>School/Department:</b>	School of Pharmacy
<b>Reference:</b>	24/111815
<b>Closing Date:</b>	Monday 13 May 2024
<b>Salary:</b>	£37,841 per annum
<b>Anticipated Interview Date:</b>	Thursday 23 May 2024
<b>Duration:</b>	Fixed term available for 13 months or 31 October 2025, whichever is sooner.

### JOB PURPOSE:

The Research Fellow will be an active member within the research group of Prof Gerd Wagner in the School of Pharmacy, Queen's University Belfast. They will carry out the design and chemical synthesis of enzyme inhibitors for the glycoengineering of therapeutic antibodies. The project is a collaboration with research groups at King's College London, the University of York, and Ludger Ltd, funded by Worldwide Cancer Research. The postholder will liaise with the project partners, and contribute to the preparation of manuscripts, reports, presentations, and grant applications. In addition, they will have a senior role in the day-to-day running of the research laboratory, including the co-supervision of postgraduate and undergraduate students, and the implementation of appropriate health & safety protocols.

### MAJOR DUTIES:

1. Design and prepare chemical inhibitors of target enzymes.
2. Carry out the characterization of inhibitors with relevant analytical techniques (e.g., NMR, mass spectrometry).
3. Analyse, interpret and critically evaluate experimental data.
4. Present regular research progress reports to members of the research group and disseminate and publicise research findings to external audiences.
5. Prepare, in consultation with the line manager, material for publication in high-impact journals and presentation at national/international conferences.
6. Assist the line manager in the preparation of funding proposals and applications to external bodies, including the identification of appropriate funding streams.
7. Play a senior role in the day-to-day running of the research laboratory, including the co-supervision of postgraduate and undergraduate students, the set up and maintenance of equipment, and the implementation of appropriate health & safety protocols.
8. Carry out routine administrative duties as requested, e.g. organisation of project meetings and documentation and risk assessment of research activities.
9. Read academic papers, journals and textbooks to keep abreast of developments.
10. Carry out any other duties designated by the line manager and which fall within the general ambit of the post.

### ESSENTIAL CRITERIA:

1. 2:1 Honors Degree or equivalent in chemistry, chemical biology, or a related subject.
2. Have or about to obtain\* a PhD in chemistry, chemical biology, or a related subject (\*must be obtained within 3 months of commencement of employment).
3. Relevant laboratory-based research experience in synthetic-organic or medicinal chemistry of nucleosides or nucleotides.
4. Experience in the application of relevant analytical techniques, in particular NMR, HPLC, and mass spectrometry / LC-MS.
5. Evidence of publication(s) in journals and/or books commensurate with career stage.
6. Good planning, organisation, and execution skills.
7. Manage allotted tasks to completion and issuing of report.
8. Practical problem-solving skills and independence of thought.
9. Good technical writing and presentation skills.

10. Ability to communicate complex information clearly.
11. Ability to work independently.
12. Ability to build contacts and participate in internal and external networks.
13. Ability to work as part of a team.
14. Ability to devise, advise on and manage research programmes.
15. Ability to prioritise and re-prioritise activities as needed to accomplish unanticipated requests or initiate new projects requiring immediate attention.
16. Ability to coordinate and motivate other team members.

**DESIRABLE CRITERIA:**

1. 1st class Honors Degree in chemistry, chemical biology, or a related subject.
2. At least 2 years' experience in the rational design of enzyme inhibitors.
3. Experience in the application of in-vitro bioassays.
4. Good knowledge of the chemical biology of carbohydrates and glycans.
5. Good knowledge of microbiology.
6. Good knowledge of bioassays.