

## Candidate Information

<b>Position:</b>	Research Fellow
<b>School/Department:</b>	School of Pharmacy
<b>Reference:</b>	25/112407
<b>Closing Date:</b>	Monday 3 March 2025
<b>Salary:</b>	£33,922 per annum
<b>Anticipated Interview Date:</b>	Thursday 13 March 2025
<b>Duration:</b>	12 months

### JOB PURPOSE:

To become an active member in the Natural Drug Discovery Group, School of Pharmacy, QUB, and engage in interdisciplinary studies of bioactive peptides using biochemistry and cell biology approaches with a focus on two main areas: (i) isolation, identification and synthesis of novel venom-derived bioactive peptides and (ii) testing their biological activities and stability using a range of bioassays including antimicrobial assays, vascular smooth muscle contraction assays, and anticancer assays.

### MAJOR DUTIES:

1. Develop and plan an area of personal research and expertise, and/or undertake research under supervision within the Natural Drug Discovery Group.
2. Design, develop and refine experimental apparatus, field research or experiments in order to obtain reliable data.
3. To assist with managing day-to-day laboratory activities, research instrumentation and organising the biological samples and reagents of the laboratory, while placing an emphasis on personal learning, scientific integrity and team player skills.
4. Carry out analyses, critical evaluations, and interpretations using methodologies and other techniques appropriate to area of research.
5. Train and supervise of postgraduate students in molecular/analytical/microbiological/cell biological technologies appropriate for the study of venom peptides.
6. Undertake research activities that may include fieldwork, laboratory experiments, computer-based data analysis and evaluation, or library research in consultation with the supervisor.
7. Present research progress reports to members of the research group regularly or to external audiences to disseminate and publicise research findings.
8. Collate research data from own work and contribute to the production of research reports, publications and proposals.
9. Prepare, often in consultation with supervisor, material for publication in national and international journals and presentations at international conferences.
10. Assist grant holder in the preparation of funding proposals and applications to external bodies.
11. Contribute to introductory courses, for example, on the use of research methods and equipment.
12. Carry out undergraduate/postgraduate supervision/ demonstration/teaching duties under direction.
13. Carry out routine administrative duties as requested, e.g. arranging research group meetings, maintaining research group website.
14. Read academic papers, journals and textbooks to keep abreast of developments.
15. Carry out any other duties designated by a line manager, which fall within the general ambit of the post.
16. Willing to travel abroad if required to meet research partners, particularly in China.

### ESSENTIAL CRITERIA:

1. Have, or be about to obtain\*, a PhD in a molecular-based life science discipline (\*must be obtained within 3 months of commencement of employment)
2. Relevant research experience to include:
  - Experience of MALDI-TOF mass spectrometry, solid phase peptide synthesis, antimicrobial study and vascular smooth muscle contraction assays.

3. Publication record commensurate with career stage.
4. Demonstration of ability to contribute to broader management and administrative processes.
5. Sufficient breadth and depth of specialist knowledge in the discipline and of research methods and techniques to work within established research programmes.
6. Excellent oral and written communication skills.
7. Ability to logically conceptualise and summarise the research findings and data.
8. Ability to interact with research colleagues and support staff.
9. Ability to build contacts and participate in internal and external networks.
10. Strong analytical and problem-solving skills.
11. Scientific integrity.
12. Demonstrable team player.
13. Willingness to travel to China once per annum as required.
14. Flexibility of working hours.

**DESIRABLE CRITERIA:**

1. Experience of molecular cloning and cell-based anticancer research.
2. Working knowledge of Mandarin.
3. Experience of presenting results in front of peers, meetings or conferences.

**ADDITIONAL INFORMATION:**

Informal Enquiries to Dr Yangyang Jiang: yangyang.jiang@qub.ac.uk