

Candidate Information

Position:	Research Fellow - Pharmacy
School/Department:	School of Pharmacy
Reference:	21/109353
Closing Date:	Monday 13 December 2021
Salary:	£34,304 per annum.
Anticipated Interview Date:	Tuesday 21 December 2021
Duration:	6 months

JOB PURPOSE:

To be an active member within Prof Raj Thakur's Ocular Drug Delivery research group at the School of Pharmacy, Queen's University Belfast. The Research Fellow will be active member of the industry funded translational research project within the area of novel long-acting drug delivery systems (LADDS). The Research Fellow will be assisting in the design, development and evaluation of LADDS for small molecules and biologics so that the overall research objectives of the project are met.

MAJOR DUTIES:

1. Develop and plan research within the area of novel long-acting drug delivery systems (LADDS) for ocular applications.
2. Design, develop and refine experimental apparatus and experiments appropriate to the preparation, characterisation and development of LADDS.
3. Develop and validate analytical/bio-analytical techniques; conduct stability studies for small and large molecules, as per standard guidelines.
4. Carry out analysis, critical evaluations, and interpretations using methodologies and other techniques appropriate for the characterisation of LADDS.
5. Present regular progress reports on research to members of the research group, funding body and external audiences to disseminate and publicise research findings.
6. Prepare, often in consultation with line manager, material for publication in high-impact journals and present at national/international conferences.
7. Assist the PI in the preparation of funding proposals and applications to external bodies.
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 a PI and which fall within the general ambit of the post.

Planning and Organising:

1. Plan own day-to-day activity within the framework of the agreed research programme.
2. Plan for specific aspects of research programmes. Timescales range from 1-3 months in advance and contribute to research group planning.
3. Plan for the use of research resources, laboratories and workshops where appropriate.
4. Plan up to 2 months in advance to meet deadlines for journal publications and to prepare presentations and papers for conferences.
5. Coordinate and liaise with other members of the research group over work progress.

Resource Management Responsibilities:

1. Ensure research resources are used in an effective and efficient manner.
2. Provide guidance as required to support staff and any students who may be assisting with research.

Internal and External Relationships:

1. Liaise with research colleagues and funding body on routine matters.
2. Make internal and external contacts to develop knowledge and understanding and form relationships for future collaboration.
3. Attend and contribute to relevant meetings.
4. Join external networks to share information and ideas.
5. Contribute to the School's outreach programme by establishing links with local community groups, industries etc.

ESSENTIAL CRITERIA:

1. 2:1 Honors Degree or equivalent in pharmacy, polymer science, or pharmaceutical chemistry.
2. Hold a PhD (or about to submit) in pharmacy, drug delivery, chemistry, polymer science or pharmaceuticals.
3. At least 3 years of recent and relevant research experience in the area of Ocular drug delivery.
4. Experience in laboratory-based research involving LADDs, stability studies, characterization of delivery systems, and in vitro testing of polymeric materials.
5. Experience in fabrication, characterization, protein activity assays and biocompatibility testing of biologic- and small molecule-loaded ocular implants.
6. Strong planning, organisation, and task execution skills.
7. Demonstrable ability to manage allotted tasks to completion and issuing of report.
8. Contribute to the School's outreach programme by links with industry, community groups etc.
9. Good knowledge of the biomaterials processing, characterisation and testing.
10. Practical problem-solving skills and independence of thought are required.
11. Evidence of good technical writing and presentation skills.
12. Evidence of publication(s) in journals and/or books.
13. Ability to communicate complex information clearly.
14. Ability to build contacts and participate in internal and external networks.
15. A calm and conscientious scientist, able to work in a disciplined manner within a team environment.
16. Demonstrable ability to devise, advise on and manage research programmes.
17. Proven ability to prioritise and re-prioritise activities as needed to accomplish unanticipated requests or initiate new projects requiring immediate attention.
18. Capable of coordinating and motivating other team members.
19. Must be willing to conduct in vivo studies.

DESIRABLE CRITERIA:

1. 1st class Honors Degree in a pharmacy, or pharmaceutical chemistry.
2. Knowledge of polymer material properties.
3. Knowledge of drug delivery, pre-formulation, and/or pharmaceutical technology.
4. Knowledge of pharmaceutical analysis of small molecules and biologics (e.g. HPLC, ELISA, SDS-PAGE, SEC-HPLC).
5. Experience in analytical method development and validation, strongly desired.
6. Experience of supervising PhD students.
7. Demonstrate good knowledge of pharmaceutical product development, regulatory guidelines, and IP.
8. Experience of working in a multi-disciplinary team.
9. Knowledge of conducting biodegradation/biocompatibility studies.
10. Ocular drug delivery experience is a plus.