# Candidate Information

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| **Position:** | Research Fellow |
| **School/Department:** | School of Pharmacy |
| **Reference:** | 22/110288 |
| **Closing Date:** | Monday 7 November 2022 |
| **Salary:** | £35,333 per annum |
| **Anticipated Interview Date:** | Thursday 17 November 2022 |
| **Duration:** | 13 months or until 31 December 2023, whichever is soonest |

## JOB PURPOSE:

To be an active member within Professor Raj Thakur's Ocular Drug Delivery research group at the School of Pharmacy, Queen's University Belfast. The Research Fellow will be an active member of the industry funded translational research project within the area of novel long-acting ocular therapeutics. The Research Fellow will be assisting in the design, development and evaluation of long-acting drug delivery systems 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 innovative long-acting drug delivery systems for ocular applications.
2. Design, develop and refine experimental apparatus and experiments appropriate to the preparation, characterisation and development of long-acting drug delivery systems.
3. Develop and validate analytical techniques; conduct stability studies for small molecules and biologics, as per standard guidelines.
4. Carry out analysis, critical evaluations, and interpretations using methodologies and other techniques appropriate for the characterisation of controlled release drug delivery systems.
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 grant holder 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 line manager, and which fall within the general ambit of the post.

### ESSENTIAL CRITERIA:

1. 2:1 Honours Degree or equivalent in pharmacy, polymer science, pharmaceutical engineering, and pharmaceutical analysis.
2. Have or about to obtain a PhD in pharmacy, drug delivery, pharmaceutics or chemical engineering.
3. At least 3 years recent and relevant research experience in drug delivery to include experience in the area of ocular drug delivery.
4. Experience in laboratory-based research in fabrication and characterization of long-acting drug delivery systems.
5. Experience in biocompatibility and sterilisation studies of ocular implants.
6. Experience in analytical method development and validation of biologics (e.g. HPLC, ELISA, SEC-HPLC, SDS-PAGE).
7. Experience in research project supervision.
8. Good planning, organization, and execution skills.
9. Manage allotted tasks to completion and issuing of report.
10. Good knowledge of the biomaterials processing, characterisation and testing.
11. Practical problem-solving skills and independence of thought.
12. Evidence of good technical writing and presentation skills.

13. Ability to communicate complex information clearly.
14. Ability to build contacts and participate in internal and external networks.
15. Ability to work as part of a team.
16. Ability to devise, advise on and manage research programmes.
17. Ability to prioritize and re-prioritize activities as needed to accomplish unanticipated requests or initiate new projects requiring immediate attention.
18. Ability to coordinate and motivate other team members.
19. Must be willing to conduct in vivo studies.

**DESIRABLE CRITERIA:**

1. 1st class Honours Degree in a pharmacy related discipline.
2. MSc in pharmacy related discipline.
3. Experience of polymer material characterization.
4. At least 2 years' experience in ocular drug delivery.
5. Experience in drug delivery, pre-formulation, and/or pharmaceutical technology.
6. Experience of evaluation of polymeric gel-based formulations.
7. Experience of supervising MSc/PhD research projects.
8. Demonstrate good knowledge of pharmaceutical product development, regulatory guidelines, and IP.
9. Knowledge of conducting biodegradation studies.
10. Knowledge in bioactivity assays of biologics.