

Candidate Information

Position:
School/Department: Pharmacy
Reference: 22/109782
Closing Date: Monday 9 May 2022
Anticipated Interview Date: Thursday 26 May 2022
Duration: Available until 30 November 2023

JOB PURPOSE:

To be an active member within the Ocular Drug Delivery research group in the School of Pharmacy, Queen's University Belfast. The Research Fellow will be the active member of the spinout company, Re-Vana Therapeutics, a preclinical stage company focused on developing innovative long-acting drug delivery systems. 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 project objectives are met.

MAJOR DUTIES:

1. Develop and plan research within the area of innovative long-acting drug delivery systems for ocular applications.
2. Has good knowledge of polymer chemistry to design sustained release formulations.
3. Plans and coordinates the synthesis and characterisation of polymers and polymer-based materials.
4. Design, develop and refine experimental apparatus and experiments appropriate to the preparation, characterisation and development of long-acting/controlled release drug delivery systems.
5. Develop and validate analytical/bio-analytical techniques; conduct stability studies for small molecules and biologics, as per standard guidelines.
6. Carry out analysis, critical evaluations, and interpretations using methodologies and other techniques appropriate for the characterisation of controlled release drug delivery systems.
7. Present regular progress reports on research to members of the research group, funding body and external audiences to disseminate and publicise research findings.
8. Prepare, often in consultation with line manager, material for publication in high-impact journals and present at national/international conferences.
9. Assist grant holder in the preparation of funding proposals and applications to external bodies.
10. Carry out routine administrative duties as requested, e.g., organisation of project meetings and documentation and risk assessment of research activities.
11. Read academic papers, journals, and textbooks to keep abreast of developments.
12. 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, chemistry, or pharmaceutical chemistry.
2. *PhD in pharmacy, drug delivery, pharmaceuticals, pharmaceutical chemistry, chemical engineering or polymer chemistry.
3. *At least 3 years relevant research experience.
4. *At least 1 year recent and relevant research experience in industry (drug delivery/formulation).
5. *Experience in laboratory-based research in formulation and characterization of drug delivery systems.
6. *Experience in characterisation techniques such as GPC, NMR, light scattering, rheology and DSC.
7. *Experience in analytical method development and validation of biologics and small molecules (e.g., HPLC (SEC-HPLC, RP-HPLC, IEX-HPLC), ELISA, and electrophoresis (SDS-PAGE)).
8. *Experience in biocompatibility and sterilisation studies.
9. *Experience of supervising research projects.
10. Evidence of publication(s) in journals and/or books commensurate with career stage.

11. Evidence of good technical writing and presentation skills.
12. Knowledge of the biomaterials processing, characterisation and testing.
13. Good oral and written communication skills.
14. Competent in giving effective and informative oral and poster presentations.
15. Strong ability to work from own initiative and to work independently.
16. Excellent team working skills in multiple internal and external team settings.
17. Excellent problem-solving skills.
18. Highly ambitious, self-motivated, very efficient and organised.
19. Showing strong commitment to, and interest in, research topic.
20. Practical problem-solving skills and independence of thought.
21. Ability to prioritize and re-prioritize activities as needed to accomplish unanticipated requests or initiate new projects requiring immediate attention.
22. Good planning, organization, and execution skills.
23. Ability to communicate complex information clearly.
24. Ability to build contacts and participate in internal and external networks.
25. Ability to devise, advise on and manage research programmes.
26. Irregular hours including evening, weekend and other out-of-hours work will be a component of the research at times.
27. Must be willing to conduct in vivo studies.

DESIRABLE CRITERIA:

1. 1st class Honors Degree in a pharmacy, or pharmaceutical chemistry.
2. At least 2 years' experience in Ocular drug delivery.
3. Experience of polymer material characterization.
4. Experience in drug delivery, pre-formulation, and/or pharmaceutical technology.
5. Experience of evaluation of polymeric gels.
6. Knowledge of polymer chemistry and synthesis.
7. Knowledge of pharmaceutical product development, regulatory guidelines, and IP.
8. Knowledge of conducting degradation studies.
9. Knowledge in bioactivity assays of biologics and cell work.
10. Experience in giving oral and poster presentations at scientific conferences.