

Candidate Information

Position:	Research Fellow in Pharmaceutics
School/Department:	Pharmacy
Reference:	20/108374
Closing Date:	Monday 19 October 2020
Salary:	£33,797 per annum
Anticipated Interview Date:	Friday 30 October 2020
Duration:	This post is available for 12 months.

JOB PURPOSE:

To be an active member of the research team assisting in the development and pre-clinical and industrial translation of novel microarray patch delivery systems for long-acting medicines. To assist in the planning and delivery of this research activity so that the overall research objectives of the project are met.

MAJOR DUTIES:

1. Design, develop, prepare and fully evaluate novel solid drug nanosuspensions.
2. Design, develop, prepare and fully evaluate novel microarray patch-based systems for intradermal deposition of solid drug nanosuspensions.
3. Prepare documentation for meetings with regulatory authorities and industrial partners
4. Design, develop and refine experimental apparatus and analytical methods in order to obtain reliable data.
5. Carry out in vivo animal experiments, analyses, critical evaluations, and interpretations using appropriate methodologies and techniques. Such techniques will include high performance liquid chromatography, mass spectrometry, ultraviolet and fluorescence spectroscopy.
6. Present regular progress reports on research to members of the research group or to external audiences to disseminate and publicise research findings.
7. Prepare, in consultation with supervisor, material for publication in national and international journals and presentations at international conferences.
8. Assist supervisor in the preparation of funding proposals, submissions to pharmaceutical/medical devices companies and applications to external bodies.
9. Carry out routine administrative tasks associated with the research project to ensure that the project is completed on time and within budget. These might include organisation of project meetings and documentation, financial control, risk assessment of research activities.
10. Carry out occasional undergraduate supervision, demonstrating or lecturing duties within the post holder's area of expertise and under the direct guidance of a member of academic staff.
11. Read academic papers, journals and textbooks to keep abreast of developments in own specialism and related disciplines.

ESSENTIAL CRITERIA:

1. Applicants must have a degree in Pharmacy, Chemistry, Chemical Engineering, Biological Sciences or a closely-related discipline (Minimum standard 2.1)
2. Have, or about to obtain, a PhD in drug delivery/pharmaceutics
3. 3 years recent relevant research experience to include; recent, relevant, experience in pharmaceutical analysis, including HPLC.
4. Knowledge of mass spectrometric detection as used in combination with HPLC Experience of formulation science,
5. Knowledge of microneedle array (microarray patch) delivery systems.
6. Experience of conducting in vivo animal experiments to evaluate dosage forms.
7. Ability to contribute to administrative relevant to the research.
8. Liaison with external collaborators and sponsors.
9. Practical problem-solving skills, independence of thought and initiative are required.

10. Ability to present scientific arguments and data in a clear, concise and confident manner in both written and oral formats.
11. A calm and conscientious scientist, able to work in a disciplined manner within a team environment.

DESIRABLE CRITERIA:

1. Ability to register immediately with the Pharmaceutical Society of Northern Ireland or the General Pharmaceutical Council.
2. A UK certificate in animal handling.
3. Experience of preparation and characterisation of solid drug nanosuspensions. For avoidance of doubt, solid drug nanoparticles (SDNs) do not involve a nanocarrier system. Rather, the nanoparticle is constructed of the drug, which is stabilised by polymer and/or surfactant excipients.