

## **Candidate Information**

Position: Research Fellow in Hydrogel-Forming Microarray Patches

School/Department: School of Pharmacy

**Reference:** 19/107928

Closing Date: Thursday 5 December 2019
Salary: £33,797 - £39,152 per annum

**Duration:** Available for 12 months in the first instance. Must be available to start by 1<sup>st</sup> January

2020.

**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 systems for minimally-invasive patient monitoring/diagnosis. To assist in the planning and delivery of this research activity so that the overall research objectives of the project are met.

## MAIN ACTIVITIES/RESPONSIBILITIES:

- Design, develop, prepare and fully evaluate hydrogel-forming microarray patches.
- Prepare documentation for meetings with regulatory authorities and industrial partners.
- Design, develop and refine experimental apparatus and analytical methods in order to obtain reliable data.
- 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, as well as ELISA techniques.
- Present regular progress reports on research to members of the research group or to external audiences to disseminate and publicise research findings.
- Prepare, in consultation with supervisor, material for publication in national and international journals and presentations at international conferences.
- Assist supervisor in the preparation of funding proposals, submissions to pharmaceutical/medical devices companies and applications to external bodies.
- 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.
- 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.
- Read academic papers, journals and textbooks to keep abreast of developments in own specialism and related disciplines.

## **ESSENTIAL CRITERIA:**

- 1. Have a degree in Pharmacy, Chemistry, Biology, Biological Sciences or a closely-related discipline.
- 2. Have, or about to obtain, a PhD in drug delivery/pharmaceutics/biosensors.
- 3. At least 3 years recent, relevant research experience to include experience in pharmaceutical analysis, including HPLC.
- Knowledge of mass spectrometric detection as used in combination with HPLC.
- 5. Knowledge of biological assay techniques, including ELISA.
- 6. Experience of formulation science and/or biosensor development.
- 7. Ability to contribute to administrative relevant to the research. Liaison with external collaborators and sponsors.
- 8. Practical problem-solving skills, independence of thought and initiative are required.
- 9. Ability to present scientific arguments and data in a clear, concise and confident manner in both written and oral formats.
- 10. Ability 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 conducting in vivo animal experiments to evaluate dosage forms