

### **Candidate Information**

**Position:** Research Assistant **School/Department:** School of Pharmacy

**Reference:** 25/112830

Closing Date: Monday 15 September 2025

Salary: £35,136 per annum

Anticipated Interview Date: Monday 29 September 2025

Duration: Fixed term available for 7 months

### JOB PURPOSE:

We seek a dynamic researcher to join our team in advancing the development and preclinical-to-industrial translation of innovative drug delivery systems drove by emerging technologies. The successful candidate will play a key role in fabricating bioprinted multilayer scaffolds designed for cutting-edge drug delivery systems designed for tissue engineering applications.

#### **MAJOR DUTIES:**

- 1. Assist in the development and optimization of a multi-layered drug-loaded bioprinted scaffold.
- 2. Optimize scaffold design to enable controlled and sustained release of Active Pharmaceutical Ingredients (APIs), with a particular focus on biologically active molecules.
- 3. Conduct in vitro testing to evaluate the survival and functionality of the scaffolds.
- 4. Perform relevant analyses of the scaffolds using tools such as rheology, texture analysers, spectroscopic and Thermodynamic methods.
- 5. Prepare sterile specimens using appropriate sterilization techniques tailored to the material properties, ensuring their compatibility and safety for in vivo studies.
- 6. Keep track of the current literature in the field and write a comprehensive review paper before the end of the project.
- 7. Engage in the dissemination of the research in regular group and consortium meetings.
- 8. Perform routine administrative tasks related to the research project to ensure timely completion of milestones and adherence to budget constraints.
- 9. Perform additional tasks assigned by the line manager that align with the scope of the role.

# **ESSENTIAL CRITERIA:**

- 1. Hold 1st class degree in Pharmacy, Pharmaceutical or Biological Sciences, Chemical Engineering, or a closely related discipline.
- 2. Recent and relevant research experience to include the following:
  - Experience of design and manufacture of drug delivery systems or medical devices.
  - Experience in the characterisation of polymeric drug delivery systems (including thermal analysis, XRD, FTIR, Texture analysis, SEM, etc.).
  - Knowledge of extrusion 3D-printing in pharmaceutical manufacturing.
- 3. Authorship of at least one research manuscript as first author, published in internationally recognised peer-reviewed journal in the last 10-months.
- 4. Ability to contribute to administrative relevant to the research.
- 5. Excellent record-keeping skills, and evidence of a well-kept notebooks.
- 6. Familiar in in vitro studies.
- 7. Proficient in applying statistical methods and tools for analysing in vitro or and in vivo data.
- 8. Capable of conveying scientific arguments and data clearly, concisely, and confidently.
- 9. Skilled in delivering regular progress reports to research groups and external audiences, effectively sharing and publicizing research findings.
- 10. Practical problem-solving skills, independence of thought and initiative are required.

- 11. Capable of assessing, organizing, and optimizing resources to support research activities.
- 12. Ability to present scientific arguments and data in a clear, concise and confident manner in both written and oral formats.
- 13. A calm, conscientious, and disciplined scientist who thrives in a collaborative team environment.
- 14. Willing and eligible to undertake international research visits to designated partner institutions, with each trip ranging from 2 to 6 weeks.
- 15. Conditions of the grant stipulate that the postholder will be required to travel to the collaborator in Egypt for a period of 4–6 weeks. Applicants must be able to meet this requirement in line with the guidelines outlined at Visas Egypt Consulate UK.

# **DESIRABLE CRITERIA:**

- 1. Postgraduate qualification in Drug Delivery, Pharmaceutical Technologies, Pharmaceutical Engineering or a closely related discipline.
- 2. 1-year relevant research experience.
- 3. Recent, relevant, experience in pharmaceutical analysis, including HPLC.
- 4. Experience in presenting at national and international conferences.
- 5. Experience in research project management.
- 6. Experience using electronic lab books.
- 7. Long-term and well-defined career goals.