

## Candidate Information

<b>Position:</b>	Research Fellow
<b>School/Department:</b>	Pharmacy
<b>Reference:</b>	19/107884
<b>Closing Date:</b>	Wednesday 13 November 2019
<b>Salary:</b>	£33,797 per annum
<b>Duration:</b>	Until 31 May 2021

### **JOB PURPOSE:**

The work will involve assessment of class III medical device loaded with nanoparticles for non-union fracture repair. This position is funded by Versus Arthritis and will involve interactions with local arthritis charities and patients. The post holder will be required to perform a range of cutting edge methodologies, through both in vitro and in vivo modelling to assess the safety and efficiency of a thermo-responsive hydrogel loaded with hydroxyapatite nanoparticles. The post holder will be an active member of a research project/team assisting in the planning and delivery of the research activity within a specified area, so that the overall research objectives of the project/school are met.

### **MAJOR DUTIES:**

1. To design, develop and execute experiments related to the above described project under the supervision of Professor Helen McCarthy, and in coordination with another Research Fellow involved in the same project.
2. Carry out analyses, critical evaluations, and interpretations using methodologies and other techniques appropriate to area of research.
3. Present regular progress reports on research to members of the research group or to external audiences to disseminate and publicise research findings.
4. Prepare, in consultation with the supervisor, material for publication in national and international journals and presentations at international conferences.
5. The appointed individual will be encouraged to formulate, write and submit grants for fellowship awards, project and travel support.
6. To assist with the supervision of postgraduate students, honours or summer students on mini-projects, which will help develop supervisory skills.
7. Carry out routine administrative tasks associated with the research project/s to ensure that project/s are completed on time and within budget.
8. Read academic papers, journals and textbooks to keep abreast of developments in own specialism and related disciplines and to maintain awareness of the context of the research project.
9. Any other reasonable duties within the general ambit of the post and competence of post holder.

### **Planning and Organising:**

1. Plan for specific aspects of the research programme. Timescales range from 1-6 months in advance and contribute to research group planning.
2. Plan own day-to-day activity within framework of the agreed research programme.
3. Plan up from 1-6 months in advance to meet deadlines for journal publications and to prepare presentations and papers for conferences.
4. Coordinate and liaise with other members of the research group over work progress.

### **Resource Management Responsibilities:**

1. Support the development and training of support staff and students by making available their research experience and expertise.

2. Take shared responsibility for the upkeep of lab equipment and replenishment of lab stocks and exercise due diligence when using equipment.
3. Ensure research resources are used in an effective and efficient manner.

**Internal and External Relationships:**

1. Communicate appropriately with lab colleagues the latest research findings/results.
2. Develop contacts with other labs within the research community at Queen's and look to identify potential cross-discipline collaborations.
3. Work collaboratively with industrial partners.
4. Join national and international scientifically relevant societies.
5. Contribute to School's outreach programme by maintaining existing and establishing new links with local community groups and arthritis charities.

**ESSENTIAL CRITERIA:**

1. Have or be about to obtain a PhD in Biochemistry, Pharmacy, Biological Science or a closely allied discipline.
2. At least 3 years recent, relevant research experience with peptide nanoparticles.
3. Experience of cellular and molecular biology, histological techniques and biochemical analysis of tissue composition.
4. Experience of assessing nanoparticles safety and efficiency in small animal model.
5. Knowledge of HPLC.
6. Experience of nanoparticle formulation and characterisation.
7. Research publications in relevant reputable peer-reviewed journals, commensurate with career stage.
8. Sufficient breadth and depth of specialist knowledge in the discipline and of research methods and techniques to work within established research programmes.
9. Ability to communicate complex information clearly in both oral and written formats.
10. Ability to prioritise own work within a general plan to meet deadlines.
11. Ability to contribute to broader management and administrative processes.
12. Ability to build contacts and participate in internal and external networks.
13. Analytical and problem-solving skills.
14. Ability to assess and organise resources.
15. Due to the nature of the projects, flexibility of working hours may be required.

**DESIRABLE CRITERIA:**

1. Masters degree in science or pharmacy
2. Evidence of Scientific membership e.g. e.g. BSNM, ESB
3. Experience of in vivo modelling relevant to bone regeneration with a personal licence.
4. Previous track record of high quality research in the field of bone regeneration.
5. Experience of training/mentoring of students or early career staff.
6. Evidence of having presented at conferences (poster or oral).