ROLE PROFILE

**Job Title:** Research Associate/Fellow  
**School:** School Pharmacy  
**Job family and level:** Research and Teaching Level 4 Training Grade/Level 4  
**Contract Status:** Fixed-term until 31 August 2019  
**Hours of Work:** Full-time (36.25 hours per week)  
**Location:** School of Pharmacy, University Park  
**Reporting to:** Dr James Dixon

**Purpose of the Role:**  
To work in a multidisciplinary team to a) optimise gene delivery in culture, hydrogels models of tissue and human material ex vivo, (b) assess the levels and duration of gene delivery efficacy, (c) engineer state-of-the-art vectors for several growth-factors, (d) measure growth-factor secretion and cellular effects, and e) conduct some demonstrations showing the system can be functional in austere military environments.

**Main Responsibilities**

1. Conduct gene delivery experiments, assessing growth factor expression.
2. Engineer tissue models and process tissue slices ex vivo.
3. Interaction and coordination of research activities with external project collaborators  
   - Including clinical staff and DSTL
4. Preparation and presentation of progress reports and contributing to scientific publications.
5. Assistance in the supervision of undergraduate and postgraduate students.
6. Organisation and assistance in general laboratory duties such as ordering of reagents, equipment maintenance, and laboratory housekeeping.
7. Assist in the supervision of undergraduate and/or postgraduate students projects.
8. Collaborate with academic colleagues on collaborative or joint research projects.
9. Active contribution to group meetings by e.g. problem solving, suggestions, etc.
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<tr>
<th>Knowledge, Skills, Qualifications &amp; Experience</th>
<th>Essential</th>
<th>Desirable</th>
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<tr>
<td><strong>Qualifications/Education</strong></td>
<td>• A 1st or upper-second class honours degree.</td>
<td>• Degree in cell biology, tissue engineering, or related.</td>
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<td>• PhD (or near completion) in gene delivery, tissue engineering, wound healing or related disciplines.</td>
<td>• PhD covering areas such as general cell biology, microbiology, bioreactor technology.</td>
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<td><strong>Skills/Training</strong></td>
<td>• Excellent skills in recombinant DNA technologies and cell culture.</td>
<td>• Experience of ex vivo tissue models.</td>
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<td>• Excellent problem solving abilities.</td>
<td>• Experience of Orthopaedics.</td>
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<td>• Good communication skills.</td>
<td>• Experience of mesenchymal stem cell culture.</td>
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<td>• Excellent IT skills.</td>
<td>• Experience of ELISA assays.</td>
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<td>• Ability to build effective relationships as part of a team and collaborate with others, both internally and externally.</td>
<td>• General molecular and microbiology.</td>
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<td>• Ability to work flexibly and with limited supervision.</td>
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<td>• Ability to work to organise and prioritise tasks to meet deadlines.</td>
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<td>• Understanding of research integrity and research data management requirements.</td>
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<td><strong>Experience</strong></td>
<td>• Writing high quality reports and papers for publication.</td>
<td>• First author publications in high impact factor journals.</td>
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<td>• Presenting work effectively to a variety of professional and academic audiences at meetings and conferences.</td>
<td>• Gene delivery technologies.</td>
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<td>• Bioreactor technologies.</td>
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Informal enquiries may be addressed to Dr James Dixon (email: james.dixon@nottingham.ac.uk), tel 0115 8468002. Please note that applications sent directly to these email addresses will not be accepted.

We pride ourselves on the collegial and supportive culture created by our staff. We are dedicated to creating an environment which enables both our staff to thrive and achieve their potential. Our commitment to Equality and Diversity has been recognised in the awarding of an [Athena SWAN Bronze Award](https://www.nottingham.ac.uk/academics/research/research-infrastructure/athena-swan/bronze-award).