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| Last updated: | <date> |

**JOB DESCRIPTION**

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| Post title: | **Research Fellow in Regenerative Medicine** | | |
| Standard Occupation Code: (UKVI SOC CODE) | 2119 - Natural and social science professionals | | |
| School/Department: | Human Development and Health | | |
| Faculty: | Medicine | | |
| Career Pathway: | Education, Research and Enterprise (ERE) | Level: | 4 |
| \*ERE category: | Research pathway | | |
| Posts responsible to: | Professor of Bioengineering | | |
| Posts responsible for: | None | | |
| Post base: | Non Office-based (see job hazard analysis) | | |

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| Job purpose |
| To undertake research in accordance with the specified research project under the supervision of the award holder. To undertake leadership, management and engagement activities.  The specific role of the person appointed will be to quantify the perfusion of microbubbles and other ultrasound responsive agents in bone fracture and to determine whether acoustic stimulation of microbubbles leads to drug release, cell uptake and the subsequent bone formation. You will also test ultrasonic devices in models of bone healing. The project will involve significant collaboration with engineers in Oxford and Southampton, to better develop synthetic ultrasound-responsive particles and devices used to stimulate them |

| Key accountabilities/primary responsibilities | | % Time |
| --- | --- | --- |
|  | To develop and carry out an area of research, including writing up and presenting work in the scientific literature, collaborating with colleagues in other research institutions, and carrying out administrative tasks necessary for progression of the research project. | 80 % |
|  | Supervise the work of junior research staff. | 10 % |
|  | Carry out occasional undergraduate supervision, demonstrating or lecturing duties within own area of expertise, under the direct guidance of a member of departmental academic staff. | 5 % |
|  | Any other duties as allocated by the line manager following consultation with the post holder. | 5 % |

| Internal and external relationships |
| --- |
| Direct responsibility to holder of research award or academic supervisor.  May have additional reporting and liaison responsibilities to external funding bodies or sponsors.  May be asked to serve on a relevant School/Department committee, for example research committee.  Collaborators/colleagues in other work areas and institutions. |

| Special Requirements |
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| To be available to participate in work at other institutions as required by the specified research project.  To attend national and international conferences for the purpose of disseminating research results.  *Applications for Research Fellow positions will be considered from candidates who are working towards or nearing completion of a relevant PhD qualification. The title of Research Fellow will be applied upon successful completion of the PhD. Prior to the qualification being awarded the title of* ***Senior Research Assistant*** *will be given.* |

**PERSON SPECIFICATION**

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| Criteria | Essential | Desirable | How to be assessed |
| Qualifications, knowledge and experience | PhD or equivalent professional qualification and experience in biomedical sciences, biomaterial science, bio-physics or biomedical engineering  Experience of working with in vivo animal models | Knowledge and experience of bone biology  Experience in molecular biology  Primary cell culture experience  Experience in acoustical engineering, and development or use of ultrasound stimulation systems  Knowledge and experience in drug delivery systems or stimuli-responsive agents | Interview  CV  Application form  References |
| Planning and organising | Able to organise own research activities to deadline and quality standards |  | Interview  CV  Application form  References |
| Problem solving and initiative | Able to develop understanding of complex problems and apply in-depth knowledge to address them  Able to develop original techniques/methods |  | Interview  CV  Application form  References |
| Management and teamwork | Able to supervise work of junior research staff, delegating effectively  Able to contribute to School/Department management and administrative processes  Work effectively in a team, understanding the strengths and weaknesses of others to help teamwork development |  | Interview  CV  Application form  References |
| Communicating and influencing | Communicate new and complex information effectively, both verbally and in writing, engaging the interest and enthusiasm of the target audience  Able to present research results at group meetings and conferences  Able to write up research results for publication in leading peer-viewed journals  Work proactively with colleagues in other work areas/institutions, contributing specialist knowledge to achieve outcomes |  | Interview  CV  Application form  References |
| Other skills and behaviours | Understanding of relevant Health & Safety issues  Positive attitude to colleagues and students |  | Interview  CV  Application form  References |
| Special requirements | Able to attend national and international conferences to present research results |  | Interview  CV  Application form  References |

**JOB HAZARD ANALYSIS**

**Is this an office-based post?**

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| Yes | If this post is an office-based job with routine office hazards (eg: use of VDU), no further information needs to be supplied. Do not complete the section below. |
| No | If this post is not office-based or has some hazards other than routine office (eg: more than use of VDU) please complete the analysis below.  Hiring managers are asked to complete this section as accurately as possible to ensure the safety of the post-holder. |

## - HR will send a full PEHQ to all applicants for this position. Please note, if full health clearance is required for a role, this will apply to all individuals, including existing members of staff.

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| **ENVIRONMENTAL EXPOSURES** | **Occasionally**  (<30% of time) | **Frequently**  (30-60% of time) | **Constantly**  (> 60% of time) |
| Outside work |  |  |  |
| Extremes of temperature (eg: fridge/ furnace) |  |  |  |
| ## Potential for exposure to body fluids | x |  |  |
| ## Noise (greater than 80 dba - 8 hrs twa) | x |  |  |
| ## Exposure to hazardous substances (eg: solvents, liquids, dust, fumes, biohazards). Specify below: | x |  |  |
| Frequent hand washing | x |  |  |
| Ionising radiation | x |  |  |
| **EQUIPMENT/TOOLS/MACHINES USED** | | | |
| ## Food handling |  |  |  |
| ## Driving university vehicles(eg: car/van/LGV/PCV) |  |  |  |
| ## Use of latex gloves (prohibited unless specific clinical necessity) |  |  |  |
| ## Vibrating tools (eg: strimmers, hammer drill, lawnmowers) |  |  |  |
| **PHYSICAL ABILITIES** | | | |
| Load manual handling |  |  |  |
| Repetitive crouching/kneeling/stooping |  |  |  |
| Repetitive pulling/pushing |  |  |  |
| Repetitive lifting |  |  |  |
| Standing for prolonged periods |  |  |  |
| Repetitive climbing (ie: steps, stools, ladders, stairs) |  |  |  |
| Fine motor grips (eg: pipetting) | x |  |  |
| Gross motor grips |  |  |  |
| Repetitive reaching below shoulder height |  |  |  |
| Repetitive reaching at shoulder height |  |  |  |
| Repetitive reaching above shoulder height |  |  |  |
| **PSYCHOSOCIAL ISSUES** | | | |
| Face to face contact with public |  |  |  |
| Lone working | x |  |  |
| ## Shift work/night work/on call duties |  |  |  |