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| Last updated: | 02/04/2024 |

**JOB DESCRIPTION**

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| Post title: | **Research Fellow in cellular and tissue biology** | | |
| Standard Occupation Code: (UKVI SOC CODE) | 2119 - Natural and social science professionals | | |
| School/Department: | School of Biological Sciences | | |
| Faculty: | Environmental and Life Sciences | | |
| Career Pathway: | Education, Research and Enterprise (ERE) | Level: | 4 |
| \*ERE category: | Research pathway | | |
| Posts responsible to: | Associate Professor Angus Wann | | |
| Posts responsible for: |  | | |
| Post base: | Office-based/Non Office-based (see job hazard analysis) | | |

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| Job purpose |
| To undertake research in accordance with funded BBSRC research project and develop on-going applications for further funding under the supervision of Dr Wann. To integrate research with collaborations/other BBSRC-funded researchers at Oxford and Bristol. To undertake leadership, management and engagement activities and training of junior members of laboratory. |

| Key accountabilities/primary responsibilities | | % Time |
| --- | --- | --- |
|  | To develop and carry out an area of personal research. | 50 % |
|  | Regularly disseminate findings by taking the lead in preparing publication materials for referred journals, presenting results at conferences, or exhibiting work at other appropriate events. | 5 % |
|  | Contribute to the writing of bids for research funding. | 5 % |
|  | Investigate models and approaches to test and develop them. | 5 % |
|  | Collaborate/work on original research tasks with colleagues in other institutions. | 5 % |
|  | Carry out administrative tasks associated with specified research funding, for example risk assessment of research activities, organisation of project meetings and documentation. Implementation of procedures required to ensure accurate and timely formal reporting and financial control. | 5 % |
|  | 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. | 10 % |

| Internal and external relationships |
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| Direct responsibility to Dr Wann.  Limited reporting and liaison responsibilities to UKRI and collaborators at Oxford and Bristol.  May be asked to serve on a relevant School/Department committee, for example research committee.  Collaborators/colleagues in closely related work areas within Southampton including collaborations with Engineering and medicine. |

| Special Requirements |
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| 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 qualifications and experience in cell or tissue biology  Detailed understanding and knowledge of cell signalling, tissue biology including *in situ* analyses of gene and protein expression and genetic manipulations in vitro  MSK cell culture | PhD in mechanobiology at cellular or tissue level  Knowledge of skeletal biology, mechanobiology, in vitro bioengineering methods, tissue engineering, materials science, click chemistry, hydrogel synthesis.  Experience of stem cell and MSK cell culture, differentiation, histological analyses, I.F/IHC, in situ or RNA scope, 3D cell culture, qPCR, western blot.  Experience of interpreting RNA omics analyses e.g Bulk, single nuclei, spatial.  High and super-resolution microscopy techinques and image analysis  Knowledge of in vivo MSK models  Teaching at undergraduate level and contributing to teaching at postgraduate level | Interview |
| Planning and organising | Able to organise own research activities to deadline and quality standards |  | interview |
| 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 |
| 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 | Able to regularly interact with and synergise with activities of posts at Oxford (bioinformatics) and Bristol (biomaterials). | interview |
| 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 | Interests in PGR training/trainees development | interview |
| Other skills and behaviours | Understanding of relevant Health & Safety issues  Positive attitude to colleagues and students |  |  |
| Special requirements | Able to attend national and international conferences to present research results |  |  |

**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 |  |  |  |
| ## Noise (greater than 80 dba - 8 hrs twa) |  |  |  |
| ## Exposure to hazardous substances (eg: solvents, liquids, dust, fumes, biohazards). Specify below: |  |  |  |
| Frequent hand washing |  |  |  |
| Ionising radiation |  |  |  |
| **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) |  |  |  |
| 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 |  |  |  |
| ## Shift work/night work/on call duties |  |  |  |