



Job Description and Person Specification

Last updated: July 2022

JOB DESCRIPTION

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|------------------------|--|--------|---|
| Post title: | Senior Molecular Biologist | | |
| Academic Unit/Service: | Cancer Sciences | | |
| Faculty: | Medicine | | |
| Career Pathway: | Technical and Experimental (TAE) | Level: | 5 |
| *ERE category: | n/a | | |
| Posts responsible to: | Professor of Molecular Immunology & Director of Translational Immunology & Professor of Imaging & Biomedical Engineering | | |
| Posts responsible for: | Junior staff members and oversight of laboratory members | | |
| Post base: | Non Office-based (see job hazard analysis) | | |

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| Job purpose |
| <p>To independently develop, oversee and manage the molecular biology/protein engineering operations in the laboratory. This will include line management of one or more junior technicians, and interactions with personnel within and outside the research group to ensure the timely completion of research projects.</p> <p>In addition, the job will involve the carrying out of research projects using advanced molecular biology, protein engineering and expression techniques, most likely in a team setting. The candidate is expected to develop new skills readily and be proactive in problem solving.</p> |

| Key accountabilities/primary responsibilities | % Time |
|---|--------|
| 1. Carry out and support ongoing research with experimentation related to the scientific mission of the laboratory, with a focus on molecular biology, protein engineering and expression including the use of phage display and methods for in vitro characterisation of proteins. | 40 % |
| 2. Role in writing scientific manuscripts, progress reports and other scientific documents. | 15% |
| 3. Responsible for training and oversight of laboratory members, including junior technicians, in laboratory techniques and procedures. | 15% |

| Key accountabilities/primary responsibilities | | % Time |
|---|---|--------|
| 4. | Oversight of regulatory, biosafety and compliance issues related to molecular biology/protein engineering techniques. | 5 % |
| 5. | Work with the administrative support to ensure maintenance of supplies for the running of the molecular biology, protein engineering and expression work in the laboratory. | 5 % |
| 6. | Oversight of laboratory inventories/databases for molecular biology, protein expression work and related experimentation. | 10 % |
| 7. | Any other duties as allocated by the line manager following consultation with the post holder. | 10% |

| Internal and external relationships |
|--|
| Laboratory members Departmental administrators/managers Other members of the department/University staff External collaborators Relevant suppliers and external contacts |

| Special Requirements |
|---|
| The post-holder will be expected to be available for out of hours work (which may include evenings, weekends, University closure periods, etc.) as necessary to perform their job duties, to adhere to experimental protocols and meet grant deadlines. |

PERSON SPECIFICATION

| Criteria | Essential | Desirable | How to be assessed |
|--|--|--|---|
| Qualifications, knowledge and experience | <p>Skill level equivalent to achievement of a professional qualification or postgraduate degree.</p> <p>Knowledge in molecular biology, protein engineering and expression, in vitro characterisation of proteins equivalent to Ph.D. level.</p> <p>Substantial experience in a relevant technical field, with proven experience of successfully planning and progressing work activities.</p> <p>Proven experience of managing outcomes in a specialist research field.</p> <p>Experience in software related to research and research management.</p> <p>Proven project and/or people management skills.</p> <p>Able to apply experience and awareness within specialist field.</p> <p>Able to appreciate University and Laboratory priorities and to apply these in managing work outcomes.</p> | Knowledge of phage display technology or other selection/library techniques. | Qualification verification/ Interview/ Application form |
| Planning and organising | <p>Able to plan and manage major new projects or significant new activities.</p> <p>Able to multi-task and work under pressure</p> <p>Able to work under pressure.</p> | | Application/ Interview/ Probation |
| Problem solving and initiative | <p>Able to self -motivate and work on own initiative.</p> <p>Demonstrable ability to solve complex problems.</p> <p>Ability to apply specialist technical knowledge to identify broad trends and to assess deep-rooted and complex issues.</p> <p>Able to apply originality in modifying existing approaches to solve problems.</p> | | Application/ Interview/ Probation |
| Management and teamwork | <p>Able to manage team dynamics, ensuring any potential for conflict is managed effectively.</p> <p>Able to assist with the design of research plans for junior technicians and other laboratory members in molecular biology, protein engineering and expression.</p> <p>Able to provide expert guidance and advice to colleagues to resolve complex problems.</p> | | Application/ Interview/ Probation |

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|--------------------------------------|---|--|--|
| <p>Communicating and influencing</p> | <p>Ability to write with clarity and be able to communicate effectively with colleagues.</p> <p>Able to present new and complex information effectively, both verbally and in writing.</p> <p>Able to resolve tensions and difficulties as they arise.</p> | | <p>Application/ Interview/ Probation</p> |
| <p>Special requirements</p> | <p>Willingness to undertake Health and Safety training specific to role.</p> <p>Willing to undertake further training and professional development as needed.</p> <p>Able to work out of (which may include evenings, weekends, University closure periods, etc.) as necessary to perform their job duties, to adhere to experimental protocols and meet grant deadlines.</p> | | <p>Application/ Interview/ Probation</p> |

JOB HAZARD ANALYSIS

Is this an office-based post?

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| <input type="checkbox"/> 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. |
| <input checked="" type="checkbox"/> 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.

| ENVIRONMENTAL EXPOSURES | Occasionally (<30% of time) | Frequently (30-60% of time) | Constantly (> 60% of time) |
|--|--------------------------------|--------------------------------|-------------------------------|
| Outside work | n/a | n/a | n/a |
| Extremes of temperature (eg: fridge/ furnace) | n/a | n/a | Na/ |
| ## Potential for exposure to body fluids | √ | | |
| ## Noise (greater than 80 dba - 8 hrs twa) | n/a | n/a | n/a |
| ## Exposure to hazardous substances (eg: solvents, liquids, dust, fumes, biohazards). Specify below: | | √ | |
| Frequent hand washing | √ | | |
| Ionising radiation | √ | | |
| EQUIPMENT/TOOLS/MACHINES USED | | | |
| ## Food handling | n/a | n/a | n/a |
| ## Driving university vehicles(eg: car/van/LGV/PCV) | n/a | n/a | n/a |
| ## Use of latex gloves (prohibited unless specific clinical necessity) | n/a | n/a | n/a |
| ## Vibrating tools (eg: strimmers, hammer drill, lawnmowers) | n/a | n/a | n/a |
| PHYSICAL ABILITIES | | | |
| Load manual handling | n/a | n/a | n/a |
| Repetitive crouching/kneeling/stooping | n/a | n/a | n/a |
| Repetitive pulling/pushing | n/a | n/a | n/a |
| Repetitive lifting | n/a | n/a | n/a |
| 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 | n/a | n/a | n/a |
| Lone working | √ | | |
| ## Shift work/night work/on call duties | n/a | n/a | n/a |