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| Last updated: | 19 November 2019 |

**JOB DESCRIPTION**

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| Post title: | Senior Microscopist | | |
| School: | Cancer Sciences | | |
| Faculty: | Medicine | | |
| Career Pathway: | Technical and Experimental (TAE) | Level: | 5 |
| Posts responsible to: | Professor of Molecular Immunology and Director of Translational Immunology & Professor of Imaging and Biomedical Engineering | | |
| Posts responsible for: | Supervision of staff members and oversight of laboratory members | | |
| Post base: | Non-Office-based (see job hazard analysis) | | |

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| Job purpose |
| To independently develop, oversee and manage the microscopy research operations and efficient running of the microscopy and related laboratory instrumentation. In addition, to manage and coordinate the provision of specialist technical services to the research group headed by Profs. Ward and Ober in the Centre for Cancer Immunology and its collaborators. In addition, the job will involve the carrying out of research projects using advanced microscopy techniques, most likely in a team setting. |

| Key accountabilities/primary responsibilities | | % Time |
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|  | Carry out and support ongoing research with experimentation related to the scientific mission of the laboratory, including the writing of scientific manuscripts, progress reports and other scientific documents. | 25 % |
|  | Ensuring continued development and maintenance of microscopy and related instrumentation and equipment. | 20% |
|  | Undertake budget and resource planning and monitoring as appropriate (regarding the purchasing and maintenance of equipment. Oversight of laboratory inventories/databases for microscopy components and related experimentation and management of contracts for purchase of microscopy equipment. Ensure maintenance of supplies for the running of the microscopy laboratory. Negotiate pricing with vendors and deal with purchasing departments, as necessary. | 25% |
|  | Line manage/supervise staff and researchers. Providing expert advice and subject leadership to staff and students. | 10% |
|  | Responsible for oversight of regulatory, biosafety and compliance issues related to microscopy and related laboratory techniques. | 10 % |
|  | Responsible for ensuring laboratory members carry out recommended procedures, including documentation of experiments and data. Oversight of maintenance of data records related to microscopy and have received the relevant training. | 5 % |
|  | Any other duties as allocated by the line manager following consultation with the post holder. | 5% |

| Internal and external relationships |
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| Internal:  Other members of the Image and Data Analysis Group  Other Faculty of Medicine staff, including academic staff and other technical staff;  Other University Professional Services, such as RIS, Finance, Procurement, health and safety etc.  External:  Funding bodies  Sponsors  Other Higher Education Institutions  Suppliers  Commercial users |

| Special Requirements |
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| The post-holder will be expected to be available for out of hours work (including weekends, university closure periods, etc.) as necessary to perform their job duties. For example, to fit in with experimental publication and grant deadlines etc. |

**PERSON SPECIFICATION**

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| Criteria | Essential | Desirable | How to be assessed |
| Qualifications, knowledge and experience | Knowledge and experience in optics/microscopy equivalent to Ph.D. level.  Skill level equivalent to achievement of a professional qualification or postgraduate degree in a physical science or engineering.  Substantial experience in a relevant technical field, with proven experience of successfully planning and progressing work activities.  Proven experience of managing outcomes in microscopy  Experience in software related to research and research management.  Proven project management skills.  Able to apply experience and awareness within microscopy  Able to appreciate HEI and Laboratory priorities and to apply these in managing work outcomes.  Experience with suppliers related to equipment procurement, maintenance and managing budgets. | Membership of relevant technical professional body.  PRINCE2 or similar project management qualification.  Expertise in single molecule microscopy and cellular microscopy | Qualification verification/  Interview/  Application  form |
| Planning and organising | Proven ability to plan and manage major new projects or significant new activities, ensuring plans complement broader organisational strategy. |  | Interview |
| Problem solving and initiative | Proven ability to self -motivate and work on own initiative  Demonstrable ability to solve complex problems  Proven ability to apply specialist technical knowledge to identify broad trends and to assess deep-rooted and complex issues.  Proven ability to apply originality in modifying existing approaches to solve problems. |  | Interview |
| Management and teamwork | Proven ability to manage team dynamics, ensuring any potential for conflict is managed effectively.  Proven ability to assist with the design of research plans for microscopy users, both inside and outside the laboratory.  Proven ability to provide expert guidance and advice to colleagues to resolve complex problems. |  | Interview |
| Communicating and influencing | Proven ability to write with clarity and be able to communicate effectively with colleagues.  Proven ability to present new and complex information effectively, both verbally and in writing.  Proven ability to resolve tensions and difficulties as they arise. |  | Interview/  Application  form |
| Other skills and behaviours | Knowledge of, or ability to rapidly learn, software programs associated with microscopy data and database management. |  | Interview |
| Special requirements | Willingness to undertake Health and Safety training specific to role.  Willing to undertake further training and professional development as needed to stay up to date with the developments in the microscopy field and its applications.  The post-holder will be expected to be available for out of hours work (including weekends, university closure periods, etc.) as necessary to perform their job duties. For example, to fit in with experimental publication and grant deadlines etc. |  | Interview |

**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 | 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 |