Job Description Template

1. Job Details

Job title: Senior Technical Officer

School/Support Department: School of Molecular and Clinical Medicine

Unit (if applicable): Edinburgh Cancer Research Centre

Line manager: Head of Laboratory

2. Job Purpose

To manage the cell culture suite within the Laboratories used by any of the 37 members of staff and visitors, to ensure the most efficient provision of resources. To conduct research experiments using specialist techniques and to train and supervise other members of staff in these techniques.

3. Main Responsibilities

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<thead>
<tr>
<th>Approx. % of time</th>
<th>Description</th>
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<tbody>
<tr>
<td>55</td>
<td>1. Responsible for the running of the Laboratories cell culture suite. This includes procurement of materials and equipment, equipment service and maintenance, the training and supervision of staff, students and visitors in cell culture techniques, solution preparation and batch testing of serum samples, maintenance of levels of consumables, to ensure the efficient running of the cell culture facilities. Also to update standard operating procedures and COSHH assessments.</td>
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<td>20</td>
<td>2. Responsible for setting up and conducting experiments under strict sterile conditions in cell culture. Responsible for the preparation and collation of results, and the production of figures and tables for publications, arising from these experiments.</td>
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<td>12</td>
<td>3. Responsible for setting up and maintaining a detailed record of the frozen cell bank of mammalian cells for the laboratory which total approximately 3,500. Responsible for the maintenance of the various cell lines in culture, and for the isolation of new cell lines. To provide cell lines on request to other people, within the group and to groups in other institutions.</td>
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<td>10</td>
<td>4. Responsible for the operation, procurement, training and supervising of staff and the maintenance of the Fluorescent Activated Cell Sorter suite (FACS) within the Laboratories.</td>
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<td>3</td>
<td>5. Responsible for the procurement processes for the Laboratories using eFinancials and SciQuest in the absence of the Lab Manager.</td>
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4. Planning and Organising

Key objectives agreed with line manager, total discretion thereafter in planning, prioritising and organising experiments.

Balancing supply and demand for plastic ware and serum. This involves projecting usage for 1-2 years in advance to enable bulk ordering to secure the best prices but also taking in to account expiry dates.

Continuously monitor and check results. The unpredictability of research means that daily planning needs to accommodate new developments.
5. Problem Solving
The job holder will be expected to respond and solve queries and problems within the laboratory from students and staff on a daily basis. Examples of these are:
- identifying sources of contamination and eliminating it before it becomes a widespread issue affecting various research groups
- identifying possible causes of unexpected cell death or poor cell growth, this may be on an individual level or an issue that would affect various groups
The job holder can refer to standard operating procedures and policies for guidance and can obtain advice for unusual or complex issues from a relevant person.

6. Decision Making
Determine work method and materials for own experiments and undergraduate projects. Decisions on changes to overall research methodology or need to adopt a different approach would be referred to line manager.
Decide on where to purchase consumables and replacement equipment for use in cell culture.

7. Key Contacts/Relationships
Close working relationship with all members of staff, students and visitors within the Laboratories regarding availability and usage of the cell culture facilities and appropriate training.
Contact with other research groups in USA and Europe for the supply of cell cultures.
Working relationship with staff in the following Edinburgh University Support Departments; Finance, Procurement.
Contacts with Sales reps from external companies for negotiation of supply of materials and discounts.

8. Knowledge, Skills and Experience Needed for the Job
BSc degree or equivalent in a relevant discipline.
More than 10 years experience of working in a laboratory would be required.
Extensive experience of mammalian cell culture, particularly ES cell culture and molecular biology techniques would be required.
Experience of operating FACS machine.
IT skills, including the use of specialised software packages, in addition to Microsoft Office and Internet.
Good interpersonal and communication skills
Good knowledge of health and safety procedures and laboratory hygiene.

9. Dimensions
Manage the cell culture facilities, which are comprised of 3 cell culture suites, with a total of 5 cell culture hoods and an ante-room.
Provide training and technical support to any of the 37 members of the Laboratories in cell culture suite and the Fluorescent Activated Cell Sorter suite, replacement cost of FACS machine £75k.
Supervise undergraduate cell culture projects ~2 per year.
Responsible for an annual consumables budget of £20k.

10. Job Context and any other relevant information
If the job holder were to fail to maintain necessary standards, the resulting disruption would have consequences on many research groups and projects within the Laboratories.
The job holder is exposed to some degree of health and safety risk within the working environment e.g. waste prior to disinfection, toxic chemicals, radioactivity, liquid nitrogen, and pressurised gas cylinders.