



Candidate Information

Position:	Research Technician
School/Department:	Centre for Cancer Research and Cell Biology
Reference:	20/108345
Closing Date:	Wednesday 7 October 2020
Salary:	£24,461 to £25,941 per annum
Anticipated Interview Date:	Monday 19 October 2020
Duration:	Available until 31 May 2022

JOB PURPOSE:

To work within a CRUK funded program, led by Dr Emma Kerr, to define metabolic mechanisms of resistance to colorectal cancer therapies. The successful applicant will work in collaboration with local and international mass spectrometry experts to develop and maintain state-of-the-art metabolic techniques to generate drug resistance profiles in clinical, in vitro and in vivo colorectal cancer model systems.

MAJOR DUTIES:

1. Perform molecular/cell biology and biological assays as required by the Principal Investigator in order to successfully complete the project.
2. Process, run and analyse sample extracts derived from in vitro and in vivo experiments, as well as from clinical samples, using LC-MS platforms.
3. Work with the PI and mass spectrometry facility to develop new applications, developing knowledge and experience to create new Standard Operating Procedures (SOPs).
4. Maintain accurate records of results in a manner that will enable them to be accessed and interpreted. Interpret and discuss own results with Principal Investigator and other members of the research group and collaborators.
5. Assist in maintaining GM modified animal lines within the BSU and develop colorectal transplant models. Generate primary immortalised and genetically modified cell lines for own immediate use and use by other researchers.
6. Carry out stocktaking and maintain levels of essential laboratory supplies for the research group and for general use of all laboratory personnel. Carry out necessary research and communicate with suppliers when sourcing suitable reagents. Co-ordinate the acquisition of consumables for the research group to ensure efficient use of resources.
7. Comply with health and safety procedures affecting self and others and ensure the work area is clean and safe at all times.
8. Oversee and instruct under-graduate and post-graduate research students and research staff in the use of standard equipment and laboratory techniques as deemed necessary and appropriate.
9. Assist in any way deemed appropriate to the overall success of the research objectives of the group and the cancer research centre.

Planning and Organising:

1. Carry out, with minimal supervision, a range of tasks largely but not exclusively according to established procedures.
2. Plan own work schedule but make adjustments depending on changing demands
3. Make arrangements for planned future work in association with academic supervisor or line manager as appropriate.
4. Ensure all supplies and equipment are available so that work can proceed as scheduled.
5. Optimise new techniques or use of new reagents and troubleshoot as required.
6. Maintain accurate records of animal numbers and genotyping data.

Resource Management Responsibilities:

1. Take delegated responsibility for the co-ordination and analysis of metabolic samples within Mass Spec CTU.
2. Take delegated responsibility for the maintenance of specific in vivo models.
3. Take responsibility for the general maintenance and efficient performance of equipment in the laboratory.

4. Have responsibility for careful use of available resources.
5. Have responsibility for cataloguing, monitoring and ensuring adequate levels of cell line stocks.
6. Have responsibility for assisting the Research team in regards to provision and maintenance of advanced models of disease.

Internal and External Relationships:

1. Daily contact with supervisor, work colleagues and other members of staff.
2. Liaison with research collaborators from other departments or institutions as necessary.
3. Some contact with laboratory sales representatives and maintenance engineers.
4. Attendance and involvement at seminars and research meetings in the PGJCCR and WWIEM.
5. Some Liaison with external consultants and UK Home Office Inspector.

ESSENTIAL CRITERIA:

1. *A minimum qualification of ONC/OND and/or NVQ level 3 in biology, medical laboratory sciences or related subject (or equivalent).
2. *3 years recent relevant experience in molecular and cell biology techniques including cell culture.
3. *Recent relevant experience in mass spectrometry techniques.
4. *Good laboratory practice.
5. Knowledge of relevant Health and Safety issues and of COSHH regulations.
6. Good communication and interpersonal skills.
7. Be capable of using own initiative.
8. Ability to work in a team and as an individual.
9. Ability to plan own work schedule responding to new pressures and adjusting priorities.
10. *Must be willing to work irregular hours when necessary for the progress of the research project.
11. *Must be willing to work with in vivo models of cancer following the guidelines of the Animals (Scientific Procedures) Act 1986.

DESIRABLE CRITERIA:

1. *BSc degree or higher.
2. *UK Home Office Personal Licence.
3. *Experience in regular maintenance and troubleshooting of mass spectrometry systems.
4. *Experience working with in vivo models.
5. *Experience with statistical analysis platforms such as R.
6. Good understanding of UK Home Office regulations concerning the usage of in vivo models.
7. Demonstrate excellent communication skills and enthusiasm to develop and maintain productive relationships with lab members and collaborators.