

Job Description

Technician (Canter Drug Discovery)

Salary: Grade 5

Contract: Full time, fixed term
Location: Canterbury Campus
Responsible to: Professor Michelle Garrett

Job family: Administrative, professional and managerial

Job purpose

As a member of the University Technical Services within the Division of Natural Sciences, this role will provide comprehensive, immediate and specialised technical support. Focused on providing research support to the specialist area of cancer drug discovery, this role will support the preparation of experiments, undertaking cancer cell culture and performing experiments in cancer cell biology, with novel anticancer agents. Reflecting a higher ability and skill level, a Technician works autonomously and solves complex problems. A Technician will have a good understanding of Health and Safety protocols and procedures and will ensure a safe working environment is maintained at all times. A Technician will support the effective and efficient operation of general facilities and resources having day to day oversight of both availability and service levels.

Key accountabilities

The following are the main duties for the job. Other duties, commensurate with the grading of the job, may also be assigned from time to time.

- Work on own initiative and with minimal supervision. Use a well-developed working technical knowledge to help solve problems independently, maintaining the working environment and raising any complex issues with more senior staff.
- Plan and perform activities independently using a range of techniques, sometimes working from a limited brief.
- Liaise with staff, students and visitors, as well as dealing with routine external service providers to ensure facilities and equipment are kept operational. Work collaboratively with other members of the team.
- Operate complex technical equipment, assisting staff and students. Undertake routine maintenance tasks, fault finding and facilitate basic repairs.
- Work effectively as a team and independently, providing technical advice in relation to the work area activities, equipment and the techniques used, to staff and students, as required.
- Pro-actively update and improve processes, contribute to and support change in the work area. Set up work environments and carry out relevant tests and experiments.
- Understand, promote and apply relevant COSHH/risk assessments and departmental health and safety protocols ensuring procedures are followed at all times. Supervise staff and students to ensure their safety.
- Maintain accurate records of work undertaken, including reports, use of databases and using appropriate (bespoke) software including Microsoft Office and software for data analysis. Write documentation and user guides where appropriate.
- Contribute to the development of protocols, standard operating procedures and maintenance schedules for the work area.
- Assist with purchasing including ordering and distributing goods. Have an awareness of costings and availability.
 Use knowledge and experience to provide recommendations and quotations to staff and students, adhering to any grant conditions.

- Monitoring resource usage and maintaining supplies of key items. Ensure the effective and efficient use of resources, maintaining relevant timetable and booking processes.
- Interpretate data and communicate findings. If required, make presentations of own work activities to others in the team and to external collaborators.
- Provide inductions, training and demonstrations of specialist techniques ensuring compliance with safety and regulatory guidelines to staff and students.
- To contribute and support change in work area to continually deliver an excellent student and staff experience.
- To actively demonstrate a commitment to professional development by continuing to advance knowledge, understanding and competencies.

Key challenges and decisions

The following provide an overview of the most challenging or complex parts of the role and the degree of autonomy that exists.

- Role holder uses both theoretical knowledge and practical experience to provide advice and support in a technical or specialised field.
- Work within established procedures and practices, analyse and use their judgement to identify the best solution to a range of different problems and issues. Support to develop junior colleagues within the team.
- Trouble shooting faults in all areas. Issues can occasionally affect multiple users at the same time, or users across different groups (i.e. in collaborations) being able to methodically problem solve in a high pressure environment as part of the team is vital to a successful outcome.

Facts & figures

Kent Technical Services provide specialist support to all areas of the University including teaching, research, innovation and civic activities. There are 6 academic divisions within the University of Kent supported by embedded technical teams who provide specialist subject support, facility operation and resource management.

Internal & external relationships

Internal: Staff at all levels within the academic division and professional services areas; students.

External: Specialist equipment and software suppliers; consultants; collaborators; contractors; visitors and visiting academic researchers; alumni.

Health, safety & wellbeing considerations

This job involves undertaking duties which include the following health, safety and wellbeing considerations:

- Regular use of Screen Display Equipment
- Repetitive limb movements
- Working with chemicals (inc. requirement to wear latex gloves and inc. work with CO2 or N2 gasses)

Further Technical Specialisms

Technical Services roles have common accountabilities across role types. The following provides an overview of any additional technical specialisms which are specific or unique to this role:

- Demonstrate an interest in mammalian cell culture and anti-cancer therapies.
- Experience working within a laboratory environment. This role will include the following duties:
 - o Mammalian cell culture.
 - o Testing of therapeutic drugs and experimental compounds on mammalian cells.
 - o Preparing samples i.e. lysate preparation and protein estimation assays.
 - Performing cell biology experiments including cell viability assays and western blot analysis.

- Extraction of chemicals from plant material
- Fractionate extracts into discreet metabolites
- Analysing chemicals present in hop cones to assess compounds in fractions of a hop variety (training will be provided).
- Ability to maintain an up to date/detailed log of the research activity undertaken and of the results obtained so that the findings projects are accurately recorded and documented.
- Desirable (but not essential) further technical specialisms for this role include:
 - o Training/experience in mammalian cell culture
 - o Experience in performing cell biological assays
 - o Experience in performing biochemical assays

Person specification

The person specification details the necessary skills, qualifications, experience or other attributes needed to carry out the job. Applications will be measured against the criteria published below.

Selection panels will be looking for clear evidence and examples in an application, or cover letter (where applicable), which back-up any assertions made in relation to each criterion.

Essential Criteria:

- Educated to A level or equivalent qualification or experience (A)
- Relevant theoretical knowledge in a related work area (A,I)
- Experience using complex technical equipment (A,I)
- Excellent working knowledge of safety regulations and procedures. For example, risk assessment, COSHH. (A,I)
- Good verbal and written communication skills, including clear and effective facilitation and presentation skills and the ability to produce clear and concise written materials. (A,I, T)
- Good interpersonal skills with the ability to liaise independently with students and staff at all levels and build and maintain good working relationships with staff in many different departments. (I)
- Excellent numeracy skills, accuracy and attention to detail. (A,I)
- Organised with the ability to prioritise a wide range of workload with competing priorities. (A,I)
- Ability to work under own initiative but also collaboratively within teams. (I)
- Excellent troubleshooting and diagnostic skills, with an ability to assess non-routine problems and implement solutions within own expertise. (A,I)
- Able to demonstrate experience in the further technical specialisms detailed in this job description. (A,I)
- Firm commitment to achieving the University's vision and values, with a passion for a transformative student experience and multidisciplinary, impactful research. (I)
- Commitment to deliver and promote equality, diversity and inclusivity in the day to day work of the role. I)

Desirable Criteria:

- Proven experience of working in a Technical support role (A,I)
- Driving License and access to transport (A,I)
- Experience extracting metabolites HPLC (A,I)
- Experience of working within, and knowledge of, the Higher Education (or related) sector (A)
- Experience providing training to others (A)
- Professional registration or willingness to work towards for example, RSciTech, EngTech, ICTTech (A)