POSITION DESCRIPTION

Technical Officer

Position Summary

The Recombinant Products Facility (RPF) (www.proteins.unsw.edu.au) provides services and training in the production and purification of biologics (including proteins, nucleic acids and bacteriophage). It is located in the biological sciences precinct of the Kensington Campus of the University of New South Wales. The Facility manages and operates state-of-the-art equipment including microbial fermentation, cell culture, mid-stream processing including TFF, process chromatography, HPLC and a range of analytical equipment. The Facility operates under an ISO9001-accredited Quality Management System (QMS).

The Technical Officer will take a lead role in providing access to high quality research infrastructure, training and provision of services to industry under an ISO9001 environment. Specifically, this will include designing and running experiments for the production of biologics (including recombinant proteins) in bioreactors, undertaking biologics purification using filtration and chromatography and characterising the purified biologics using a range of assays.

The Technical Officer will report to the Manager, Recombinant Products Facility (RPF) and has no direct reports.

Accountabilities

Specific accountabilities for this role include:

- Lead and facilitate the smooth and efficient running of the RPF through the provision of high quality and specialised technical support to staff and students
• Prepare and oversee the day-to-day operation of the RPF in conjunction with the Facility Manager e.g. setting priorities and standards of service to meet the requirements of both contract work and internal researchers using the facility.

• Support and assist the Facility Manager by contributing to the development of new and improved research methodologies and identify any requirement for new equipment, infrastructure, services and training.

• Contribute to a culture of continuous improvement by evaluating; equipment performance, service delivery and training, systems, procedures and protocols to identify opportunities for improvement and implement changes, once reviewed, as directed by the Facility Manager.

• Provide high level training and support to users of the facility and new facility staff, including updating and developing new training methods and documentation.

• Ensure efficient and safe use of specialised complex research equipment and infrastructure including users training, maintenance and repair.

• Manage Facility access, inductions and trainings for facility users using the university Safety Management System.

• Provide authoritative technical and logistical advice to users of the facility and responding efficiently and courteously to requests, escalating issues as required.

• Assist the Facility Manager in facility users’ project management and providing technical expertise in biologics production, purification and analysis.

• Assist with contract work in an ISO9001 environment, including:
  o Molecular biology experiments including gene cloning
  o Conducting upstream experiments (bioreactor-scale fermentations and cell culture)
  o Conducting downstream experiments (for example chromatographic purification)
  o Performing analysis
  o Maintaining all related documentation as required under the Facility’s QMS

• Oversee the facility equipment booking system ACLS (training, booking)

• Align with and actively demonstrate the UNSW Values in Action: Our Behaviours and the UNSW Code of Conduct.

• Cooperate with all health and safety policies and procedures of the university and take all reasonable care to ensure that your actions or omissions do not impact on the health and safety of yourself or others.

Skills and Experience

• A degree in biotechnology, biochemistry, microbiology or a related area with subsequent relevant experience or an equivalent level of knowledge gained through any other combination of education, training and/or experience.

• Demonstrated experience in protein biotechnology and the industry is highly desirable, including fermentation, cell culture, gene cloning, protein chromatography, protein analysis.

• Demonstrated experience working under a documented Quality Management System (QMS).
• Demonstrated ability to conduct independent laboratory work with limited supervision, as well as a strong attention to detail and a rigorous approach to experiment design and documentation.

• Proven ability to work collaboratively and productively in a team including on the same project, collaborate across disciplines and build effective relationships with external partners.

• Excellent interpersonal and communication skills (written and verbal), including the ability to liaise with a diverse group of individuals, interpret and present analytical results, and write scientific reports.

• Demonstrated experience working with, training and supervising others within a inter/multidisciplinary research environment, supporting and advising researchers and students on the technical aspects of the laboratory and the design, development and conduct of experiments.

• An understanding of and commitment to UNSW’s aims, objectives and values in action, together with relevant policies and guidelines.

• Knowledge of health and safety responsibilities and commitment to attending relevant health and safety training.