



POSITION DESCRIPTION

Position Title:	Biological Officer
Cluster / Business Unit / Division	Nuclear Science & Technology / Research
Section or Unit:	Human Health
Classification:	Band 5
Position Description Number:	PD-2400
Job Family:	Research
Work Contract Type:	Research and Sciences
STEMM/NON-STEMM:	STEMM
STEMM CATEGORY:	Research & Sciences

POSITION PURPOSE

The Biological Officer will contribute to the Human Health theme by supporting and enhancing core capabilities, whilst assisting research in line with ANSTO's strategic goals. The primary objective of the Biological Officer is to support and enable growth in the radiobiology capability. Working with senior researchers, this position will also assist in the screening of novel pharmaceutical agents both in vitro and in vivo, for neutron capture and theranostic applications. The Biological officer will provide rigorous technical support to all research activities within Human Health, including routine processing of samples generated both here and overseas to undertake analysis of samples as required. In addition to research activities, this position will support the operation, maintenance and compliance of all biological laboratories associated with Human Health and Biosciences.

ORGANISATIONAL ENVIRONMENT

ANSTO leverages great science to deliver big outcomes. We partner with scientists, engineers and clinicians and apply new technologies to provide real-world benefits. Our work improves human health, saves lives, builds our industries and protects the environment. ANSTO is the home of Australia's most significant landmark and national infrastructure for research. Thousands of scientists from industry and academia benefit from gaining access to state-of-the-art instruments every year.

Nuclear Science & Technology (NST) incorporates ANSTO's research, innovation, landmark research infrastructure and associated platforms and capabilities. NST conducts research and development in relation to nuclear science and technology and connects people, transfers knowledge and provides nuclear-based products and services for the benefit of Australia.

ANSTO undertakes human health research in collaboration with national and international research organisations, hospitals and the users of ANSTO's research infrastructure. The Human Health research theme includes two programs: (i) Impact of radiation on living systems; (ii) Radiotherapy, theranostics and radiotracers for improving health. The programs inform, complement and reinforce each other and draw from ANSTO's broad range of capabilities and intrinsic strengths.

ACCOUNTABILITIES & RESPONSIBILITIES

Key Accountabilities

- Provide innovative and creative solutions for investigating and characterising biological systems and samples by working with senior researchers to enhance current capabilities (e.g. enhanced microscopy), develop new capabilities and design novel methods and techniques utilising the resources available through NST and external collaborative platforms.

- Utilise knowledge and expertise in molecular biology, biochemistry or pharmacology for use in the evaluation of radiopharmaceuticals and new neutron capture agents for diagnosis and therapy of disease, establish and validate biological techniques, undertake analysis and interpretation of data.
- Undertake a range of technical support procedures related to in-vitro tissue and cell studies, tissue sectioning, autoradiography, histology, in-vivo studies and other related procedures.
- Support research activities within multidisciplinary projects that align with the strategic goals of the Human Health theme and provide specialised expertise for researchers, both from within ANSTO and external, contributing to successful outcomes within budget, scope and timelines.
- Independently identify and undertake self-educational and training programs, as required, to satisfy project needs.
- Responsibility to ensure all work undertaken meets strict safety and regulatory frameworks.
- Manage and conduct operational and maintenance activities within biological laboratories to optimise their utilisation and ensure compliance with quality, regulatory and safety requirements.
- Provide supervision and training for staff, students and facility users where required.
- Assist with the preparation and publication of papers, reports, patents and abstracts.
- Prepare and maintain standard operating procedures, work instructions, SWMES, and other regulatory required paperwork.
- Pro-actively encourage the sharing of knowledge and experiences and interact with staff of varying backgrounds and experiences to establish productive working relationships.
- Undertake additional duties as required and during periods of leave of other staff.
- Fulfil OHSE responsibilities as specified in AG-2362 of the ANSTO OHSE system.

Decision Making

- The ANSTO values, organisational corporate plan, operational excellence program, the ANSTO Health strategy, NST Research strategy and Human Health strategic plan provide the context for the position.
- The position works within a framework of legislation, policies, professional standards, strategic and resource parameters. Within this framework the position has full independence in determining how to achieve objectives and recommend this to their line manager for endorsement.
- The position is fully accountable for the accuracy, integrity and quality of the content of advice provided to other researchers both internal and external to ANSTO, ensuring that decisions are based on sound evidence.
- Determine own work priorities, methods and approaches within the context of agreed work plans and will consult with the line managers on issues that have an impact on the projects or associated activities.
- The levels of authority delegated to this position are those approved and issued by the Chief Executive Officer. All delegations will be in line with the ANSTO Delegation Manual AS-1682 (as amended or replaced).

Key Challenges

- Developing innovative biological methodologies, novel solutions for extending the scope of existing infrastructure and establishing new capabilities.
- Keeping abreast of recent developments within biological sciences, ensuring continual improvements and implementation of best practice and maintain leading edge capabilities in molecular, cell biology and biochemistry techniques.
- Working independently on multiple project tasks to ensure all project milestones are met.
- Carry out work in a highly regulated environment and ensure adherence to all regulations.
- Establish productive working relationships with people of diverse academic backgrounds and varied levels of experience.
- Working in a complex environment, achieving results within tight constraints on time, resources and finances.
- Working within a complex Federally regulated environment involving agencies such as Public Service, ARPANSA, OGTR, NHMRC etc.
- Working within a complex and unfamiliar environment overseas (during international field trips) that are subject to additional regulations, while adhering to the Australian Federal regulations. This challenge will require an agile mindset and the ability to troubleshoot.

KEY RELATIONSHIPS

Who	Purpose
Internal	
Manager	<ul style="list-style-type: none"> • Receive guidance, direction and performance requirements consistent with the business plan and objectives. • Provide expert, authoritative and evidence based advice • Recommend and gain endorsement for plans and goals and other initiatives. • Provide regular updates on key tasks, and any identified issues
Work area team members (Human Health, Biosciences, Vivarium, CAS, ACNS, Synchrotron, GATRI)	<ul style="list-style-type: none"> • Support team members and work collaboratively to contribute to achieving research theme objectives. • Provide expert advice and analysis on a full range of matters to team members. • Contribute to group decision making processes, planning and goals • Determine work priorities • Identify and resolve conflicting demands on resources
Stakeholders – internal	<ul style="list-style-type: none"> • Provide supervision, guidance, advice and support. • Engage with internal safety and quality stakeholder teams to ensure compliance with safety and quality systems.
External	
Stakeholders - external	<ul style="list-style-type: none"> • Provide supervision, guidance, advice and support • Ensure safety and regulatory compliance
Collaborators and Partners	<ul style="list-style-type: none"> • Ensure effective communication, for project planning and co-ordination of activities • Report on work outcomes, outputs and results

POSITION DIMENSIONS

Staff Data	
Reporting Line	Reports to the Research Program Manager – Human Health
Direct Reports	Nil
Indirect Reports	Nil

Financial Data (2023/2024)	
Revenue / Grants	N/A
Operating Budget	N/A
Staffing Budget	N/A
Capital Budget	N/A
Assets	N/A

Special / Physical Requirements	
Location:	Working in different areas of ANSTO as needed including radiation areas under tightly regulated conditions;
Travel:	May be required travel to ANSTO sites from time to time Operational needs (fieldtrips and conferences) may require temporary assignments at collaborative/partner facilities within Australia and internationally.
Physical:	Office and laboratory based physical requirements (sitting, standing, minimal manual handling, movement around office and site, extended hours working at computer) Wearing personal protective equipment for the handling of hazardous and/or radioactive material to undertake sterile preparation of materials in a clean environment.
Radiation areas:	May be required to work in radiation areas under tightly regulated conditions Perform duties in an area where radioactive materials are handled under tightly controlled safety conditions Perform duties with and in an area where hazardous chemicals or materials are handled under tightly controlled safety conditions
Hours:	Willingness to work extended and varied hours based on operational requirements
Clearance requirements:	Satisfy ANSTO Security and Medical clearance requirements

Workplace Health & Safety	
Specific role/s as specified in AG-2362 of the ANSTO WHS Management System	All Workers Other specialised roles identified within the guideline a position holder may be allocated to in the course of their duties

ORGANISATIONAL CHART

Refer to published Organisational Chart.

KNOWLEDGE, SKILLS AND EXPERIENCE

1. Degree in Biology, Biochemistry or Pharmacology, or equivalent experience in a research setting coupled with extensive experience in the biological sciences.
2. Demonstrated experience in *in vitro* analytical and *in vivo* biological techniques. Analytical chemistry and/or data science experience is desirable.
3. Extensive and demonstrated experience in cell culture techniques including maintenance of cell cultures and cell stocks, preparing cells for animal model development and membrane preparations, immunocytochemistry techniques, development of new cell-based assays and demonstrated experience in microscopy, flow cytometry and PCR techniques.

4. Demonstrated experience in working with rodents including biodistribution and associated data analysis.
5. Ability to interpret data and communicate research results.
6. Experience in managing the operations of a laboratory facility, including the operation/maintenance of equipment, knowledge of quality assurance programs and risk management procedures.
7. Demonstrated high level of interpersonal skills and communicates well with people at various levels and with varying expertise within and external to the organisation.
8. Ability to supervise and facilitate multidisciplinary teamwork while working co-operatively with others as part of a team.
9. Highly organised and meticulous approach to work, including concise record keeping of work performed and results.
10. Demonstrated ability for self-motivated education and training.

VERIFICATION

This section verifies that the line manager and appropriate senior manager/executive confirm that this is a true and accurate reflection of the position.

Line Manager		Delegated Authority	
Name:	TBA	Name:	Ryan Middleton
Title:	Research Program Manager	Title:	Acting Theme Leader, Human Health
Signature:		Signature:	
Date:		Date:	

Appendix 1

ANSTO Job Families
Accounting & Finance
Administration
Communications & Marketing
Compliance & Regulation
Engineering and Technical
Human Resources
ICT & Digital Solutions
Information & Knowledge Management
Legal
Manufacturing
Monitoring & Audit
Operations
Organisational Leadership
Project & Program
Research
Science
Security & Intelligence
Senior Executive
Service Delivery
Strategic Policy
Trades & Labour