Australian Government

ANSTO
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POSITION DESCRIPTION

Position Title:	Research Assistant - Radiobiology
Cluster / Business Unit / Division	Nuclear Science and Technology
Section or Unit:	Strategic Research Services and Engagement / Vivarium Facilities
Classification:	Band 5
Job Family:	Science
Position Description Number:	PD-2675
Work Contract Type:	Technical
STEMM/NON-STEMM:	STEMM
STEMM CATEGORY:	Science

POSITION PURPOSE

The Research Assistant - Radiobiology supports ANSTO's Neutron Capture Enhanced Particle Therapy (NCEPT) program by coordinating and undertaking animal-based and laboratory-based preclinical research. Embedded within the Vivarium Facilities, the role establishes and maintains murine tumour models and supports irradiation, biodistribution, imaging, pharmacokinetic and tissue-analysis workflows. The position delivers reliable, compliant and reproducible preclinical models and data to support the translation of NCEPT.

ORGANISATIONAL ENVIRONMENT

ANSTO leverages great science to deliver big outcomes. We partner with scientists and engineers 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 and Technology (NST) incorporates ANSTO's research, innovation, landmark research infrastructure and associated platforms and capabilities. NST conducts research and development in nuclear science and technology, connects people, transfers knowledge and provides nuclear-based products and services for the benefit of Australia.

The Health Research and Technology Group (NST Health) develops nuclear medicine products and technologies, including advanced radiotherapies, to address areas of unmet clinical need. The group maintains core capabilities in radiochemistry, radiobiology, preclinical imaging and radiation physics and collaborates with academia, industry, clinicians and hospitals. The Vivarium Facilities provide the infrastructure, animal research expertise and regulatory framework required for in vivo research at ANSTO; this role is embedded within the Vivarium Facilities while contributing directly to NST Health's NCEPT research program.

ACCOUNTABILITIES & RESPONSIBILITIES

Key Accountabilities

- Coordinate assigned preclinical radiobiology and animal research workflows to deliver NCEPT milestones, including model establishment, animal scheduling, sample tracking, irradiation and imaging windows, and prioritisation of competing work.
- Establish and support in vitro and in vivo murine tumour models and undertake approved animal procedures within demonstrated competency, including monitoring, dosing, sample collection, tissue harvest and downstream processing.
- Conduct specialised radiobiology, biodistribution, pharmacokinetic, imaging, efficacy and ex vivo tissue-response workflows, applying appropriate quality control and interpreting routine results.

- Coordinate with Vivarium, preclinical imaging, beamline, histology and analytical platform staff to ensure animal arrivals, housing, irradiation campaigns, imaging studies and downstream analyses are delivered safely and efficiently.
- Maintain high standards of animal welfare and compliance with approved ethics protocols, the Australian Code for the care and use of animals for scientific purposes, biosafety, radiation protection, WHS and facility requirements, while keeping accurate and traceable animal, laboratory, sample, facility and quality records.
- Develop, maintain and improve work instructions, risk assessments, safe work documentation and project-specific procedures to strengthen safety, reproducibility and workflow efficiency.
- Operate and maintain laboratory and preclinical research equipment, manage routine consumables and troubleshoot model, assay, equipment and scheduling issues.
- Train and provide technical guidance to students, researchers and facility users; prepare technical summaries and data packs; and contribute to project reports, manuscripts and presentations.
- Undertake additional duties as required and during periods of leave of other staff.

Decision Making

- The ANSTO values, corporate and business plans, NST strategy, Vivarium operating requirements and NCEPT project objectives provide the context for the position
- The position works within a framework of legislation, ANSTO policies, professional standards, approved ethics protocols, the Australian Code for the care and use of animals for scientific purposes, biosafety, radiation protection, WHS, quality and resource requirements.
- Within this framework, the position has some independence in determining the methods and approaches used to deliver assigned workflows, including day-to-day planning, scheduling and use of routine resources within approved protocols.
- The position uses experience and judgement to prioritise competing animal, facility and experimental needs, troubleshoot model and assay workflows, and implement appropriate controls.
- The position is accountable for the accuracy, integrity, traceability and reproducibility of its work and records, and for promptly identifying and escalating deviations or emerging risks.
- The position consults the line manager, Vivarium Facilities Manager and NCEPT Program Lead on complex, novel, high-risk, compliance-sensitive or project-critical matters, including issues that may affect resources or MRFF milestones.
- 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

- Maintaining high standards of animal welfare, ethics and regulatory compliance while delivering reliable and reproducible preclinical data.
- Coordinating time-critical animal work, irradiation schedules, imaging windows and downstream tissue analysis across shared facilities.
- Troubleshooting technically demanding tumour-model and assay workflows while preserving sample quality, traceability and comparability across experiments.
- Balancing routine Vivarium and laboratory requirements with MRFF project priorities in a multidisciplinary, multi-institutional research program.
  Keeping records, procedures and risk controls current as research methods, project requirements and regulatory expectations evolve.

KEY RELATIONSHIPS

Who	Purpose
Internal	
Vivarium Facility Manager	• Receive direction, agree work priorities and performance expectations, report on delivery and escalate operational, compliance or resourcing issues.
NCEPT Program Lead	• Receive dotted-line scientific direction and ensure work remains aligned with MRFF milestones, experimental requirements and translational objectives.
Vivarium Facilities Team	• Coordinate animal housing, welfare monitoring, facility operations, training, competency, ethics compliance and day-to-day support for in vivo workflows.
NCEPT Scientific Team	• Coordinate experimental design, animal studies, irradiation and imaging activities, sample logistics, assay workflows, data interpretation and access to shared platforms.
External	
University and international research collaborators	• Coordinate joint experimental workflows, method transfer, sample or data sharing, technical handover and collaborative publications.
Clinical and translational partners	• Obtain input on translational priorities, treatment relevance and interpretation of preclinical findings.

POSITION DIMENSIONS

Staff Data	
Reporting Line	Reports to the Vivarium Facility Manager (embedded within Vivarium Facilities) Dotted-line accountability to the NCEPT Program Lead for MRFF project alignment.
Direct Reports	Nil
Indirect Reports	Provides technical supervision and training to students, researchers, facility users and contractors where required.

Financial Data (2025/2026)	
Revenue / Grants	Nil
Operating Budget	Nil
Staffing Budget	Nil
Capital Budget	Nil
Assets	Nil

Special / Physical Requirements	
Location:	Lucas Heights Working in different areas of designated site/campus as needed
Travel:	May be required to travel to other ANSTO sites and, occasionally, to collaborative partner, beam or imaging facilities within Australia.

Physical:	Office based physical requirements (sitting, standing, minimal manual handling, movement around office and site, extended hours working at computer) Laboratory and animal-facility requirements, including standing, frequent manual handling, and movements such as stooping, kneeling and crouching. Wearing personal protective equipment for work with hazardous and/or radioactive materials and in animal facilities, including respiratory protection where required.
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 experimental and operational requirements After hours work may be required for short and infrequent periods Required to participate on an on-call roster
Clearance requirements:	Satisfy ANSTO Security and Medical clearance requirements Obtain and maintain appropriate federal government clearance

Workplace Health & Safety	
Specific role/s as specified in AP-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

On file

KNOWLEDGE, SKILLS AND EXPERIENCE

1. A bachelor's degree in radiobiology, biomedical science, cancer biology, animal technology or a related discipline. An Honours qualification or equivalent relevant research experience is desirable.
2. Demonstrated experience establishing and/or supporting in vitro and in vivo preclinical rodent studies, including tumour models, animal handling, monitoring, dosing, sample collection and tissue processing.
3. Demonstrated experience in mammalian cell culture and relevant radiobiological or biological assays such as clonogenic or cell-viability assays, gamma-H2AX, apoptosis analysis, immunocytochemistry, immunohistochemistry, flow cytometry or microscopy.
4. Experience supporting preclinical workflows involving one or more of biodistribution, pharmacokinetics, small-animal imaging, histology or ex vivo tissue analysis.
5. Demonstrated knowledge and practical application of animal ethics and welfare standards, the Australian Code for the care and use of animals for scientific purposes, biosafety or PC2 requirements, WHS and radiation protection or other regulated laboratory requirements.
6. Demonstrated ability to coordinate complex, time-critical workflows across animal facilities, laboratories and research platforms while maintaining sample quality, data integrity and traceability.
7. Demonstrated ability to apply sound judgement, troubleshoot technical issues, interpret routine data and implement improvements to research workflows.

8. Demonstrated ability to develop and maintain work instructions, risk assessments, safety documentation, data and quality records, and other compliance records.
9. Demonstrated ability to train and guide staff, students or facility users and to build effective working relationships across multidisciplinary teams.
10. Strong written and verbal communication, organisational and self-directed learning skills, including the ability to prepare accurate technical summaries, data packs and project reports.

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:	Emma Davis	Name:	Sandy Haig
Title:	Vivarium Facility Manager	Title:	General Manager, NST Strategic Research Services and Engagement
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