

Australian National University

**Position Description** 

College/Division:	College of Health and Medicine		
Department/Unit:	The John Curtin School of Medical Research		
Position Title:	Research Technician		
Classification:	ANU Officer Grade 4/5 (Technical)		
Responsible to:	Lead Researcher		
Number of positions that report to this role:	Nil		

## PURPOSE STATEMENT:

ANU has an international reputation for research and education relevant to the health and well-being of the population of Australia, as well as that of the developing world. This is achieved through discovery research, applied research in health service settings, research-led teaching in health and medical sciences, and the translation of research findings into practice and policy. The ANU College of Health and Medicine comprises the Research School of Psychology, the ANU Medical School, the John Curtin School of Medical Research and the Research School of Population Health. These schools work together to deliver world-class research and education across the spectrum of medicine and health-related fields, working in partnership with the health sector at local, national and international levels.

Research in the Division of Genome Science and Cancer of the John Curtin School of Medical Research combines advanced experimental and computational approaches with sophisticated genetic models to connect genotype with phenotype, understand mechanisms of cell differentiation, development or pathology, and generate novel therapies for cancer and other disease.

## **KEY ACCOUNTABILITY AREAS:**

### **Position Dimension & Relationships:**

The Technical Officer will be the core member of the Germ Cell and Cancer Epigenetics group at the John Curtin School of Medical Research, accountable to Dr Tanya Soboleva, the leader of the group. The Technician will be expected to work collegially, leading by example to develop and maintain effective, productive and beneficial workplace relationships within group as well as with all academic and professional School and College staff, students and honorary appointees.

### **Role Statement:**

Under general direction, the Research Technician will:

- Perform routine laboratory experiments, such as maintaining cell culture, creating gene knockout/overexpression cell lines; molecular cloning and bacterial protein expression and purification, performing immuno-precipitations and western blotting experiments; mouse colony monitoring; preparation of DNA and RNA libraries for NGS amongst other experimental duties
- Analyse experimental outputs and perform library, internet and literature searches to assist in the preparation of data for research publication.
- Take responsibility for the general maintenance of lab including but not limited to waste disposal, washing, cleaning; annual fridge/freezer defrosting and lab decluttering.
- Assist in general maintenance of equipment, ensuring it is well functioning, cleaned, secured, and stored correctly.
- Complete general administration duties associated with Soboleva group including the preparation of reports, ensuring safe working practices, WHS requirements and compliance protocols for regulatory requirements are met.
- Management of inventories, including the preparation and/or ordering of supplies, and collating cost estimates on laboratory purchases.
- Maintain networks amongst other School and College Technical staff on lab/facility capabilities or facilities and/or with lab/facility managers and the building maintenance staff on building/equipment maintenance issues.

### • Other duties as required, consistent with the classification of this position. See the classification descriptors for general staff<sup>1</sup> and minimum standards for academic staff<sup>2</sup>

## SELECTION CRITERIA:

(Please address all selection criteria, point by point, with detailed address of criterion 2; Please note that applications that do not address selection criteria may not be considered):

- 1. Bachelor degree or equivalent (or higher) with experience in Molecular and Cellular Biology, Biochemistry or Genetics, or equivalent with evidence of experimental skills in the following:
  - a. Maintenance of mammalian cell line cultures, mammalian cell transfections;
  - b. experience with viral transduction or CRISPR gene KO of mammalian cell culture would be an advantage
  - c. Molecular cloning (i.e., for the purpose of gene overexpression, vector modification, mutagenesis)
  - d. Protein expression and purification from bacterial cultures
  - e. Biochemical assays such as Immunofluorescence (IF), Immunohistochemistry (IHC), Immunoprecipitation (IP, co-IP, or chromatin -IP), Western Blotting.
  - 2. A demonstrated ability to communicate effectively and concisely, both orally and in writing, and to work both independently with limited supervision and harmoniously in a team environment with a diverse range of people with experience assessing academic literature and using electronic databases and other resources for research purposes.
  - 3. Experience in developing and implementing standard operating procedures and protocols in a laboratory research environment.
  - 4. Proven information technology and organisational skills with a demonstrated ability to keep accurate records and prioritise tasks, exercising sound judgement to meet tight timelines.
  - 5. A proven ability to provide technical support to laboratory users on the safe use of laboratory equipment and instrumentation, including general laboratory equipment, and a strong understanding of WHS and regulatory requirements.
  - 6. A demonstrated general knowledge and understanding of equal opportunity principles as they relate to employment.

ANU Officer Levels 4 and 5 are broadbanded in this stream. It is expected that at the higher levels within the ANU Officer 4/5 broadband occupants will have a deeper understanding, and a more independent application, of the technical methods and procedures used, and a consequent increase in the complexity of the functions performed

The ANU conducts background checks on potential employees, and employment in this position is conditional on satisfactory results in accordance with the Background Checking Procedure which sets out the types of checks required by each type of position.

Supervisor/Delegate Signature:	Da	te:
Printed Name:	Uni	i ID:

References:	
General Staff Classification Descriptors	
Academic Minimum Standards	

<sup>&</sup>lt;sup>1</sup>Schedule 5 - General staff classification descriptors - Human Resources - ANU

<sup>&</sup>lt;sup>2</sup>Schedule 4 - Human Resources - ANU



# **Pre-Employment Work Environment Report**

Pos	sitio	n Det	tails	
-				

College/Div/Centre	Dept/School/Section	
Position Title	Classification	
Position No.	Reference No.	

In accordance with the Work Health and Safety Act 2011 (Cth) the University has a primary duty of care, so far as reasonably practicable, to ensure the health and safety of all staff while they are at work in the University.

- This form must be completed by the supervisor of the advertised position and appended to the back of the Position Description.
- This form is used to advise potential applicants of work environment and health and safety hazards prior to application.
- Once an applicant has been selected for the position they must familiarise themselves with the University WHS Management System via Handbook guidance <u>https://services.anu.edu.au/human-resources/health-safety/whs-management-system-handbook</u>
- The hazards identified below are of generic nature in relation to the position. It is not correlated directly to training required for the specific staff to be engaged. Identification of individual WHS training needs must be in accordance with WHS Local Training Plan and through the WHS induction programs and Performance Development Review Process.
- 'Regular' hazards identified below must be listed as 'Essential' in the Selection Criteria see 'Employment Medical Procedures' at <a href="http://info.anu.edu.au/Policies/\_DHR/Procedures/Employment\_Medical\_Procedures.asp">http://info.anu.edu.au/Policies/\_DHR/Procedures/Employment\_Medical\_Procedures.asp</a>

#### **Potential Hazards**

• Please indicate whether the duties associated with appointment will result in exposure to any of the following potential hazards, either as a <b>regular</b> or <b>occasional</b> part of the duties.						
TASK	regular	occasional		TASK	regular	occasional
key boarding	х			laboratory work	х	
lifting, manual handling		х		work at heights		
repetitive manual tasks		х		work in confined spaces		
Organizing events				noise / vibration		
fieldwork & travel				electricity		
driving a vehicle						
NON-IONIZING RADIATION				IONIZING RADIATION		
solar				gamma, x-rays		
ultraviolet		Х		beta particles		
infra red				nuclear particles		
laser						
radio frequency						
CHEMICALS				BIOLOGICAL MATERIALS		
hazardous substances	х			microbiological materials	х	
allergens				potential biological allergens		
cytotoxics		Х		laboratory animals or insects		х
mutagens/teratogens/		х		clinical specimens, including		
carcinogens				blood		
pesticides / herbicides				genetically-manipulated specimens		х
				immunisations		
OTHER POTENTIAL HAZARI	DS (please sp	becify):				



### Australian National University

# **Position Description**

College/Division:	ANU College of Health and Medicine
Department/Unit:	the John Curtin School of Medical Research
Position Title:	Research Technician
Classification:	ANU Officer Grade 6 (Technical)
Responsible to:	Manager Title
Number of positions that report to this role:	Nil

## PURPOSE STATEMENT:

ANU has an international reputation for research and education relevant to the health and well-being of the population of Australia, as well as that of the developing world. This is achieved through discovery research, applied research in health service settings, research-led teaching in health and medical sciences, and the translation of research findings into practice and policy. The ANU College of Health and Medicine comprises the Research School of Psychology, the ANU Medical School, the John Curtin School of Medical Research and the Research School of Population Health. These schools work together to deliver world-class research and education across the spectrum of medicine and health-related fields, working in partnership with the health sector at local, national and international levels.

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# **KEY ACCOUNTABILITY AREAS:**

### Position Dimension & Relationships:

The Technical Officer will be the core member of the Germ Cell and Cancer Epigenetics group at the John Curtin School of Medical Research, accountable to Dr Tanya Soboleva, the leader of the group. The Technician will be expected to work collegially, leading by example to develop and maintain effective, productive and beneficial workplace relationships within group as well as with all academic and professional School and College staff, students and honorary appointees.

## **Role Statement:**

Under general direction, the Research Technician will:

- Provide technical and experimental advice and training related to the projects that are running in the group by assisting other members and ensuring that the experimental workflow is running smoothly.
- Perform routine laboratory experiments, such as maintaining cell culture, creating gene knockout/overexpression cell lines; molecular cloning and bacterial protein expression and purification, performing immuno-precipitations and western blotting experiments; mouse colony monitoring; preparation of DNA and RNA libraries for NGS amongst other experimental duties
- Analyse experimental outputs and perform library, internet and literature searches to assist in the preparation of data for research publication.
- Take responsibility for the general maintenance of lab including but not limited to waste disposal, washing, cleaning; annual fridge/freezer defrosting and lab decluttering.
- Supervise the general maintenance of equipment, ensuring it is well maintained, cleaned, secured, and stored correctly.

- Complete general administration duties associated with Soboleva group including the preparation of reports, ensuring safe working practices, WHS requirements and compliance protocols for regulatory requirements are met.
  - Management of inventories, including the preparation and/or ordering of supplies, and collating cost estimates on laboratory purchases.
  - Maintain networks amongst other School and College Technical staff on lab/facility capabilities or facilities and/or with lab/facility managers and the building maintenance staff on building/equipment maintenance issues.
  - Other duties as required, consistent with the classification of this position.
- Comply with all ANU policies and procedures, and in particular those relating to work health and safety and equal opportunity

See the <u>classification descriptors for general staff</u><sup>3</sup> and <u>minimum standards for academic staff</u><sup>4</sup>

## SELECTION CRITERIA:

(Please address all selection criteria, point by point, with detailed address of criterion 2; Please note that applications that do not address selection criteria may not be considered):

- 1. Bachelor/Master's degree or higher with subsequent laboratory experience in Molecular and Cellular Biology, Biochemistry or Genetics, or equivalent qualifications
- 2. Proven evidence of independent experimental skills in the following:
  - a. Maintenance of mammalian cell line cultures, mammalian cell transfections;
  - b. experience with viral transduction or CRISPR gene KO of mammalian cell culture would be an advantage
  - c. Molecular cloning (i.e., for the purpose of gene overexpression, vector modification, mutagenesis)
  - d. Protein expression and purification from bacterial cultures
  - e. Biochemical assays such as Immunofluorescence (IF), Immunohistochemistry (IHC), Immunoprecipitation (IP, co-IP, or chromatin -IP), Western Blotting.
- 3. Demonstrated experience in assessing academic literature and using electronic databases and other resources for research purposes.
- 4. Experience in developing and implementing standard operating procedures and protocols in a laboratory research environment.
- 5. Demonstrated ability to maintain the lab space in perfect working condition including but not limited to waste disposal, washing, cleaning; annual fridge/freezer defrosting and lab decluttering.
- 6. A demonstrated ability to work both independently with limited supervision and harmoniously in a team environment with a diverse range of people.
- 7. Strong information technology and organisational skills with demonstrated ability to keep accurate records and prioritise tasks, exercising sound judgement to meet tight timelines.
- 8. A demonstrated general knowledge and understanding of equal opportunity principles as they relate to employment.

The ANU conducts background checks on potential employees, and employment in this position is conditional on satisfactory results in accordance with the Background Checking Procedure which sets out the types of checks required by each type of position.

Supervisor/Delegate Signature:	Date:	

<sup>&</sup>lt;sup>3</sup>Schedule 5 - General staff classification descriptors - Human Resources - ANU
<sup>4</sup>Schedule 4 - Human Resources - ANU

HR125

References:	
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Academic Minimum Standards	



Australian National University

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lifting, manual handling		х		work at heights			
repetitive manual tasks		х		work in confined spaces			
Organizing events				noise / vibration			
fieldwork & travel				electricity			
driving a vehicle							
NON-IONIZING RADIATION				IONIZING RADIATION			
solar				gamma, x-rays			
ultraviolet		х		beta particles			
infra red				nuclear particles			
laser							
radio frequency							
CHEMICALS				<b>BIOLOGICAL MATERIALS</b>			
hazardous substances	х			microbiological materials	х		
allergens				potential biological allergens			
For assistance please contact HR Division Ph. 6125 3346							

x x	laboratory animals or insects clinical specimens, including		×
x	clinical specimens including		
	blood		
	genetically-manipulated specimens		x
	immunisations		
y):			
	Date:		
	y):	specimens immunisations y):	specimens immunisations