

TECHNICAL OFFICER
POSITION DESCRIPTION

-Position Title:	Technical Officer	Position Number: new	Faculty/Division: Sciences
Classification:	HEO 5	No. Direct Reports & Highest Classified Position: nil	School/Branch: School of Biological Sciences
FTE: 1.0	Reports to: Director, Australian Centre for Ancient DNA	Fixed <input checked="" type="checkbox"/> Continuing <input type="checkbox"/>	Discipline/Unit: Genetics and Evolution.
Position Summary:	<p>The School of Biological Sciences in the Faculty of Sciences brings together the internationally acclaimed and contemporary disciplines of cellular and molecular biology, ecology and environmental sciences, and genetics, genomics & evolutionary biology delivering undergraduate and postgraduate education, training and research with both national relevance and global outreach and networks in the public and private sectors.</p> <p>The Australian Centre for Ancient DNA (ACAD) is a research-intensive centre consisting of 25-30 research staff, postgraduate and Honours students within the School of Biological Sciences. The Centre maintains a suite of ultra-low contamination risk ancient DNA laboratories, an intermediate museum/forensics pre-PCR laboratory and two post-PCR laboratories. These research facilities represent a major financial and IP investment by the University of Adelaide and the core group of ACAD staff.</p> <p>ACAD's reputation as a world-class research centre is dependent on a number of critical elements – maintaining the ultra-low contamination laboratories in a DNA-free state, timely implementation and/or R&D of state-of-the-arts methods, and adherence to the highest standards of research, such as ensuring quality and reliability of data for peer-reviewed publications.</p> <p>The ACAD Technical Officer will perform molecular biology experiments associated with a grant funded project, and provide technical support in the laboratories mentioned above, which reside at the North Terrace Campus and one in the Plant Biodiversity Centre, Adelaide Botanic Gardens.</p>		
Position Characteristics:	Scope	Under general direction, it will be the responsibility of the Technical Officer to perform molecular biology experiments in relation to an ARC funded Linkage Project (Evolutionary analysis of ancient cereal crops and changes in genetic diversity) e.g. DNA isolation from fossil material and highly degraded sources, genomic library preparation for NGS, DNA capture by hybridisation, as well as standard methods such as PCR, qPCR and routine DNA purification and visualization techniques. The Technical Officer will oversee laboratory inductions in the ancient DNA laboratories and in the post-PCR laboratories, and provide technical support in DNA protocols to students, staff and visitors/collaborators associated with the project, as well as manage laboratory stock supplies.	
	Significant internal/external relationships	<ul style="list-style-type: none"> • Liaise with School of Biological Sciences staff, international visitors, ACAD PhD Candidates, researchers and Honours students. • Liaise with the ACAD Lab Coordinator. • Liaise with Laboratory vendors and suppliers. 	
	Special conditions	Reasonable workplace adjustments will be made for people with a disability.	
	Delegations	None	

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Key Responsibilities and Outcomes	1	Provide technical support and perform laboratory duties/analyses associated with relevant research project(s).	<ul style="list-style-type: none"> ▪ Maintain DNA isolation from fossil material and highly degraded sources. ▪ Perform Genomic library preparation for NGS. ▪ Perform DNA capture by hybridisation using RNA baits in solution. ▪ Perform DNA amplification using PCR or isothermal amplification (TwistDX kit). ▪ Perform DNA purification using Ampure. ▪ Assess quantity and quality of DNA libraries (Nanodrop, Qubit, TapeStation, BioAnalyzer, qPCR). ▪ Perform Electrophoresis using agarose gels. ▪ Maintain the ultra-low contamination laboratories in a DNA-free state
	2	Provide technical advice to staff and students	<ul style="list-style-type: none"> ▪ Maintain up-to-date ACAD laboratory protocols, instruments and devices, and ancient DNA laboratory procedures in conjunction with the Lab Coordinator. ▪ Document protocols when a new method is developed, in a timely manner. ▪ Assist in the operation and basic maintenance of the specialised lab equipment. ▪ Induct new students and staff with laboratory protocols, instruments and devices, and ancient DNA laboratory procedures in conjunction with the Lab Coordinator.
	3	Assist in the development and application of laboratory methods	<ul style="list-style-type: none"> ▪ Assist in the development, improvement and troubleshooting of laboratory protocols such as ancient DNA extraction, DNA library preparation for NGS, DNA capture by hybridisation, PCR, qPCR, DNA quality control. ▪ Assist students and staff in the generation of data for publications (e.g. theses and grant proposals).
	4	Perform laboratory stock supplies and equipment maintenance	<ul style="list-style-type: none"> ▪ Ensure stock supply is up-to-date across all labs in conjunction with the Lab Coordinator. ▪ Liaise with the Laboratory Coordinator to order reagents, consumables and equipment when stock is running low. ▪ Liaise with Laboratory Coordinator to arrange repairs with service technicians to avoid work delays, including calibration of equipment as required.

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Criteria	Capabilities and Behaviours	Teamwork	<ul style="list-style-type: none"> • Actively participates in team meetings through sharing ideas and contributing to discussions. • Accomplishes shared goals through accepting joint responsibility. • Provides appropriate information, support and encouragement to enable successful task completion. • Works effectively in a team environment.
		Flexibility and Adaptability	<ul style="list-style-type: none"> • Shows flexibility in coping with multiple and changing priorities. • Adapts to changes in environment and work demands, working effectively with a variety of situations and people. • Adapts responses and tactics to fit changing circumstances. • Is open to new and different ways of doing things.
		Continuous learning	<ul style="list-style-type: none"> • Develops and maintains personal and professional competence. • Undertakes regular review of work practices to identify areas for improvement. • Identifies possible solutions to solve an issue when raising it to the next level. • Contributes ideas towards continuous improvement of processes and service. • Displays an interest and enthusiasm for the field of work.
		Achievement Drive	<ul style="list-style-type: none"> • Plans carefully and sets goals for improving performance. • Deals with conflicting demands quickly and calmly. • Negotiates and sets expectations for work commitments. • Delivers high quality output.
		Communication	<ul style="list-style-type: none"> • Uses high level communication skills (clarifying questions, summarising, paraphrasing) to ensure their meaning is understood. • Is persuasive and confident in communicating ideas. • Negotiates win-win outcomes by exploring different positions and building consensus. • Gains clear agreements by presenting own position clearly and considering alternative viewpoints.

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	<p>Knowledge and Experience</p>	<ul style="list-style-type: none"> ▪ Extensive work experience in a Molecular Biology laboratory setting. ▪ Demonstrated ability to contribute to the publication of research papers. ▪ Demonstrated ability to work in a team or independently as required. ▪ Demonstrated ability to prioritise, and be exceptionally organised. ▪ Demonstrated attention to detail and clear writing ability, in particular to lab processes and/ or protocols. ▪ Demonstrated ability to communicate clearly and accurately, and to liaise, collaborate and interact with students and researchers.
	<p>Qualifications</p>	<ul style="list-style-type: none"> ▪ Degree in Molecular Biology or Genetics or equivalent education and/or work experience essential. ▪ Driver's licence desirable.
<p>Occupational Health, Safety and Welfare Requirements</p>		<ul style="list-style-type: none"> • All Supervising staff are required to implement and maintain the University's OH&S Management System in areas under their control ensuring compliance with legislative requirements and the established Performance Standards. All other staff will assist the Head of School/Branch to create and maintain a safe and healthy work environment by working safely, adhering to instructions and using the equipment provided in accordance with safe operating procedures. Where appropriate, staff will initiate and participate in worksite inspections, accident reporting and investigations, develop safe work procedures and provide appropriate information, instruction, training and supervision. Staff will also inform the Head of School/Branch of any unsafe working practices or hazardous working conditions.

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<p>University Expectations</p>	<p>All staff are expected to:</p> <ul style="list-style-type: none"> • Contribute to the efficient and effective functioning of their team or work unit in order to meet University objectives. This includes demonstrating appropriate and professional workplace behaviours in accordance with the Code of Conduct, providing assistance to team members if required and undertaking other key responsibilities or activities as directed by one's supervisors; • Participate in the Planning, Development and Review which includes a regular review of their performance against the responsibilities and performance objectives associated with the role and demonstration of appropriate behaviours which reflect a commitment to the University's values and strategic directions; • Perform their responsibilities in a manner which reflects and responds to continuous improvement; and • Read, understand and comply with all University policies and procedures. 	
<p>Approvals: Head of School / Branch Manager</p>	<p>Head of School / Branch Manager Name: Signature: Date:</p>	<p>Director Human Resources Name: Signature: Date:</p>
<p>Acknowledgement of Incumbent</p>	<p>I have read and understood the requirements of the position Name: <i>(please print)</i> Signature: Date:</p>	