THE UNIVERSITY OF WESTERN AUSTRALIA

POSITION DESCRIPTION

Position Title	Research Associate
Classification	Level A
School/Division	UWA School of Agriculture & Environment
Centre/Section	Associate Professor and Director, DNA Zoo Australia
Supervisor Title	Associate Professor
Supervisor Position Number	318416
Position Number	320854

Your work area

The UWA School of Agriculture and Environment is located in one of the world's biodiversity hotspots. Surrounded by a wealth of agricultural, natural and mining resources, our location allows us to produce innovative research with worldwide application

Our teaching and research benefit from a network of national and international collaborators, and our strong industry and government links are producing change in agricultural and environmental management, regional development, and urban policy and planning

DNA Zoo Australia (DZA, dnazoo.org), research initiative with the University of Western Australia dedicated to generating high-quality genomic resources for Western Australia species and a member of a global comparative genomics consortium, is looking for an experienced computational biologist to advance DNA Zoo's mission to leverage comparative genomic data to improve ecosystem stability and human health. DZA provides computational and analytic resources to advance scientific discovery through its multi-disciplinary team of wet-lab and computational scientists who work on collaborative projects both within Australia and with the global members of the DNA Zoo community.

Reporting structure

Reports to: Associate Professor and Director, DNA Zoo Australia

Your role

As the successful appointee you will contribute to and lead generating new genomic and epigenomic datasets. This will include developing sustainable integrated genome sequencing products that empower DNA Zoo Australia to explore, analyse and interpret their comparative genomic data.

Your key responsibilities

The ideal candidate will be proficient in DNA and RNA extractions, short and long read sequencing library preparation methods, have genome assembly workflow experience, have strong experimental, analytical, and communication skills, and will be able to work independently and collaboratively on scientific problems and deliver solutions. There will be opportunities for working in teams and independent decision making at all levels of genome assembly and analysis of the data, as well as examining, evaluating, and recommending experimental approaches to collaborating labs. In addition, methodological developments for novel and challenging experimental analysis and integration tasks arise frequently requiring originality and creativity, including designing and analysing follow-up experiments and analyses.

Plan and implement the preparation of scientific manuscripts for publication in peer reviewed journals

Undertake genomics research as part of a specialised team with a focus on 3D genome analysis

Assist in supporting the ongoing activities of the DNA Zoo program, including development of 3D genomics lab protocols, and maintenance of sample libraries and stakeholder engagement

Other duties as directed

Your specific work capabilities (selection criteria)

Postgraduate qualifications in genomics or molecular biology or a combination of relevant experience and/or education/training

Proficient in DNA and RNA extractions, short and long read sequencing, library preparation methods, have genome assembly workflow experience

Substantial experience in next generation sequencing and genome analysis

Familiar with genome assembly experimental workflows

Proficiency in a range of sequencing workflows including long read, short read and HiC

Substantial relevant experience in writing scientific manuscripts and reports

Ability to work independently, show initiative, problem solve and work productively as part of a team

Highly developed written and verbal communication skills

Highly developed organisational skills with the demonstrated ability to set priorities and to meet deadlines

Special requirements (selection criteria)

There are no special requirements

Compliance

Ensure you are aware of and comply with legislation and University policy relevant to the duties undertaken, including:

The University's Code of Conduct hr.uwa.edu.au/policies/policies/conduct/code/conduct

Inclusion and Diversity web.uwa.edu.au/inclusion-diversity

Safety, health and wellbeing safety.uwa.edu.au/