

Position Title	Research Assistant
Classification	Level 5
School/Division	School of Biological Sciences
Centre/Section	Plant Biology
Supervisor Title	Professor
Supervisor Position Number	313508
Position Number	New

Your work area

[The School of Biological Sciences](#) is internationally recognised for its strong teaching programmes in the natural sciences and biology and has an enviable research track record. The School has broad expertise across marine biology, ecology, conservation biology, evolutionary biology, computational biology, plant and animal physiology, and genomics. The School also leads UWA's program in Science Communication. Our research programmes involve a diverse array of taxa, from microbes through animals and plants. We are located on a vibrant campus and have ready access to incredible natural environments, including the Indian Ocean and the extensive Western Australian coastline. Our undergraduate and postgraduate courses consistently rate very highly in student evaluations, which in part reflects our strong emphasis on practical and field-based teaching.

The School of Biological Sciences is a large and multidisciplinary team of more than 80 high-calibre academic and professional staff delivering world-class education and research programmes to approximately 600 undergraduate and postgraduate students. The School is also responsible for the supervision of ~120 PhD students, reflecting research strengths and expertise in the disciplines of Marine Biology, Animal Biology, Computational Biology, Ecology & Conservation, Evolutionary Biology, Neuroscience, Plant Biology and Science Communication.

Reporting structure

Reports to: Professor

Your role

As the appointee you will, under general direction, assist with research projects investigating plant-pathogen interactions and the evolution of disease-resistance genes in Brassicas and other crops. This pivotal role includes project planning, executing glasshouse/phytotron experiments, laboratory molecular techniques, conducting data analysis and interpretation and preparing scientific manuscripts for publication. Additionally, you will work closely with the laboratory manager to perform laboratory management and organisation tasks. You will play a pivotal role in conducting cutting-edge research to decipher the genetic basis of disease resistance in crops and their wild relatives. Your responsibilities will encompass a blend of computational analysis, laboratory experimentation, and data interpretation, all aimed at advancing our understanding of plant-pathogen interactions.

Your key responsibilities

Participate in the development of research methodologies and experimental design.

Conduct molecular biology research as part of a specialised team, focusing on genomics and plant-pathogen interactions.

Assist in conducting data analyses to identify candidate genes associated with disease resistance.

Assist in performing wet lab experiments to explore functional aspects of resistance genes.

Collaborate with team members to integrate genomic and phenotypic data for comprehensive analysis.

Accurately document research findings and contribute to preparing scientific publications and reports.

Assist in the maintenance and optimisation of laboratory protocols and procedures.

Perform other duties as directed.

Your specific work capabilities (selection criteria)

Relevant tertiary qualifications or demonstrated equivalent

Demonstrated advanced molecular biology skills

Substantial relevant experience in writing scientific manuscripts and reports

Proficiency in molecular biology techniques, including but not limited to DNA/RNA extraction, PCR, electrophoresis, phenotyping, and genotyping

Experience in working in glasshouses/phytotrons to grow plants and conduct experiments

Strong analytical skills and familiarity with statistical methods for biological data analysis

Highly developed communication and interpersonal skills, with the ability to work effectively within a collaborative research environment

Proficiency in a range of computing skills including word processing, spreadsheets, databases, internet and email

Highly developed organisational skills with ability to manage multiple tasks efficiently, set priorities and meet project deadlines

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

Prior experience in plant-pathogen interactions or crop genetics research is desirable

Experience in plant genomics and mining of genomics data is desirable

Demonstrated experience in genomic analysis and bioinformatics tools is desirable

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/