

Position Title: Research Associate

Position Classification: Level A

Position Number: NEW

School/Division: School of Biological Sciences

Centre/Section:

Supervisor Title: Associate Professor

**Supervisor Position Number:** 

### Your work area

The School of Biological Sciences is a large, multidisciplinary School with research and teaching focused on understanding and conserving life on Earth. Our researchers tackle challenges in the laboratory and at field sites across the world, studying plants and animals in both natural and managed environments using techniques ranging from molecular and genetic analysis to data collection from whole populations, communities and ecosystems to big-data synthesis science.

## **Reporting Structure**

Reports to: Associate Professor

## Your role

Funded by Australian Research Council, this position will join a collaborative team of researchers investigating vibration information gathering and communication in termites. As the appointee you will be responsible for exploring the electrophysiology of termite vibro-acoustic sense organs in the antennae and legs. Specifically, the appointee will design and run experiments designed to measure the sensitivity of these sense organs to a range of acoustic and vibratory stimuli.

The appointee may also design and run behavioural experiments testing hypotheses of vibration and acoustic cues in termites. The appointee will collect, collate, and analyse data, prepare results into reports and write manuscripts, and may co-supervise research projects of students.

# Key responsibilities

Design and test sampling methods for electrophysiological measurement of vibro-acoustic signal in sense organs on the antennae and legs

Measure the sensitivity of these sense organs to a range of vibratory and acoustic stimuli.

Test the effect of various substrates on vibration and acoustic signals and their detection

Design of and conducting laboratory experiments to test vibration and acoustic signals

Statistical analysis of data from experiments

Assist with preparation of results into reports to the funding agency

Prepare results and write manuscripts for scientific journals

Co-supervise research projects of undergraduate, honours and masters students.

### Your specific work capabilities (selection criteria)

PhD in neuroscience or related field

Demonstrated experience electrophysiology

Demonstrated ability to design and conduct laboratory research

Demonstrated ability to work as part of a team

Demonstrated ability to publish in high impact scientific journals

Demonstrated ability to meet deadlines, work within budgets and report according to specifications

#### Desirable

Experience working with insect nervous system

Experience with insect vibration detection and communication systems

Experience working with collaborators from multiple organisations

Experience with supervision of Honours and Masters students

# **Special Requirements**

There are no special requirements

## Compliance

### **Workplace Health and Safety**

All supervising staff are required to undertake effective measures to ensure compliance with the Occupational Safety and Health Act 1984 and related University requirements (including Safety, Health and Wellbeing Objectives and Targets).

All staff must comply with requirements of the Occupational Safety and Health Act and all reasonable directives given in relation to health and safety at work, to ensure compliance with University and Legislative health and safety requirements.

Details of the safety obligations can be accessed at <a href="http://www.safety.uwa.edu.au">http://www.safety.uwa.edu.au</a>

### **Equity and Diversity**

All staff members are required to comply with the University's Code of Ethics and Code of Conduct and Equity and Diversity principles. Details of the University policies on these can be accessed at <a href="http://www.hr.uwa.edu.au/publications/code">http://www.hr.uwa.edu.au/publications/code</a> of ethics, <a href="http://www.equity.uwa.edu.au/publications/code">http://www.equity.uwa.edu.au/publications/code</a> of ethics, <a href="http://www.equity.uwa.edu.au/publications/code">http://www.equity.uwa.edu.au/publications/code</a> of ethics, <a href="http://www.equity.uwa.edu.au/publications/code">http://www.equity.uwa.edu.au/publications/code</a> of ethics, <a href="http://www.equity.uwa.edu.au/publications/code">http://www.equity.uwa.edu.au/publications/code</a> of ethics.