Position Description – Research Associate in Insect Motion Vision

Updated 8 October 2024

POSITION DETAILS	
College/Portfolio	**College of Medicine and Public Health**
Organisational Unit	**FHMRI**
Supervisor (Title)	**Matthew Flinders Professor in Neuroscience**
Classification	**Research Academic Level A**
Employment Type	**Fixed-term, full-time, available for 12 months**

POSITION SUMMARY

The Research Associate will make an active contribution to the research activities on an externally funded project within the Insect Vision laboratory. Responsibilities include design of visual experiments on hoverflies that aim at investigating how insect movement help hoverflies make rapid decisions, in the natural world.

The Research Associate will make an active contribution on the design of visual stimuli, perform experiments using quantitative behaviour and/or electrophysiological techniques and/or modelling, analyse and interpret his/her own data using Matlab scripts, with the ultimate aim of generating publishable outcomes, as well as pilot data for own external funding.

The Research Associate will work with support and guidance from a more senior academic, while contributing to the common goals and activities of the members of the Insect Vision laboratory. The Research Associate will report directly to the head of the laboratory.

UNIVERSITY EXPECTATIONS AND VALUES

All staff at Flinders are responsible for understanding their obligations and responsibilities as set out in the University's code of conduct and are expected to:

- demonstrate commitment to the University's values of Integrity, Courage, Innovation, Excellence and the underlying ethos of being Student Centred;

- contribute to the efficient and effective functioning of the team or work unit in order to meet the University's objectives. This includes demonstrating appropriate and professional workplace behaviours, providing assistance to team members if required and undertaking other key responsibilities or activities as directed by one's supervisor;

- promote and support an inclusive workplace culture which values diversity and embraces the principles of equal opportunity;

- perform their responsibilities in a manner which reflects and responds to continuous improvement; and

- familiarise themselves and comply with the University's *Work Health and Safety, Injury Management and Equal Opportunity* policies.

A National Police Certificate which is satisfactory to the University will be required by Flinders University before the successful applicant can commence in this position

KEY POSITION RESPONSIBILITIES

The Research Associate in Insect Motion Vision is accountable for:

1. Assisting in the development of visual stimuli that investigate visual salience in hoverflies.

2. Contributing to the performing of quantitative behaviour and/or electrophysiology in the hoverfly visual system and/or creating computational, biomimetic models.

3. Developing Matlab scripts that allow quantitative analysis and interpretation of data, and/or modelling.

4. Discussing the project on a regular basis with lab head and other team members as well as actively participating in weekly lab meetings.

5. Summarising experimental findings in publishable format, using appropriate scientific language.

6. Ensuring project deadlines are met.

7. Contributing to ethical, high quality and innovative research and evaluation through activities such as scholarship, quality publication, external grant acquisition and presentations that aligns with the College areas of research strength and focus.

8. Establishing and maintaining collaborations within the University, and at State, national and international levels in order to improve research outputs, patents and publications.

9. Some out-of-hours work (including weekends), as well as rural SA, interstate and overseas travel, may be required

10. Any other responsibilities in line with the level of the position as assigned by the Supervisor and/or the University.

KEY POSITION CAPABILITIES

- Completion of a PhD in a relevant area, or significant progress towards completion of a postgraduate degree in an area addressing insect motion vision, or other relevant field.

- Demonstrated emerging research experience in terms of publications and presentations at a national and/or international level in a relevant field.

- Demonstrated experience in quantitative and/or qualitative research methodology.

- Demonstrated ability to prioritise and meet deadlines to deliver project targets on time.

- Demonstrated well-developed interpersonal skills and the capacity to collaborate and engage with diverse stakeholders and industry partners, work independently or as part of a team.

- Demonstrated excellent oral and written communication skills in an academic environment.

- Demonstrated problem solving skills.

- Demonstrated ability to design experiments, analyse data and interpret the results.

- Demonstrated experience developing experiments using electrophysiology and/or quantitative behaviour and/or biomimetic modelling, with publishable outcomes.