

MSc + Hons Projects

2020/2021

With **Dr. Joshua Thia**

In association with the **PEARG Lab** (Pest and Environmental Adaptation Research Group), **Prof. Ary Hoffmann**, and **A/prof. Paul Umina**.



I am broadly interested in genetics and evolutionary biology and how they can be applied to conservation and biosecurity issues. My current work focuses on insecticide resistance as an adaptive trait in agricultural insect and mite pest species.

Themes

Population genomics, evolutionary biology, and applied science

Potential projects

1. Molecular mechanisms and heritability of organophosphate resistance in red-legged earth mites
2. Population genomics and demographic dynamics of red-legged earth mites
3. Co-evolution of insects and their endosymbionts to insecticide selection
4. Costs of insecticide resistance and their effects on the rate of resistance evolution

Skills you may learn

Molecular lab techniques, experimental biology, bioinformatics, evolutionary biology, practical field work

Links and contacts

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