

2019 Biology Mid Year Honours Projects

Division of Biomedical Sciences and Biochemistry

[A/Prof Maja Adamska](#) - *Genomic and evolutionary basis of animal development*

- Using sponges and corals to understand animal evolution and development

Division of Ecology and Evolution

Paul Cooper – Macroinvertebrates and water quality

- [Using macroinvertebrates to determine water quality in the Mulloon Creek catchment](#)

Sasha Mikheyev – Evolutionary genomics

- How animals adapt to rapid changes in their environments

*Adrienne Nicotra – *Wahlenbergia* ecology, evolution and physiology*

- [How do warming temperatures affect plant fitness?](#)
- [How does parental environment affect dormancy status, germination strategy and early seedling growth characteristics?](#)
- [How do growth and developmental temperature affect plant thermal tolerance?](#)

Benjamin Schwessinger – Plants fungi, evolution

- Enhancing agricultural and environmental biosecurity using cutting edge genomic tools

Kara Youngentob – Nutritional ecology

- How plant nutrients and toxins affect animals

Division of Plant Sciences

Owen Atkin, Onoriode Coast and Andrew Scafaro – Plant respiration in a changing world

- Small heat shock proteins and their role in the response of plants to heat stress
- Exploring relationships between photosynthesis and the critical temperature of photosystem II function
- High night temperature and photosynthesis in wheat

Caitlin Byrt – Engineering plant membrane proteins and solute transport to increase yield security

- Salinity and drought tolerance mechanism in plants

*Tory Clarke – *CO₂ fixation and water loss of leaves**

- Targeted engineering of photosynthetic pathways to increase crop yields

*Peter Solomon - *Wheat Biosecurity**

- Understanding the molecular basis for how pathogens infect and kill plants