HONOURS PROJECT

**Project Title:** Can the quenda maintain evaporative water loss constancy under perturbing environmental conditions?

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**Project**
Determination of insensible evaporative water loss (EWL) has been traditionally considered a physical process, where the water vapour pressure deficit between the animal and the ambient air is the major driver of EWL. However, recent studies have demonstrated that small arid-habitat mammals and psittacine birds can maintain EWL constant over a range of environmental conditions predicted to perturb EWL, suggesting acute physiological control of insensible water loss. However, we don’t know the allometric and phylogenetic extent of this physiological capability. This study will examine the ability of the quenda *(Isoodon obesulus)* to physiologically regulate its insensible EW, and determine its suitability as a model for further experimental work in this area.

**Funding:** ARC Discovery project

**Special requirements:** This study will involve daily animal care and maintenance, and some fieldwork.

**References:**