



PhD Opportunity

Molecular aggression: variation and heritability of the levels of reactive oxygen species and their effects on the evolution of life histories in the wild

School of Zoology, University of Tasmania

Funding: Australian Postgraduate Award plus ELITE SCHOLAR top-up
Project support - \$10 000 per year (ARC supported project)

Project Description: Ageing is arguably one of the most fundamental aspects of a species life history and impacts almost every other fitness component (e.g., tradeoffs with fecundity and fertility, and investments into immunology and DNA repair). This PhD project will integrate a detailed field based component with laboratory studies on an established model system to examine free radical biology (the molecules responsible for ageing) and their effects on key life history characteristics. Specifically, it will assess the extent to which the production and maintenance of levels of Reactive Oxygen Species and other reactive metabolic by-products of respiration act as selection pressures in natural populations. This project is part of an ARC funded discovery grant to Professor Mats Olsson (University of Wollongong) and Dr Erik Wapstra (University of Tasmania).

Who are we looking for: You will need to be competitive for an Australian Postgraduate Award (generally first class honours). You will need to enjoy fieldwork, laboratory work and have a passion for research science. A background in evolutionary biology will be key as will a desire to combine fieldwork with experimental and laboratory work.

When: Ideally, you will need to apply for an APA Scholarship by 31 Oct 2009 and be willing to start in mid 2010. Alternate start dates are available by negotiation.

More information: Please contact Dr Erik Wapstra at the University of Tasmania.
Ph: + 61 3 6226 2813, Email: erik.wapstra@utas.edu.au
<http://fcms.its.utas.edu.au/scieng/zoo/>