





Fish eco-physiology in a changing world

PhD scholarship opportunities

Deakin University, Australia

We have two exciting opportunities to obtain a PhD scholarship through <u>Deakin University</u>, working at the Waurn Ponds campus and at the Queenscliff Marine Research Station. This will be a two-stage application process: (1) 'Expression of Interest' forms and CVs will be reviewed to find the two strongest candidates; (2) those candidates will be entered into a competitive scholarship round. Candidates who are successful at both of these stages will be offered a 3-year PhD scholarship (~AU\$27,000 p.a. tax free) through the <u>School of Life and Environmental Sciences</u> to study one of the two following projects:

<u>Project 1</u>: Predicting the lifetime resilience and performance of economically-important fishes

In animal production, and in other contexts such as animal ecology, it would be useful to know the survival probability and future performance of juvenile individuals. In the absence of this knowledge in aquaculture, much time and energy is wasted on raising individuals that ultimately perform poorly and/or die prior to harvest. This project will examine physiological and molecular traits of juvenile fishes, with an aim to predict the performance of individuals as they progress through life. The successful PhD candidate will be under the primary supervision of Dr Timothy Clark with co-supervision by Dr Craig Sherman.

Project 2: Why are aquatic ectotherms getting smaller as the climate warms?

The 'temperature-size rule' is a phenomenon whereby ectothermic animals in warm environments are typically smaller than individuals of the same species in cooler environments. While the temperature-size rule has been observed across several fish species, the underlying mechanisms responsible for the phenomenon remain enthusiastically debated. This project will examine the physiological and nutritional mechanisms determining growth rates and adult body sizes, with an aim to more accurately forecast the impacts of climate warming on fish populations. The successful PhD candidate will be under the primary supervision of Dr Timothy Clark with cosupervision by Dr Fredrik Jutfelt (NTNU) and Dr David Francis.

The positions are available to domestic and international students. Applicants should have achieved an excellent grade (e.g., H1 or HD) in an Honours or MSc research program, and they should have proven skills in scientific writing. To apply, please send your Expression of Interest form (download from here: https://goo.gl/moGD7i) and CV to Dr Timothy Clark at t.clark@deakin.edu.au. Only applications received before 7th March 2018 will be eligible to progress to the second stage of the application process.