Australian Seafood Cooperative Research Centre (CRC) Postgraduate Scholarship 2010

"Fishing-to-market: product-quality-based harvest strategies to increase profitability for greenlip abalone"

In collaboration with Flinders University, SARDI Aquatic Sciences and the University of South Australia, the Australian Seafood CRC invite applications for a PhD top-up scholarship to complete research on product-quality-based harvest strategies designed to increase the profitability of greenlip abalone. This scholarship will provide an indexed, tax-free, PhD top-up of ~$6,500 pa for up to three years, subject to satisfactory progress. If the successful applicant is an Australian or New Zealand citizen, or Australian Permanent Resident, they will receive a Research Training Scheme place, which provides an exemption from tuition fees. The scholarship has an additional operating budget of ~$22 000 per year for 3 years and $300 towards thesis binding in the 3rd year. A further $1 000 per year is also available for defined mentor activities to be approved by the CRC. As a Seafood CRC student the successful candidate will be fully engaged in the CRC PhD program, which will support the development of the student as a scientist in a number of innovative ways through annual workshops and mentoring programs (see www.seafoodcrc.com).

Project Description: Greenlip abalone support valuable wild-harvest fisheries, primarily in SA, Tas and WA. The largest of these is in SA, where the greenlip abalone TACC is ~390 t.yr-1. Increasing the volume of "premium" greenlip abalone product to the market will enhance market share and product image, and increase the current profitability of the fishery. This is due to the large beach price difference (up to $10.kg^{-1}) between "premium" and "non-premium" greenlip abalone, which is important in the current economic climate that includes a strong Australian Dollar and rising harvest costs. Current knowledge on appropriate quality characteristics and measures, along with the cost and potential value of spatial and temporal variability in quality, is not well understood. Similarly, approaches to exploit this variation through targeted harvest strategies to improve product quality and consistency, and increase profitability are not well developed. Consequently, this project is focused around understanding and predicting spatial and temporal variation in quality, and to use this information to develop harvest strategies that maximise yield, product value and profitability. The objectives of the project are:

1. Document current knowledge and perceptions of spatial and temporal variation in greenlip abalone product quality characteristics;
2. Identify a suite of measures for industry-based indexing of greenlip abalone product quality traits;
3. Determine the range of variation, and associated scale of spatial and temporal variability, in greenlip abalone product quality characteristics from wild populations;
4. Model and evaluate the profitability, practicality and predictability of harvest strategies that maximise product quality attributes; and

5. Test effectiveness of current freezing technology using measures identified in Objective 2.

The student will be enrolled at Flinders University, Adelaide, but the position will be based at the Lincoln Marine Science Centre, Port Lincoln, South Australia. The project will require some travel to Eyre and Yorke Peninsulas for the collection of samples and interaction with the supporting industry, and to Adelaide for sample processing. The student will be co-supervised by Dr Stephen Mayfield and Dr Ben Stobart (SARDI Aquatic Sciences), Dr Trent D'Antignana (Flinders University) and Dr Miguel de Barras Lopes (University of South Australia). External collaborators in the project include two industry mentors: Mr Jim George (Western Abalone Processors) and Mr Jonas Woolford (President: Abalone Industry Association of SA). This scholarship will only be available to those who are in receipt of or will be in receipt of a base rate scholarship at Flinders University such as an APA, FURS or FSERA; have completed at least four years of tertiary education studies at a high level of achievement and have an appropriate Honours 1 or high 2A (or equivalent) undergraduate degree; and are enrolled as full-time students in a PhD by 1 September 2010.

Selection of Candidate

Selection criteria - essential

1. An Honours (1ST or 2A) degree, Master's degree (Distinction average) or equivalent in a relevant discipline (e.g., Biological Sciences, Fisheries and Aquaculture);
2. Ability and experience in working both independently and as part of an interdisciplinary team;
3. Strong written and oral communication skills, including an ability to publish and present results of scientific research and to communicate effectively in a variety of scientific and non-scientific forums; and
4. Knowledge, understanding and commitment to Equal Employment Opportunity, Occupational Health and Safety, Workplace Diversity and Employee Participation.

Selection criteria - desirable

5. A commitment to applied research and an interest in supporting the development of Australia's seafood industry; and
6. An understanding of the biology, ecology and fisheries for greenlip abalone.

The final decision on the award of this scholarship will be based on an assessment of the requirements of the total Selection Criteria. The decision will be final but feedback may be given to unsuccessful candidates as to how to improve their future applications.

Additional information

For additional information regarding this scholarship, organisational environment and other aspects of pursuing a PhD at Flinders University and with the Australian Seafood CRC, please contact Dr Stephen Mayfield (SARDI Aquatic Sciences) on (08) 8207 5427 or

0401 122 108 or stephen.mayfield@sa.gov.au or Dr Trent D'Antignana (Flinders University) on (08) 8683 2542 or trent.dantignana@flinders.edu.au

Further information
For information on how to apply, see the following link:
<http://www.flinders.edu.au/scholarships-system/main-display-scholarship-details.cfm?scholarship_id=3171> http://www.flinders.edu.au/scholarships-system/main-display-scholarship-deta ils.cfm?scholarship_id=3171 .

Applications for APA or equivalent scholarships are available at http://www.flinders.edu.au/scholarships/postgrad-scholarships.cfm .
International applicants must meet the English language requirement - see http://www.flinders.edu.au/international-students/