

## PhD Scholarship - High Value Nutrition

**CLOSING DATE:** Applications accepted until position filled

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### PURPOSE

The Greenshell™ mussel (GSM) *Perna canaliculus* is an iconic New Zealand seafood product that is highly valued by consumers in New Zealand and overseas for its unique flavour and visual appeal, and increasingly for its anti-inflammatory properties. This project aims to develop a new GSM product supplemented with Fucoidan, a sulphated polysaccharide extracted from *Undaria pinnatifida* that contains bioactive compounds that have the potential to confer metabolic health benefits.

*Undaria pinnatifida* – otherwise known as Wakame - is a species of kelp that is native to Japan and forms a core part of the Japanese diet. In New Zealand *Undaria pinnatifida* is classified as an 'unwanted organism' under the *Biosecurity Act 1993* and as a pest in many regional pest management strategies due to its ability to grow invasively on any hard surface, including GSM mussel lines.

In this project we will develop a new GSM-Fucoidan food product and scientifically validate its health benefits relating to anti-inflammatory properties, immune stimulation and glycaemic control in people with pre-diabetes or experiencing joint pain by conducting a clinical study in a Chinese population resident to New Zealand. China is a major export market for GSM and the results from this study will provide the evidence needed to differentiate the product in the crowded Chinese market based on its established health benefits.

This project seeks to further elevate the status of GSM as a high-value food product for export and to support the development of a new Fucoidan industry in New Zealand by transforming what is currently a waste product into a high-value food with health benefits.

The project is delivered in partnership with Beyond Capital MedTech Management Ltd, who have co-funded the research and will produce the functional food product needed for the clinical study. The research team is led by Professor Jun Lu and consists of a biomedical scientist, a clinical endocrinologist, a biostatistician, a physiotherapist, a rehabilitation health specialist from Auckland University of Technology and the University of Auckland, and an overseas food science expert from National University of Singapore.

Results are expected to be published by mid-2022.

### AMOUNT AND TYPE OF AWARD

- Contribution to tuition fees of \$7500 per year for two years;
- Stipend of \$27,500 per year paid annually in 12 equal monthly instalments.

### TENURE

- Two years subject to satisfactory progress

### ELIGIBILITY CRITERIA

- Applicants must be residing (located) in New Zealand at the date of application.
- The successful candidate will demonstrate enthusiasm and have an outstanding academic record and be prepared to conduct the doctoral study in Auckland, New Zealand.
- High proficiency in English is essential. Applicants who have completed tertiary and/or postgraduate education in English will be prioritised.
- Knowledge in the areas of biochemistry, biomedical science, human physiology, chemistry, and clinical trial would be an advantage.

- The holding of this scholarship is conditional on acceptance into the AUT doctoral programme. Applicants must fulfil all conditions for admission to the Doctoral Programme in AUT University, which can be found on the AUT University website [www.aut.ac.nz](http://www.aut.ac.nz). This includes having completed the required academic qualifications for direct entry and meeting the requirements for English language proficiency. Minimum English language requirement for international applicants – IELTS scores of 6.5 overall with 7 in writing and all other bands 6.0 or higher. For information on how to commence your application for admission to the PhD programme, contact the Graduate Research School [doctoral.and.mphil.admissions@aut.ac.nz](mailto:doctoral.and.mphil.admissions@aut.ac.nz)

#### APPLICATION REQUIREMENTS

Applicants must complete the AUT PhD Scholarship application online. It is not possible to submit incomplete scholarship applications through the online application process. In order for the application to be submitted applicants must complete all sections and request the required support statements. Incomplete applications will not be forwarded to the selection panel. The following will need to be uploaded and submitted with the on-line Application Form:

- A cover letter describing your research experience and your interest in this project
- A curriculum vitae including the names and contact details of two referees. Reports from two academic referees must be sent directly and confidentially to the Scholarships Office.

**Reference statements:** Two academic reference statements are required. Applicants must not submit referee's reports directly; nominated referees will be sent a request directly from the On-line application system. Please advise your referees that they will be receiving an email requesting a reference statement. Applicants can submit the application without referees' statements. However, the application will be considered ineligible and will not be released to the selection panel without the required reference statements.

#### SELECTION PROCESS

- Applications will be considered by the principal investigator of the High Value Nutrition project and will be based on demonstrated strength in the following:
  - the applicant's academic record
  - the applicant's past research experience and publication record (if appropriate)
  - the referees' statements.
- The Selection panel's decision will be final; if suitable applicants are not available the panel will not award the scholarships.
- The scholarship will not be awarded if the selection panel is of the opinion that the applicants are not of sufficient merit; the position may then be re-advertised.

#### CONDITIONS OF ACCEPTANCE AND APPOINTMENT

- The stipend cannot be released until the successful applicant is enrolled at in the PhD programme at AUT. Therefore, the start date will depend on the completion of AUT University enrolment and obtaining a student visa (if required). The scholarship is to be taken up in 2020 with the preference for early October enrolment.
- The award of the scholarship is conditional on the recipient gaining entry to and enrolling in an AUT Doctor of Philosophy programme in the School of Sciences.
- The successful applicant must be prepared to commit full-time to their programme of research.

- The successful applicant will be required to sign the AUT Postgraduate Scholarships Contract.
- This scholarship may not be held in conjunction with any other scholarship without the approval of the Faculty Scholarships Committee and Scholarships Office.
- Recipients must be resident in New Zealand to receive stipend payments. Stipends will not be paid to students living off-shore. Reasonable annual holiday leave overseas of no more than four weeks is acceptable.
- Scholarships payments will not be made retrospectively.
- Recipients must notify the School and the Scholarships Office in writing if they wish to apply for a Leave of Absence or withdraw from their programme.