WESTERN SYDNEY
UNIVERSITY

Hawkesbury Institute
for the Environment

METAGENOMICS APPROACHES TO PREDICT EFFICIENCY OF BIOREMEDIATION

The Hawkesbury Institute for the Environment (HIE) is a research institute within Western Sydney University. HIE has rapidly become a research leader in environmental and ecological research, with a strong reputation for delivering research outcomes of the highest quality. HIE houses a team of over 50 academic research scientists and over 50 PhD students with access to a unique suite of world-class research facilities.

We are seeking to appoint a PhD student to focus on research related to metagenomics approaches to predict efficiency of bioremediation as part of a CRC-CARE project.

The projects seek to identify (a) the linkage of plant and soil microbiomes to plant physiological conditions, plant performance and soil health, and (b) Develop microbial indicators for types and efficiency of bioremediation in field conditions.

The projects will use a range of analytical procedures including state-of-the-art next-generation sequencing, and soil microbiome and plant health measures to characterise how these variables impact microbiomes and their activities. The successful applicants will be trained in the broad areas of microbiomes and be able to analyse data from next-generation (amplicon and shotgun) sequencing. Statistical skills for analysing microbiome data are required, and relevant training will be provided to candidates with excellence in other areas of the projects.

The successful candidates will have opportunity to improve the scope of the projects and methodologies and will be expected to participate in training relevant to the position and communicate the findings of the project via journal publications and presentations at scientific conferences and to non-scientific audiences.

CRCCARE
A safer, cleaner environmental future

WHAT DOES THE SCHOLARSHIP PROVIDE?

» Domestic students will receive a tax free stipend of $27,082 per annum and a funded place in the doctoral degree.
» International students will receive a tax free stipend of $27,082 per annum. Those with a strong track record may receive a fee waiver.
» Funding is available for project costs and conference travel.

CRITERIA

Relevant professional experience in the broad area of ecology and soil science will be viewed favourably. As a minimum, the successful applicant should:

» hold qualifications and experience equal to one of the following (i) an Australian First Class Bachelor Honours degree, (ii) coursework Masters with at least a 25% research component , (iii) a Research Masters degree or (iv) equivalent overseas qualifications.
» demonstrate strong academic performance in soil/plant ecology.
» possess excellent written and verbal communication skills.
» be enthusiastic and highly motivated to undertake further study at an advanced level in laboratory and field environments.
» International applicants must also demonstrate a high level of proficiency in the English language. Please refer to the English language requirements at **www.westernsydney.edu.au/international/home/admissions/entry_requirements**

HOW TO APPLY

» Applicants should discuss their eligibility and interests with Prof Brajesh Singh **b.singh@westernsydney.edu.au**
» Contact the Graduate Research School at **grs.scholarships@westernsydney.edu.au.**
» Please submit an application form, CV, names and contact information of two referees, and a one-page document stating how your research interests align with the project's aims.

Closing date: 30 March 2018

» The application form can be downloaded: **www.westernsydney.edu.au/graduate_research_school/grs/scholarships/current_scholarships**