

PhD scholarship in tropical coastal ecosystem services

In the Department of Geography, National University of Singapore (NUS) and Asian School of the Environment, Nanyang Technological University (NTU)

INVITATION TO APPLY

The Department of Geography at the National University of Singapore, and the Asian School of the Environment at Nanyang Technological University invite applications for a PhD scholarship in tropical coastal ecosystem services, to begin on 1 January 2018. The successful applicant will be advised by Dr. Dan Friess (NUS) and co-advised by Dr. Natasha Bhatia (NTU). This PhD project is part of the larger multi-million dollar project '*A Natural Capital Assessment for Singapore*'.

ABOUT THE PHD PROJECT

Currently, little is known about the economic, social and cultural value of ecosystem services for many of the coastal and marine ecosystems (mangroves, coral reefs, seagrass, beaches, estuaries) found in Singapore. However, the demand for marine and coastal resources is ever increasing as Singapore's coastal zone continues to develop at a rapid rate. Key questions for this PhD project include: 1) what is the extent and health of coastal and marine ecosystems in Singapore? 2) what is the current provision of key coastal and marine ecosystem services in Singapore? 3) How do different stakeholders (the public, NGOs, government) value ecosystem services?

The PhD scholar will be expected to take a mixed methods approach to this project, including field data quantifying ecosystem services and ecosystem health, social science research methods quantifying social value of ecosystems, and modelling of habitat extent and ecosystem service distribution. GIS skills will be required for this position. The PhD scholar will be working within a larger team of Postdoctoral Researchers and Research Assistants who are conducting a National Natural Capital Assessment for Singapore.

ABOUT THE RESEARCH PROJECT

This PhD position will be contributing to a larger multi-million dollar project where we are conducting a National Natural Capital Assessment for Singapore. The overall aim of the project is to quantify the economic, social, and cultural value of Singapore's environmental assets (its 'Natural Capital'), and present and model the information in such a way that it can inform future policy and urban development. To protect and enhance natural capital in Singapore and secure the long-term foundational benefits from this capital, we need to understand the current status of Singapore's ecosystems, and develop tools to predict the environmental impacts of future urbanization. This will be achieved by:

1. quantifying the current status of Singapore's terrestrial and coastal-marine ecosystems
2. quantifying the value of Singapore's terrestrial and coastal/marine ecosystems to Society.

3. assessing tradeoffs between urban development (urban assets) and natural capital (natural assets)
4. assessing future policy and development opportunities that integrate natural capital

This project also represents the first national-scale Natural Capital Project to be conducted in the tropics.

ABOUT THE INSTITUTIONS

The QS World University rankings place NUS in the top 15 universities in the world and number one in Asia. In the same rankings the Department of Geography is generally ranked among the top 10 Geography programmes globally. The Department runs a very active graduate research programme of 50 PhD students, 20 research Masters students and 15-20 taught MSc students. Further information on the Department's graduate programme is available at:
<http://www.fas.nus.edu.sg/geog/graduate/overview.html>

Young and research-intensive, Nanyang Technological University (NTU Singapore) is ranked 11th globally and 1st amongst the world's best young universities. The Asian School of the Environment is home to Environmental Sciences at NTU. Here, our aim is to provide the next generation of Geoscientists, Ecologists and Environmental Sociologists with the training they need to succeed in their chosen career. Graduate students can expect to be a part of a select and inclusive cohort of 40 PhD students, post-doctoral students and research associates. For more information, please visit:
<http://www.ase.ntu.edu.sg/>

APPLICATION PROCEDURE

Applicants must have graduated with at least an upper second class honours degree or equivalent from a recognized university. Applications from candidates who also already hold a graduate degree (e.g. Masters) are particularly welcome. There is no restriction on the nationality of applicants.

Please note that all applications must include a Statement of Purpose. Details are at: <http://www.fas.nus.edu.sg/geog/graduate/application.html>. This Statement should include 1) a description of the potential research topic the applicant wishes to work on; 2) the methodological approaches, techniques and conceptual framing that a candidate is considering using to structure, guide and operationalize their research; 3) how the past education and other experiences of the candidate have served as preparation for graduate-level work; and 4) other relevant information, including existing work and/or publications that has inspired the interests of the candidate, details about their own publications (e.g. arising from a master's degree etc), and contributions they have made to seminars, workshops, conferences etc).

Applications will be assessed against the following criteria:

- The quality of their Statement of Purpose
- Academic performance as evident in the grades received in the completed Undergraduate and Graduate programmes

- Two external referee reports
- Demonstrable evidence of capacity to conduct and present independent research in English
- Potential to pursue a career in advanced research as demonstrated in the Statement of Purpose.

For further information on the project contact the Lead PI Dr. Dan Friess (dan.friess@nus.edu.sg). For questions on the application process email the graduate secretary Ms Pauline Lee (geoleepl@nus.edu.sg). Completed applications using the online application format <https://inetapps.nus.edu.sg/GDA2/Home.aspx> must be received by 26th October 2017. Applicants will be asked to appear for interview (including over SKYPE).