

Postdoctoral Researcher in tropical urban ecosystem services

In the Singapore-ETH Centre (SEC), collaborating with the National Parks Board, Singapore

INVITATION TO APPLY

The Singapore-ETH Centre (SEC) invites applications for a Postdoctoral Research Fellow in tropical urban ecosystem services, to begin on 1 January 2018 or soon thereafter. The position will be for a period of 2 years, subject to performance review. The successful applicant will be part of a multi-million dollar project on the topic of 'A Natural Capital Assessment for Singapore'.

ABOUT THE RESEARCH PROJECT

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. The key deliverables of the project will be:

1. a report assessing the current status and potential future of Singapore's natural capital
2. a tool for visualizing spatial variation in ecosystem services, trade-offs in ecosystem service provision, and the impacts of future urbanization on ecosystem service provision
3. peer-reviewed publications relating to the Natural Capital Assessment

THE ROLE

The Postdoctoral Researcher will have expertise in working on urban ecosystem services, or similar environmental issues. S/he will be responsible for overall coordination of the terrestrial ecosystems Work Package, including overseeing the implementation of the project work plan. The Postdoctoral Researcher will take a significant lead in research relating to terrestrial ecosystem services quantification in Singapore, largely through integrating field and remotely-sensed datasets. Statistical modelling and GIS experience are highly regarded, and fluency using the R statistical

programming language is preferred. Experience in remote sensing would be an advantage.

ABOUT THE INSTITUTIONS

The Singapore-ETH Centre was established in 2010 by ETH Zurich and Singapore's National Research Foundation, as part of its CREATE campus. The vibrant hub for research aims to provide practical solutions to some of the most pressing problems through its programmes - Future Cities Laboratory and Future Resilient Systems.

The successful applicant will be co-supervised by staff from the Centre for Urban Greenery and Ecology (CUGE) at the National Parks Board of Singapore. CUGE Research engages in multidisciplinary research on the greening and ecology of cities. Through its research programs, CUGE Research aims to enhance greenery planning, design and management in cities.

TERMS OF APPOINTMENT

1. The appointment will be tenable for a period of two years
2. The position comes with competitive remuneration
3. Singapore citizens and permanent residents are eligible for provident fund benefits

APPLICATION PROCEDURE

Applicants must hold a PhD from a reputable university (or be awaiting conferment), have research experience in a related field of natural sciences, and a record of (or potential to deliver) impactful research publications.

Interested scholars should submit the following via email to Dr. Dan Richards (richards@arch.ethz.ch) by 31st October 2017:

- Letter of application
- Curriculum vitae, with complete list of publications
- At least one sample of their published work
- A write-up, of no more than 800 words, explaining the candidate's past research experience and aptitude in relation to the research project
- Please arrange for TWO referees (one of which should be the PhD supervisor) to submit a confidential report on their academic standing and research directly to richards@arch.ethz.ch. The referee reports should also reach us by 31st October 2017.

Applicants will be asked to appear for interview (including over SKYPE). For further information on the project contact Dr. Dan Richards richards@arch.ethz.ch