Post Doctoral Fellowship at University of KwaZulu-Natal
Centre for Water Resources Research
ECOSYSTEM SERVICES, ECOLOGICAL INFRASTRUCTURE AND THE HYDROLOGICAL CYCLE

Scholarship description:
Land, soil and water resources and the production of goods and services upon which society depends are intimately linked. However, rapid and extensive changes in land use and cover are resulting in the degradation of soil and water resources. Sustaining a landscape's ability to generate benefits to society depends on recognition of the key processes, the linkages between different components, understanding their structure and function, and the spatial and temporal scales at which these are dominant or dormant, as well as the complexity of society's interaction and feedback to these.

In South Africa, the concept of "Ecological Infrastructure", defined as functioning ecosystems that produce and deliver valuable services to people, is being promoted as a means of connecting catchment functioning with societal needs and benefits. The uMngeni catchment (4 349 km^2) in South Africa is one of the world's fastest growing urbanisation centres. Providing water and sanitation for the rapidly expanding residential population and sustaining agricultural and industrial production in the catchment is crucial, typifying the challenges facing many developing regions. These catchments are stressed by high demands for water for competing uses and deterorating water quality. The uMngeni River and its catchment is now the focus of an innovative water resources management programme which is aims to retain and restore its ecological infrastructure.

In partnership with the South African National Biodiversity Institute (SANBI), we seek a recently graduated PhD who is enthusiastic and willing to undertake research in these topics through a focus on water related ecological infrastructure and the benefits to society associated with these. Although, the study site is the uMngeni Catchment, researchers who bring wider experience, or are willing to test and develop these concepts throughout sub-Saharan Africa and beyond are encouraged to apply.

Eligibility: The successful candidate should be driven, disciplined, able to work as a member of a team, and be able to set and meet his/her own deadlines. The candidate is expected to have a recent PhD degree in hydrology, environmental science, engineering or a relevant related discipline. Proficiency in English, both verbal and written, is required.

Scholarship package:
A tax free stipend of at least R 250 000 per year, which may be renewed for a second year, is offered. This is a full-time studentship based at the Centre for Water Resources Research (cwrr.ukzn.ac.za/) on the Pietermaritzburg campus of the University of KwaZulu-Natal (www.ukzn.ac.za). The candidate will be expected to cover all living expenses, medical insurance and personal travel from this stipend. All project running costs will be covered through a seperate budget.

How to Apply: Email your CV (with at least three traceable references), academic record and a sample of your writing in the form of a recent publication or chapter from the PhD thesis to CWRR@ukzn.ac.za . Further enquries to Prof GPW Jewitt (jewittg@ukzn.ac.za)

Application deadline: Nov 30, 2016.