



Call for applications: PhD bursary for 2022

Dynamics of Sustainability Transitions

Deadline for applications: 12 June 2021

Project background

There is growing consensus that significant transformations at local to global scales are required to place humanity and the Earth on a more sustainable and equitable trajectory of development. Achieving Agenda 2030 and the 17 Sustainable Development Goals (SDGs) will require systemic transformations across multiple sectors, including energy systems, technological systems, food systems, economies and cities. The substantial interdependencies between these sectors will lead to tensions and synergies among efforts aimed at achieving transformations in different sectors and amongst different SDGs. At the same time, a more sustainable future may be achieved through different pathways (e.g., renewables vs nuclear; decentralized vs centralized decision-making) that each has a different set of associated costs and benefits. It is also likely that different people in different places will have substantially different visions of what might constitute a more sustainable and equitable future world.

We critically need approaches that help us identify sustainability initiatives, innovations and practices that hold the potential to trigger different transformative pathways toward sustainability. Many existing initiatives that have transformative potential are currently marginalized because they do not align with dominant values and forces currently shaping the world. Better understanding the obstacles such initiatives face, and how they may be better supported to effect transformative is a critical area of research and policy. We also need better knowledge on how interactions between different small-scale initiatives can lead to different plausible transformation pathways. Furthermore, better understanding of the implications of different transformation pathways for the extent to which different sets of SDGs are achieved, and what types of values may be emphasized or prioritized under different pathways, may be critical to informing policy choices and directing investments towards sustainability transformations.

The South African Research Chair (SARChI) in Social-Ecological Systems and Resilience, held by Prof Reinette (Oonsie) Biggs aims to contribute to better understanding how transformative change can be facilitated at a range of scales, specifically in a southern African context. This thematic area of work under the Chair builds on the Seeds of Good Anthropocenes initiative (<https://goodanthropocenes.wordpress.com/>) that is being conducted in collaboration with the Stockholm Resilience Centre in Sweden, McGill University in Canada, and other partners. This initiative aims to inform and contribute to deep, systemic transformations towards socially and ecologically desirable, just, and sustainable futures, by identifying and connecting initiatives (“seeds”) that currently exist at the margins of society, and have the potential to grow, change and combine in surprising ways to create a variety of possible, radically alternative, positive futures (see Bennett et al 2016¹).

Centre for Sustainability Transitions, Stellenbosch University

The Centre for Sustainability Transitions (CST, <http://www.sun.ac.za/cst>) builds on a strong history of transdisciplinary research and complexity studies at Stellenbosch University, providing a vibrant hub for solution-oriented sustainability science that hosts leading scientists and students from diverse disciplinary backgrounds in a state-of-the-art research centre. The primary objective of the CST is to provide transformational knowledge on the dynamics of multi-scale social-ecological change, and strategic insights into the new modes of research and governance that can bring about a just transition to a more equitable and sustainable society, in southern Africa and globally.

¹ Bennett E et al. 2016. Bright spots: Seeds of a good Anthropocene. *Frontiers in Ecology and the Environment* 14(8): 441-448.

Call for applications

We seek motivated individuals interested to pursue a PhD focusing on the dynamics of sustainability transitions, who have a keen interest in sustainability and transition-related research, an interest and ability to integrate across the social and natural sciences, and who enjoy collaboration and working in teams. Interested individuals should have a strong academic track-record, participate in the events and activities of the CST, and be interested in developing a career around topics such as social-ecological systems, resilience and risk, complexity thinking, and sustainability transformations. A variety of potential topics could be pursued, relating to one or more of the following:

- Cataloguing and analyzing select examples of sustainability-related transformations to explore patterns and processes of change. This could draw on examples from the Seeds of Good Anthropocenes database (<https://goodanthropocenes.wordpress.com/>)
- Contribution of different seeds to achieving the Sustainable Development Goals (SDGs)
- Explore the deeper values underlying different seeds and how those may shape different potential futures
- Analyzing characteristics of transdisciplinary knowledge co-production processes that support sustainability-related transformations.
- Exploring options for building resilience and capacity for transformative change towards more sustainable futures drawing on practical examples of ongoing initiatives in the region.

Supervisors will include Prof Reinette (Oonsie) Biggs, and one or more CST researchers, depending on the topic. Studies will generally be registered within the CST's PhD in Sustainable Development in the Faculty of Economic and Management Sciences, but other options can be considered.

Funding

Bursaries will be funded from the DST/NRF SARChI chair held by Prof Biggs. The NRF minimum academic requirement for PhD funding is 65% average for the preceding Masters degree. Applicants for doctoral funding must be 32 years of age or younger in the year of application.

Successful applicants will be funded either at Full Cost Study (FCS) or Partial Cost of Study (PCS). The FCS funding will be awarded to South African citizens and permanent residents only, who are either financially needy (i.e., those whose combined household family income is less or equal to R350 000 per annum), living with a disability, or exceptional academic achievers. PCS funding will be awarded to 5% of international students including South African citizens and permanent residents who could not be funded under FCS but meet other minimum requirements for the NRF scholarship funding criteria.

Subject to availability of funds, CST aims to top-up NRF funding to R 138,000 pa (R 11,500 per month). Tuition and reasonable running and travel expenses will also be covered where possible. Successful completion and defense of a research proposal within the first year will be a pre-requisite for continuing with the PhD.

Requirements

Potential PhD candidates should have completed a Masters degree or equivalent. All candidates should show evidence of strong scholarly performance. Based on the National Research Foundation's funding guidelines, strong preference will be given to South African nationals and under-represented groups.

To apply

Applications will follow a 2-step process:

Step 1. Apply to CST

All interested candidates should first apply to the CST by emailing the following documents to cst-enquiries@sun.ac.za by **12 June 2021** with the subject line "**PhD application: Sustainability transitions**":

- a motivation letter (detailing your previous academic and work experience, and how your experiences and skills speak to the proposed research topic, as well as your specific interests with regard to the proposed project),
- a detailed CV that includes your academic record, previous work experience, any scientific publications on which you have been an author, and the names of at least two academic referees,
- transcripts of academic qualifications,

- at least one example of recent written work (e.g. a paper, report, thesis chapter).

Step 2. Apply to NRF

Suitable candidates will then be instructed to apply on the NRF system by **1 July 2021**, and link their application to Prof Biggs' SARChI Chair. Instructions on this process will be communicated to successful applicants in step 1.

Please note that funding will only be awarded to candidates selected and approved by the NRF.

Enquiries

Enquiries can be directed to cstenquiries@sun.ac.za. Please use the subject line "Enquiry: PhD Sustainability Transitions", as enquiries about multiple adverts are being directed to this address.