



## Funded PhD Position Available at Stellenbosch University

Applications are invited to undertake a funded PhD study looking at aspects of

### Modelling wood formation

Interested candidates are invited to apply to undertake a PhD-level degree which develops and explores **approaches to using computational modelling to simulate aspects of the wood formation process** (xylogenesis), or plant physiological processes that influence it.

The exact scope of the study is flexible and the research could take more than one direction. For example, agent-based or particle-based modelling could be applied to simulating the differentiation of a population of virtual xylem cells, considering neighbour status/flux in developmental signals. The final project topic will be decided in consultation between the student and the supervisory panel. We are looking for students with a **high-level of motivation and initiative who can actively drive an interesting research project**, and **novel proposals are very welcome**.

This offer is for students who start their studies from the start of the 2021 academic year (January or February 2021) to submit at the end of 2023. A tax-free **scholarship of ZAR 165,000 per annum** is offered for three years for successful candidates. Students will have the opportunity to present their work at an international conference during their candidature. Students must register full-time and be based on the Stellenbosch campus of the University. At least three peer-reviewed publications will be expected from PhD candidates by the time of graduation.

See <http://blogs.sun.ac.za/eucxylo/> for more information about the broader program.

Applicants must have a minimum of an M.Sc. degree from a recognised institution, achieved with an above-average grade, in an appropriate field. We are particularly looking for candidates who have already got qualifications and experience with computational approaches to modelling living systems, particularly plant cell or tissue development.

Applications for this round are open until the end of September 2020. Please send applications and address any queries, to Dr David Drew ([drew@sun.ac.za](mailto:drew@sun.ac.za)) including the following:

- All previous degrees and academic records.
- A cover letter giving background to your application.
- A brief (max one page) essay describing a possible research direction for your PhD in simulating developing xylem.
- A comprehensive and up-to-date résumé including the names and details of at least two referees.