

PhD Research Positions in Plant Molecular Genetics, Biochemistry or Bioinformatics,

Department of Molecular and Cell Biology, University of Cape Town



Prof Nicola Illing and Assoc Prof Robert Ingle welcome applications from Masters graduates for PhD research positions to compare the biochemical, physiological and genetic mechanisms of desiccation tolerance in germinating seedlings from *Xerophyta* resurrection plants and barley. Funding has been secured from the European Commission (H2020-MSCA-RISE-2018) (<http://resist.cpsbb.eu/>) to cover research expenses, as well as a living expenses for a year-long exchange at the University of Potsdam, Germany or Ben-Gurion University of the Negev, in Israel.

Specific projects include i) a comparative metabolomic and lipid analysis of desiccating *Xerophyta elegans* and *Xerophyta schlechteri* seedlings ii) a comparative RNA-seq, metabolomic and lipid analysis of *Xerophyta* and wild barley seedlings iii) modelling of gene regulatory networks during desiccation in *Xerophyta* species.

Successful candidates should have a Masters degree in a relevant field, and be willing to apply for UCT and NRF scholarships to secure additional funding to cover their living expenses in Cape Town and their University fees.

Contact Nicola Illing (Nicola.Illing@uct.ac.za) if you require further information.

Applications: Please submit your CV, including the names of 3 referees and your complete academic transcripts to Nicola.Illing@uct.ac.za

Closing date for applications: June 5, 2020.



Fig 1: Fluorescent images of *Xerophyta schlechteri* (A) and *Xerophyta elegans* (B) seeds, and germinating seedlings