







Ruan van Mazijk, *Curriculum vitae*

2018

Contact information

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- Find me as @rvanmazijk on  Twitter and  GitHub
- Also find me on  LinkedIn,  ResearchGate and  Mendeley

I am a fundamentally curiosity driven individual. My interests include plant and animal phylogenetics and systematics, community ecology, plant ecophysiology, and the effects of climate change on the world's biota. I enjoy applying numerically and statistically grounded methods in these fields. My long-term goals are careers in research, academia, and teaching.

Current positions



MSc candidate (Dept. of Biological Sciences, University of Cape Town) (2018—present). Dissertation title: The effects of genome size on plant hydraulic ecophysiology, habitat, and phenology in Cape Schoenoid sedges (Cyperaceae: Schoeneae). Principle supervisor: Associate Prof A.M. Muasya. Co-supervisors: Associate Prof G.A. Verboom and Associate Prof A.G. West.

Tutor for Study Design & Data Analysis for Scientists (STA2007F/S/H) (UCT) (2017—present).

Assistant tutor for Bionumeracy (STA1007S) R practicals (UCT) (2016—present).

Education

BSc Hons in Biological Sciences (UCT) (2017). Project title: The role of environmental heterogeneity in determining plant species richness in the Greater Cape Floristic Region and the Southwest Australia Floristic Region. Supervisors: Associate Prof M.D. Cramer and Associate Prof G.A. Verboom. Graduated with distinction.

BSc (UCT) (2016). Majors: Ecology & Evolution, Applied Biology. Graduated with distinction in both majors and the degree as a whole.

National Senior Certificate (Fairmont High School, Durbanville, South Africa) (2013). Bachelor's Pass with honours and 6 distinctions.

Professional affiliations

South African Association of Botanists (SAAB) member (2017—present).

Golden Key International Honour Society member (2015—present).

Funding

South African Association of Botanists (**SAAB**) **MSc Student Bursary** (inaugural recipient) (R20,000 p.a.) (2018, 2019).

Dorothy Cameron Scholarship (R20,000 p.a.) (2018).

UCT Masters Research Scholarship (R25,000 p.a.) (2018).

DST-NRF Innovation Honours Scholarship (R60,000 p.a.) (2017).

South African Association of Botanists (**SAAB**) **Honours Scholarship** (R10,000 p.a.) (2017).

UCT Science Faculty Scholarship (R15,000 p.a.) (2015, 2016).

Awards & honours

Dick & Dorothy Borchers Prize (R1,000 p.a.) (UCT) (2015) for the highest standard in second year Biological Sciences.

Dean's Merit List (UCT) (2014—2016).

Class Medals (top of the class) for five Biological Sciences undergraduate courses at UCT (2014—2016). Namely:

- Evolutionary Biology (BIO3016S) (2016)
 - Life on Land: Plants (BIO2012S) (2015)
 - Life on Land: Animals (BIO2011S) (2015)
 - Life in the Sea (BIO2013F) (2015)
 - Biological Diversity (BIO1004S) (2014)
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Prior tutorial & leadership experience

Open Day volunteer for the Dept. of Biological Sciences (UCT) (22 Apr. 2017, 21 Apr. 2018)

Departmental Representative for the Dept. of Biological Sciences (UCT) (2016).

Class Representative for three Biological Sciences undergraduate courses at UCT (2015—2016). Namely:

- Evolutionary Biology (BIO3016S) (2016)
- Ecology (BIO3015F) (2016)
- Life on Land: Plants (BIO2012S) (2015)

Hot-seat tutor for Mathematics for Biology, Earth, and Environmental Sciences (MAM1004F/S) (UCT) (2015).

Other academic activities

Publications

The role of environmental heterogeneity in determining plant species richness in the Greater Cape Floristic Region and the Southwest Australia Floristic Region (In preparation), with Associate Prof M.D. Cramer and Associate Prof G.A. Verboom.

Isotopic analysis of Liesbeeck River stream-water during a high-intensity winter-rainfall event, in order to ascertain the water's source (In review), with L.K. Smythe, E. Weideman, and Associate Prof A.G. West.

Research assistance

Assessing the current available data for the soils of the Greater Cape Floristic Region (June 2016—present), with L. Wootton. Part of “Biodiversity and Environmental Change in the Cape Floristic Region” Supervisor: Associate Prof M.D. Cramer (UCT).

Monitoring *Mimetes* spp. & *Leucospermum* spp. populations on the Cape Peninsula (Jan.—Feb. 2017), with L. Wootton. Supervisor: Dr J. Slingsby (SAEON/SANBI).

Legume symbiotic rhizobia culturing and field sampling (Dec. 2015). Supervisors: M. Dlodlu (UCT) and Associate Prof A.M. Muasya (UCT).

Workshop & conference attendance

Presenter at **Pint of Science – Cape Town** (16 May 2018). I presented hypotheses concerning the role of genome size in plant water use and ecology. pintofsciencesa.wixsite.com

Attendee at **satRday Cape Town** (17 Mar. 2018). capetown2018.satrdays.org

Presenter at workshop **Biodiversity and Environmental Change in the Cape Floristic Region** (24 Jan. 2017). Organiser: Associate Prof L. Gillson (UCT). I presented a progress report on “Development of soil atlas for the Greater Cape Floristic Region”, with L. Wootton.

Attendee at workshop **Spatial Point Process Modelling for Ecological Survey Data**, with inlabru (11—13 Jan. 2017). Instructors: David Borchers, Janine Illian (CREEM, St Andrews University), and Fabian Bachl (University of Edinburgh).

Skills

Extended experience with:

- Apple OS-X & macOS
- MS Windows, MS Office
- R, RStudio, tidyverse packages, RMarkdown & RNotebooks
- GitHub

Fluent in both English and Afrikaans.

Animal Ethics Course certified by South African Veterinary Council (part of BSc Hons general coursework) (Apr. 2017).

Miscellaneous

- Botanical Society of South Africa (BotSoc) member (2017—present).
 - UCT Birding Club member (2016—2017).
 - UCT Wine & Culture Society member (2016—present).
 - *Cape Wine Ambassador* qualification (2016). Conferred by: Clive Torr.
 - UCT Biological Society member (2015).
 - Two Oceans Aquarium *Young Biologist* Volunteer (2013—2014).
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References

Associate Prof R. Altwegg

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- Head of Centre for Statistics in Ecology, the Environment and Conservation
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Prof T.A. Hedderson

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