

## MSc candidate in Biological Sciences

UCT<sup>1</sup>

*Genome-size effects on plant hydraulic ecophysiology, habitat & phenology in Cape schoenoid sedges*

Principal supervisor: Prof A.M. Muasya. Co-supervisors: A/Prof G.A. Verboom & A/Prof A.G. West

## BSc Hons in Biological Sciences *With distinction*

UCT 2017

*Relating vascular plant species richness & environmental heterogeneity spatially in the GCFR & SWAFR*

Supervisors: Prof M.D. Cramer & A/Prof G.A. Verboom

## BSc in Ecology & Evolution, Applied Biology *With distinction in both majors & the degree*

UCT 2016

## Publications

**Van Mazijk**, Cramer, & Verboom. 2021. Environmental heterogeneity explains contrasting plant species richness between the South African Cape and southwestern Australia. *J. Biogeogr.* 48:1875–1888. DOI: 10.1111/jbi.14118.

Elliott, **van Mazijk**, Barrett, Bruhl, Joly, Muthaphuli, Wilson, & Muasya. 2021. Global dispersal and diversification of the genus *Schoenus* (Cyperaceae) from the Western Australian biodiversity hotspot. *J. Syst. & Evol.* 59(4):791–808. DOI: 10.1111/jse.12742

Elliott, Laidler, Muasya, Muthaphuli & **van Mazijk**. 2019. Solving the sedge mystery. *Veld & Flora* 105(3):20–25. (Popular article)

Cramer, Wootton, **van Mazijk** & Verboom. 2019. New regionally-modelled soil layers improve prediction of vegetation type relative to that based on global soil models. *Divers. Distrib.* 25(11):1736–1750. DOI: 10.1111/ddi.12973.

**Van Mazijk**, Smyth, Weideman & West. 2018. Isotopic tracing of stormwater in the urban Liesbeek River. *Water SA* 44(4):674–679. DOI: 10.4314/wsa.v44i4.16.

## Funding, awards & conferences

|  |           |
|--|-----------|
| Student sponsorship to attend MEDECOS (NRF <sup>2</sup> )  | 2022      |
| Presented at IBS <sup>3</sup> ECBC <sup>4</sup>  | 2021      |
| Candidate at iDiv <sup>5</sup> Joint Recruitment Symposium   | 2020      |
| Best Systematics MSc Presentation at SAAB <sup>6</sup> -AMA <sup>7</sup> -SASSB <sup>8</sup> (tie) | 2019      |
| Innovation Masters Schol. (NRF)  | 2019      |
| MSc Student Bursary (SAAB)   | 2018–2019 |
| Once-Off Award (UCT)   | 2018      |
| Travel grant for SAAB-AMA-SASSB (UCT)  | 2018      |
| Dorothy Cameron Schol. (UCT)   | 2018      |
| Masters Research Schol. (UCT)  | 2018      |
| Innovation Honours Schol. (NRF)  | 2017      |
| Honours Schol. (SAAB)  | 2017      |
| Science Faculty Schol. (UCT)   | 2015–2016 |

## Teaching assistance *All for undergrad. unless stated*

|  |                 |
|--|-----------------|
| Angiosperm diversity   | 2018–2019, 2022 |
| Data wrangling & manipulation in R   |                 |
| (Organised & lead workshop)  | 2019            |
| Principles of ecology & evolution  | 2019–2020       |
| Scientific study design & data analysis in R                                 | 2017–2020       |
| Teaching Biodiversity for High School Life                                   |                 |
| Science Teachers (SDU <sup>9</sup> short course)                             | 2019            |
| Stat. modelling in R (SEEC <sup>10</sup> -ACCESS <sup>11</sup> short course) | 2018            |
| Intro. statistics in R   | 2016–2018       |

## Professional affiliations

|  |       |
|--|-------|
| SASSB council member, student representative | 2019– |
| SASSB student member                         | 2018– |
| SAAB student member                          | 2017– |

## Research assistance

|   |      |
|---|------|
| <i>Schoenus</i> spp. (Cyperaceae: Schoeneae) collections & growth for Dr T.L. Elliott & Prof A.M. Muasya (UCT)                      | 2018 |
| <i>Mimetes</i> spp. & <i>Leucospermum</i> spp. (Proteaceae) population monitoring for Dr J.A. Slingsby (SAEON <sup>12</sup> , SEEC) | 2017 |
| Legume symbiotic rhizobia collections & culturing for Dr M. Dlodlu (University of Swaziland)  | 2015 |

## References *All from the Dept. Biological Sciences (UCT)*

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|---------------------|--------------------------|
| A/Prof G.A. Verboom | tony.verboom@uct.ac.za   |
| Prof M.D. Cramer    | michael.cramer@uct.ac.za |
| Prof A.M. Muasya    | muthama.muasya@uct.ac.za |
| A/Prof A.G. West    | adam.west@uct.ac.za      |

## Skills & misc.

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| Skills    | Strong public speaker, visual design, teaching |
| Languages | English, Afrikaans, R, bash                    |
| Tools     | R Markdown, LaTeX, git, GitHub, MS Office      |
| Methods   | Stat. modelling, data manipulation, GIS (in R) |

<sup>1</sup>University of Cape Town

<sup>2</sup>National Research Foundation (South Africa)

<sup>3</sup>International Biogeography Society

<sup>4</sup>Early Career Biogeographers Conference

<sup>5</sup>German Centre for Integrative Biodiversity Research, Halle-Jena-Leipzig

<sup>6</sup>South African Association of Botanists

<sup>7</sup>African Mycological Association

<sup>8</sup>Southern African Society for Systematic Biology

<sup>9</sup>UCT Schools Development Unit

<sup>10</sup>UCT Centre for Statistics in Ecology, the Environment & Conservation

<sup>11</sup>NRF Applied Centre for Climate & Earth Systems

<sup>12</sup>South African Environmental Observation Network