

## ABRIDGED CURRICULUM VITAE

Prof Michelle van der Bank  
26 January 2020

### 1. Biographical Sketch

Name: Michelle van der Bank  
Institution: University of Johannesburg  
Department: Botany and Plant Biotechnology  
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#### Academic Qualifications:

PhD Botany 1996 Rand Afrikaans University (now University of Johannesburg), South Africa  
BSc Hons Biochemistry (*Cum Laude*) 1992, Rand Afrikaans University  
MSc Zoology 1988, Rand Afrikaans University  
BSc Hons Zoology (*Cum Laude*) 1987, Rand Afrikaans University  
BSc 1986 Biology, Rand Afrikaans University

**NRF Rating:** C1

**H-index (Scopus):** 24

**Field(s) of Research:** Biochemistry, Genetics and Molecular Biology

### 2. Teaching Activities

#### Courses Presented:

- i. Module: Plant Taxonomy (BOT03B3)
- ii. Module: Plant Systematics & Molecular Evolution (BOT8X03)

#### Postgraduate Student Training:

Completed MSc degrees – 18  
Completed PhD degrees – 8  
MSc degrees in progress – 11  
PhD degrees in progress – 6

### 3. Research Activities

#### Awards/Recognitions:

- i. Eco-logic Awards 2018 - Bronze award in Biodiversity - LifeScanner: Lab-in-a-Box (Ryan Rattray, Prof Michelle van der Bank, Sujeevan Ratnasingham).
- ii. Member on the executive committee of Global Genome Biodiversity Network (GGBN)- 2018 to current.
- iii. Award for excellent service to the Environmental Management Inspectors (2014 – 2015) awarded by the Department of Environmental Affairs, South Africa
- iv. Founding member of the International Scientific Collaboration Committee (ISCC), Canada.
- v. Finalist in 2009 for National Science and Technology Forum (NSTF) Awards: Category B – individual through research and its outputs.
- vi. Representative for AFRICA for the global Tree-BOL initiative aiming to barcode all trees of the world.
- vii. Received NRF Rating Dec. 2010: Category C1 (Established Researchers).
- viii. Awarded the Prestigious Royal Society (UK) - National Research Foundation (SA) Grant for 2007-2011.

- ix. NRF Thuthuka Research Index: Listed in the top 20 Women in Research in 2006.
- x. Compton prize for the best article submitted to the S.A. Journal of Botany for 1998.
- xi. RAU Faculty of Natural Science Merit Award: Van der Bank M., 1996; Best Junior Researcher.

#### Research Grants:

- i. Knowledge Interchange and Collaboration; PI; 2017
- ii. DST-NRF Conference Fund; PI; 2017
- iii. Foundation Biodiversity Information Programme – Accelerated Data Mobilization Grant; PI; Aquatic plants; June 2016 (1 year)
- iv. Foundation Biodiversity Information Programme, NRF; PI; A phylogenetic analysis of the origin and assembly of forbs in South African grassy biomes; Aug 2015 (1 year)
- v. Natural Resource Management Programme, South Africa; Co-PI; DNA bar-coding of terrestrial and fresh water invasive species in South Africa; 2013-2015 (3 years)
- vi. Natural Resource Management Programme, South Africa; Co-PI; DNA bar-coding of terrestrial and fresh water invasive species in South Africa; March 2012 (1 year)
- vii. Natural Resource Management Programme, South Africa; Co-PI; DNA bar-coding of terrestrial and fresh water invasive species in South Africa; March 2011 (1 year)
- viii. The International Development Research Centre (IDRC); Co-worker; The International Barcode of Life Project: engaging developing nations; March 2010 (3 years)
- ix. National Research Foundation/Royal Society (Capacity building Grant); Co-PI; Regional patterns of biodiversity and conservation in SA: the flora of the KNP as a case study; Sept. 2007 (5 years)
- x. The Darwin Initiative for the Survival of Species (Post-Project); Co-worker; Integrating Evolutionary History and Phylogenetic Measures of Biodiversity in Conservation Planning (South Africa); August 2006 (2 years)
- xi. The European Commission (Marie Curie Early-Stage Research Training Network); Co-worker (14 other partners); Understanding and conserving the Earth's biodiversity hotspots (HOTSPOTS; MEST-CT-2005-020561); November 2005 (4 years)
- xii. NRF Thuthuka Programme; PI; Diversification of species in arid zones, January 2005 (4 years)
- xiii. The Leverhulme Trust (Academic Interchange Network; Co-worker; Speciation in diversity hotspots: The South Africa flora as a case study F/100 239/Q; January 2004 (4 years)
- xiv. The Darwin Initiative for the Survival of Species (Main Project); Co-worker; DNA Banking, phylogeny and conservation of the South African flora; June 2003 (3 years)
- xv. HF Verwoerd Research Trust Grant; PI; Molecular phylogeny of *Babiana* (Iridaceae), January 2003 (1 year)
- xvi. Additional small grants - Systematic Association, UK Bursary (1999); Lennox Boyd Trust (UK) Grant; 2000

#### Selected Publications:

- i. Manning J, Olaniyan D, Magee AR, **Van der Bank M**, Boatwright JS. **2020**. A taxonomic revision of *Englerodaphne* (Thymelaeaceae: Thymelaeiodeae). *South African Journal of Botany*. (Accepted)
- ii. Bello AN, Boatwright JS, **Van der Bank M**, Magee AR. **2020**. Four new species of *Pteronia* (Astereae, Asteraceae) from South Africa. *Phytotaxa*. (Accepted)
- iii. Janssens SB, Couvreur TLP, Mertens A, Dauby G, Dagallier L-PMJ, Vanden Abeele S, Vandeloos F, Mascarello M, Beeckman H, Sosef M, Droissart V, **Van der Bank M**, Maurin O, Hawthorne W, Marshall C, Réjou-Méchain M, Beina D, Baya F, Merckx V, Verstraetel B, Hardy O. **2020**. A large-scale species level dated angiosperm phylogeny for

- evolutionary and ecological analyses. *Biodiversity Data Journal* 8: e39677. doi.org/10.3897/BDJ.8.e39677
- iv. Maas PJM, Baas P, Christenhusz MJM, Clarkson JJ, Koek-Noorman J, Mennega AMW, Tokuota T, **Van der Bank M**, Van der Ham RWJM, Van Marle EJ, Westra LYTh, Chase MW. **2019**. The perplexing “unknown yellow”: *Pibiria*, a new genus of Passifloraceae with a mixture of features found in Passifloroideae and Turneroideae. *Botanical Journal of the Linnean Society* 189: 397-407.
  - v. Adamowicz SJ, Boatwright JS, Chain F, Fisher BL, Hogg ID, Leese F, Lijtmaer DA, Mwale M, Naaum AM, Pochon X, Steinke D, Wilson J-J, Wood S, Xu J, Xu S, Zhou X, **Van der Bank M**. **2019**. Trends in DNA barcoding and metabarcoding. *Genome* 62: v-viii.
  - vi. Farrell MJ, Govender D, Hajibabaei M, Berrang-Ford L, **Van der Bank M**, Davies TJ. **2019**. Bacterial diversity in the waterholes of the Kruger National Park: an eDNA metabarcoding approach. *Genome* 62: 229-242.
  - vii. Yessoufou K, Bezeng BS, Gaoue OG, Bengu T, **Van der Bank M**. **2019**. Phylogenetically diverse native systems are more resilient to invasive plant species on Robben Island, South Africa. *Genome* 62: 217-228.
  - viii. Li H-T, Yi T-S, Gao L-M, Ma P-F, Zhang T, Yang J-B, Gitzendanner MA, Fritsch PW, Cai J, Luo Y, Wang H, **Van der Bank M**, Zhang S-D, Wang Q-F, Wang J, Zhang Z-R, Fu C-N, Yang J, Hollingsworth PM, Chase MW, Soltis DE, Soltis PS, Li D-Z. **2019**. Darwin’s abominable mystery and the Jurassic angiosperm gap. *Nature Plants* 5: 461-470.
  - ix. Daru BH, **Van der Bank M**, Davies TJ. **2018**. Unravelling the evolutionary origins of biogeographic assemblages. *Diversity and Distributions* 24: 313-324.
  - x. Adamowicz SJ, Hollingsworth PM, Ratnasingham S, **Van der Bank M**. **2017**. International Barcode of Life: Focus on big biodiversity in South Africa. *Genome* 60: 875-879.
  - xi. Bello AO, Boatwright JS, Tilney PM, **Van der Bank M**, Magee AR. **2017**. A taxonomic revision of the *Pteronia camphorata* group (Asterea, Asteraceae). *South African Journal of Botany* 113: 277-287.
  - xii. Terra V, Garcia FCP, de Queiroz LP, **Van der Bank M**, Miller JT. **2017**. Phylogenetic Relationships in *Senegalia* (Leguminosae-Mimosoideae) Emphasizing the South American Lineages. *Systematic Botany* 42(3): 458-464.
  - xiii. Bezeng SB, Morales-Castilla I, **Van der Bank M**, Yessoufou K, Daru BH, Davies TJ. **2017**. Climate change may reduce the spread of non-native and invading species in South Africa. *Ecosphere* 8: e01694.
  - xiv. Bezeng BS, Davies TJ, Daru BH, Yessoufou K, Kabongo RM, Orton R, Maurin O, Van der Bank H, **Van der Bank M**. **2017**. Ten years of DNA barcoding at the African Centre for DNA barcoding. *Genome* doi: 10.1139/gen-2016-0198.
  - xv. Daru BH, **Van der Bank M**, Bello A, Yessoufou K. **2017**. Testing the reliability of the standard and complementary DNA barcodes for the monocot subfamily Alooideae from South Africa. *Genome* 60 (4): 337-347.
  - xvi. Maurin O, Gere J, Boatwright JS, **Van der Bank M**. **2017**. The inclusion of *Anogeissus*, *Buchenavia* and *Pteleopsis* in *Terminalia* (Terminaliinae, Combretaceae). *Botanical Journal of the Linnean Society* 184: 312-325.
  - xvii. Boatwright JS, **Van der Bank M**, Magee AR, Manning JC. **2017**. Transfer of the Madagascan species of *Gnidia* to *Lasiosiphon* (Thymelaeaceae: Thymelaeoideae). *South African Journal of Botany* 112: 336-337.
  - xviii. Williamson J, Maurin O, Shiba SNS, Van der Bank H, Pfab M, Pilusa M, Kabongo RM, **Van der Bank M**. **2016**. Exposing the illegal trade in *Encephalartos* species at the Faraday and Warwick traditional medicine markets in South Africa using DNA barcoding. *Genome* 59 (9): 771-781.

- xix. Maurin O, Muasya AM, Catalan P, Shongwe EZ, Viruel J, Wilkin P, **Van der Bank M. 2016.** Diversification into novel habitats in the southern African clade of *Dioscorea* (Dioscoreaceae): erect habit and elephant's foot tubers. *BMC Evolutionary Biology* 16:238.
- xx. Charles-Dominique T, Davies TJ, Hempson GP, Bezeng BS, Daru BH, Kabongo RM, Maurin O, Muasya AM, **Van der Bank M, Bond WJ. 2016.** Spiny plants, mammal browsers and the origin of African savannas. *Proceedings of the National Academy of Sciences of the United States of America* 113: E5572–E5579.