Barnabas H. Daru

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Lab URL: https://darulab.org/

GoogleScholar: https://goo.gl/2t1Wau

APPOINTMENTS

2023- Assistant Professor, Stanford University.

2018-22 Assistant Professor & Herbarium Curator, Texas A&M University Corpus Christi, TX

2014-16 Lecturer, University of Pretoria, South Africa.

EDUCATION

2016-18 **Postdoctoral Fellow**, Harvard University

2012-15 Ph.D. in Botany, University of Johannesburg, South Africa

2010-12 M. Sc. in Botany, University of Johannesburg, South Africa

2003-07 B.Sc. Hons, University of Jos, Nigeria

GRANTS AND FELLOWSHIPS (TOTAL = \$1,314,792)

2021-23 NSF DBI (**Lead PI**), phyloregion, computational infrastructure for biogeographic regionalization and macroecology in the R computing environment (**\$585,050**)

2022-24 Texas Parks and Wildlife (**co-Pl**), A multi-taxa assessment of the Ingleside Sandsheet Pond habitat to inform and support conservation (**\$384,301**)

2020-23 NSF DEB (**PI**), Leveraging historical collections and new surveys to characterize foundational shifts in vital symbioses in the threatened Arctic (**\$143,676**)

2019-23 NSF DEB (**subaward**), Digitization TCN: Collaborative: American Crossroads: Digitizing the vascular flora of the south-central US (**\$42,245**)

2016-18 Harvard University Postdoctoral Fellowship, Extinction risk, biotic interactions and spatial trends of phenological diversity using herbarium records (\$135,000)

2015-16 South African NRF (Lead PI), Mangrove transcriptomics (\$9300)

2015-16 Genome Research Institute, University of Pretoria, South Africa (\$4500)

2014 South African National Research Foundation Doctoral Fellowship (\$8200)

2014 South African National Research Foundation Travel Grant (\$3000)

2003-07 Nigerian Petroleum Corporation Undergraduate Fellowship (\$1912)

PUBLICATIONS

(48 papers; Students and Postdoctoral Scholars underlined, Citations = 2379, H-index = 26)

[2023]

- 48. **Daru, B.H.** & Rock, B.M. (2023) Reorganization of seagrass communities in a changing climate. *Nature Plants* doi: 10.1038/s41477-023-01445-6.
- 47. **Daru, B.H.** & Rodriguez, J. (2023) Mass production of unvouchered records fails to represent global biodiversity patterns. *Nature Ecology & Evolution* 7: 816–831.
- 46. Gumbs, R., Chaudhary, A., **Daru, B.H.**, Faith, D.P., Forest, F., Gray, C.L., Kowalska, A., Lee, W.S., Pellens, R., Pollock, L.J., Rosindell, J., Scherson, R.A. & Owen, N.R. Indicators to monitor the status of the Tree of Life. *Conservation Biology* (in press).

[2022]

45. Davies, T.J, Maurin, O., Yessoufou, K., **Daru, B.H.**, Bezeng, B.S., Mankga, L.T., Schaefer, H., Thuiller, W. & van der Bank, M. (2022) Woody plant phylogenetic diversity supports nature's contributions to people but is at risk from human population growth. *Conservation Letters* 15: e12914.

[2021]

- 44. **Daru, B.H.,** Willis, C.G., Meineke, E.K., <u>Ronk, A.</u>, Zobel, M., Pärtel, M., Antonelli, A., Davies, T.J. & Davis, C.C. Widespread homogenization of plant communities in the Anthropocene. *Nature Communications* 12: 6983.
- 43. **Daru, B.H.** (2021) Migratory birds distribute seeds to new climates. *Nature* 595: 34-36. [commentary]
- 42. Meineke, E.K. & **Daru, B.H.** (co-first author) (2021) Bias assessments to expand research harnessing biological collections. *Trends in Ecology and Evolution* 36: 1071-1082.
- 41. Rock, B.M. & **Daru**, **B.H.** (2021) Impediments to understanding seagrasses' response to global change. *Frontiers in Marine Science* 8: 608867.
- 40. **Daru, B.H.** (2021) Exploring a new way to think about climate regions. *eLife* 10: e67422. [commentary]

[2020]

- 39. **Daru, B.H.,** Farooq, H., Antonelli, A. & Faurby, S. (2020) Endemism patterns are scale dependent. *Nature Communications* 11: 2115.
- 38. Davies, T.J., **Daru, B.H.,** Bezeng, B.S., Charles-Dominique, T., Hempson, G.P., <u>Kabongo, R.M.</u>, Maurin, O., Muasya, A.M., van der Bank, M. & Bond, W.J. (2020) Savanna tree evolutionary ages inform the reconstruction of the paleoenvironment of our hominin ancestors. *Scientific Reports* 10: 12430.
- 37. **Daru, B.H.**, <u>Karunarathne P.</u> & <u>Schliep K.</u> (2020) phyloregion: R package for biogeographic regionalization and macroecology. *Methods in Ecology and Evolution* 11: 1483-1491.

[2019]

- 36. **Daru, B.H.,** le Roux, P.C., Gopalraj, J., <u>Park, D.S.</u>, Holt, B.G. & Greve, M. (2019) Spatial overlaps between the global protected areas network and terrestrial hotspots of evolutionary diversity. *Global Ecology and Biogeography* 28: 757-766.
- 35. Mathakutha, R., Steyn, C., le Roux, P.C., Blom, I.J., Chown, S.L., **Daru, B.H.**, Ripley, B.S., Louw, A. & Greve, M. (2019) Invasive species differ in key functional traits from native and non-invasive alien plant species. *Journal of Vegetation Science* 30: 994-1006.
- 34. **Daru, B.H.,** Kling, M.M., Meineke, E.K. & van Wyk, A.E. (2019) Temperature controls phenology in continuously flowering *Protea* species of subtropical Africa. *Applications in Plant Sciences* 7: e1232.

[2018]

- 33. **Daru, B.H.,** <u>Bowman, E.A.,</u> Pfister, D.H. & Arnold, A.E. (2018) A novel proof of concept for capturing the diversity of endophytic fungi preserved in herbarium specimens. *Philosophical Transactions of the Royal Society B* 374: 20170395.
- 32. Meineke, E.K., Davies, T.J., **Daru, B.H.** & Davis, C.C. (2018) Biological collections for understanding biodiversity in the Anthropocene. *Philosophical Transactions of the Royal Society B* 374: 20170386.
- 31. **Daru, B.H.**, Park, D.S., Primack, R.B., Willis, C.G., Barrington, D.S., Whitfeld, T.J.S., Seidler, T.G., Sweeney, P.W., Foster, D.R., Ellison, A.M. & Davis, C.C. (2018) Widespread sampling biases in herbaria revealed from large-scale digitization. *New Phytologist* 217: 939-955.
- 30. **Daru, B.H.**, van der Bank, M. & Davies, T.J. (2018) Unravelling the evolutionary origins of biogeographic assemblages. *Diversity and Distributions* 24: 313-324.

[2017]

- 29. **Daru, B.H.**, Elliott, T.L., Park, D.S. & Davies, T.J. (2017) Understanding the processes underpinning patterns of phylogenetic regionalization. *Trends in Ecology and Evolution* 32: 845-860.
- 28. **Daru, B.H.**, Holt, B.G., Lessard, J.P., Yessoufou, K. & Davies, T.J. (2017) Phylogenetic regionalization of marine plants reveals close evolutionary affinities among disjunct temperate assemblages. *Biological Conservation* 213: 351–356.
- 27. **Daru, B.H.**, van der Bank, M. & Yessoufou, K. (2017) Testing the reliability of the standard and complementary DNA barcodes for the monocot subfamily Alooideae from South Africa. *Genome* 60: 337–347.
- 26. Bezeng, B.S., Morales-Castilla, I., van der Bank, M., Yessoufou, K., **Daru, B.H.** & Davies, T.J. (2017) Climate change may reduce the spread of non-native species. *Ecosphere* 8: e01694.
- 25. Yessoufou, K., **Daru, B.H.**, Elansary, H.O., Rampedi, I. (2017) Integrating biogeography, threat, and evolutionary data to explore extinction on crisis in the taxonomic group of cycads. *Ecology and Evolution* 7: 2735–2746.
- 24. Bezeng, B.S., Davies, T.J., **Daru, B.H.**, Kabongo, R.M., Maurin, O., Orton, R.D., Yessoufou, K., van der Bank, H. & van der Bank, M. (2017) Ten years of barcoding at the African Centre for DNA barcoding. *Genome* 60: 629–638.

[2016]

- 23. Charles-Dominique, T., Davies, T.J., Hempson, G.P., Bezeng, B.S., **Daru, B.H.**, Kabongo, R.M., Maurin, O., Muasya, A.M., van der Bank, M. & Bond, W.J. (2016) Spiny plants, mammal browsers and the origin of African savannas. *Proceedings of the National Academy of Sciences USA* 113: E5572–E5579.
- 22. **Daru, B.H.** & le Roux, P.C. (2016) Marine protected areas are insufficient to conserve global marine plant diversity. *Global Ecology and Biogeography* 25: 324–334.
- 21. **Daru, B.H.**, van der Bank, M., Maurin, O., Yessoufou, K., Schaefer, H., Slingsby, J.A. & Davies, T.J. (2016) A novel phylogenetic regionalization of the phytogeographic zones of southern Africa reveals their hidden evolutionary affinities. *Journal of Biogeography* 43: 155–166.
- 20. **Daru, B.H.**, Berger, D.K. & van Wyk, A.E. (2016) Opportunities for unlocking the potential of genomics for African trees. *New Phytologist* 210: 772–778.
- 19. Davies, T.J., **Daru, B.H.**, van der Bank, M., Maurin, O. & Bond, W.J. (2016) Multiple routes underground? Frost alone cannot explain the evolution of underground trees. **New Phytologist** 209: 910–912.

[2015]

- 18. **Daru, B.H.**, van der Bank, M. & Davies, T.J. (2015) Spatial incongruence among hotspots and complementary areas of tree diversity in southern Africa. *Diversity and Distributions* 21: 769–780.
- 17. Yessoufou, K., **Daru, B.H.** & Muasya, A.M. (2015) Phylogenetic exploration of commonly used medicinal plants in South Africa. *Molecular Ecology Resources* 15: 405–413.
- Bello, A., Daru, B.H., Stirton, C.H., Chimphango, S.B.M., van der Bank, M., Maurin, O. & Muasya, A.M. (2015) DNA barcoding reveals microevolutionary signals in fire survival and regeneration strategies in southern African Psoraleoid legumes. AOB PLANTS 7: plv124.
- 15. **Daru, B.H.,** Yessoufou, K., Nuttman, C. & Abalaka, J. (2015) A preliminary study of bird use of fig *Ficus* species in Amurum Forest Reserve, Nigeria. *Malimbus* 37: 1–15.

[2014]

- 14. Maurin, O., Davies, T.J., Burrows, J.E., **Daru, B.H.**, Yessoufou, K., Muasya, A.M., Van der Bank, M. & Bond, W.J. (2014) Savanna fire and the origins of the "underground forests" of Africa. *New Phytologist* 204: 201–214.
- 13. Manning, J.C., Boatwright, J.S., **Daru, B.H.,** Maurin, O. & Van der Bank, M. (2014) A molecular phylogeny and classification of Asphodelaceae subfamily Alooideae: towards a resolution of the prickly issue of polyphyly in the Alooids. **Systematic Botany** 39: 55–74.
- 12. Yessoufou, K., Bamigboye, S.O., **Daru, B.H.** & Van der Bank, M. (2014) Evidence of constant diversification punctuated by a mass extinction in the African cycad. *Ecology and Evolution* 4: 50–58.
- 11. Iheanacho, H.E., Njobeh, P.B., Dutton, F.M., Steenkamp, P.A., Steenkamp, L., Mthombeni, J.Q., **Daru, B.H.** & Makun, A.H. (2014) Morphological and molecular identification of filamentous *Aspergillus flavus* and *A. parasiticus* isolated from compound feeds in South Africa. *Food Microbiology* 44: 180–184.
- 10. Yessoufou, K., Gere, J., **Daru, B.H.** & Van der Bank, M. (2014) Differences in evolutionary history translate into differences in invasion success of alien mammals in South Africa. *Ecology and Evolution* 4: 2115–2123.

[2013]

- 09. **Daru, B.H.,** Yessoufou, K., Mankga, L.T. & Davies, T.J. (2013) A global trend towards the loss of evolutionarily unique species in mangrove ecosystems. *PLoS ONE* 8: e66686.
- 08. **Daru, B.H.**, Manning, J.C., Boatwright, J.S., Maurin, O., Maclean, N., Schaefer, H., Kuzmina, M. & Van der Bank, M. (2013) Molecular and morphological analysis of subfamily Alooideae (Asphodelaceae) and the inclusion of *Chortolirion* in *Aloe*. *Taxon* 62: 62–76.
- 07. Kyalangalilwa, B., Boatwright, J.S., **Daru, B.H.,** Maurin, O. & Van der Bank, M. (2013) Phylogenetic position and revised classification of *Acacia s.l.* (Fabaceae: Mimosoideae) in Africa, including new combinations in *Vachellia* and *Senegalia*. *Botanical Journal of the Linnean Society* 172: 500–523.

[2012]

- 06. Yessoufou, K., **Daru, B.H.** & Davies, T.J. (2012) Phylogenetic patterns of extinction risk in the Eastern Arc ecosystems, an African biodiversity hotspot. *PLoS ONE* 7: e47082.
- 05. Van der Bank, H.F., Greenfield, R., **Daru, B.H.** & Yessoufou, K. (2012) DNA barcoding reveals micro-evolutionary changes and river system-level phylogeographic resolution of seven populations of African silver catfish, *Schilbe intermedius* (Siluriformes, Schilbeidae). *Acta Ichthyologica et Piscatoria* 42: 307–320.
- 04. Yessoufou, K., Abalaka, J., Van der Bank, M. & **Daru, B.H.** (2012) Fig-frugivore interactions follow a constrained Brownian motion model of evolution in an Important Bird Area, West Africa. *Israel Journal of Ecology and Evolution* 58: 39–51.

Publications in Peer-Reviewed Book Chapters

- 03. **Daru, B.H.** & Yessoufou, K. (2016) A search for a single DNA barcode for seagrasses of the world. In: *DNA barcoding in marine perspectives: assessment and conservation of biodiversity* (eds. by S. Trivedi, A.A. Ansari, K.S. Ghosh, H. Rehman), pp. 313–330. Springer International Publishing Switzerland. doi: 10.1007/978-3-319-41840-7 19
- 02. Gere, J., Yessoufou, K., **Daru, B.H.**, Mankga, L.T., Maurin, O. & Van der Bank, M. (2013) Incorporating *trnH-psbA* to the core DNA barcodes improves significantly species discrimination within southern African Combretaceae. In: *DNA barcoding: a practical tool for fundamental and applied biodiversity research* (eds. by Z.T. Nagy, T. Backeljau, M. De Meyer, K. Jordaens), ZooKeys 365, pp. 127–147. doi: 10.3897/zookeys.365.5728.

01. Mankga, L.T., Yessoufou, K., Moteetee, A.M., **Daru, B.H.** & Van der Bank, M. (2013) Efficacy of the core DNA barcodes in identifying processed and poorly conserved plant materials commonly used in South African traditional medicine. In: *DNA barcoding: a practical tool for fundamental and applied biodiversity research* (eds. by Z.T. Nagy, T. Backeljau, M. De Meyer, K. Jordaens), ZooKeys 365, pp. 215–233. doi: 10.3897/zookeys.365.5730.

Manuscripts Submitted or Under Review

01. **Daru, B.H.,** Karunarathne, P., Davies, T.J. & Schliep, K. A global biogeographic classification for vascular plants. *Nature Ecology and Evolution* (under review).

TEACHING AND ADVISING

TEXAS A&M UNIVERSITY-CORPUS CHRISTI

2021, Spring Semester: Systematics (graduate, ~6 participants)

2019, 2020, Spring Semester: Biogeography (graduate, 5-10 participants)

2021, Spring Semester: Plant Ecology (undergraduate, ~25 participants)

2021, Spring Semester: Biological Systematics & Phylogenetics (undergrad, ~9 students)

2020, 2021, Fall Semester: Science Communication (undergraduate, ~15 students)

2020, Spring Semester: Plant Taxonomy, Spring 2020 (undergraduate, ~7 students)

2020, Spring Semester: Biogeography, Spring 2020 (undergraduate, ~10 students)

A. P. LEVENTIS ORNITHOLOGICAL RESEARCH INSTITUTE, NIGERIA

2019, Summer Semester: Conservation Biology (graduate, ~10 participants)

UNIVERSITY OF PRETORIA, SOUTH AFRICA

2015-16: Molecular and Cell Biology (undergraduate, ~300-400 students)

UNIVERSITY OF JOHANNESBURG, SOUTH AFRICA

2015: R for Phylogenetics and Spatial Ecology (mixed participants, ~15 participants)

2010-16: Teaching Assistant: Plant Diversity (with Michelle van der Bank)

NATIONAL YOUTH SERVICE CORPS, NIGERIA

2008-2009: General High School Biology Teacher (Comprehensive Grammar Secondary School Ogbooro, Oyo State, Nigeria)

TRAINEES

Postdoctoral Researchers:

Gabriel Nakamura 2021-22; Postdoc at Universidade Federal do Rio Grande do Sul, Brazil Piyal Karunarathne 2019-20; Research Fellow at Uppsala University Sweden

PhD Students:

Paul Markley, Ph.D. in progress

Alex Aromin, Ph.D. in progress (joint with C. Lumibao)

Masters Students:

Arras Wiedorn 2020-21; Texas State Aquarium

Brianna Rock 2019-21; Associate Aquarist, SeaWorld Parks & Entertainment, Florida Samantha-Leigh Jamison 2015-17, Ph.D. student at University of Pretoria

Undergraduates, research for credit, work experience:

PRESENTATIONS

Honorary Lecture at International Conference

- **Invited Keynote Speaker**, "Understanding plant biogeography in the Anthropocene", Houston Regional Ecology and Evolution Student Symposium, Texas, USA, May 2021.
- **Invited Speaker**, Students & Careers Resource Symposium of *Ecological Society of America student section*, with the goal to discuss international student opportunities, 2021.
- **Invited Plenary Speaker**, "Putting phylogenetic biogeography on the map", 21st congress of the Association for the Taxonomic Study of the Flora of Tropical Africa (AETFAT), Nairobi Kenya, May 2017 (~300 participants).

Conference Presentations

- **Daru BH** (2022) GreenMaps: a Tool for Addressing the Wallacean Shortfall in the Global Distribution of Plants. *Conference of the Botanical Society of America, Anchorage, Alaska*.
- **Daru BH** (2020) GreenMaps: a Tool for Addressing the Wallacean Shortfall in the Global Distribution of Plants. 46th conference of the South African Association of Botanists, Qwagwa, Free State, South Africa.
- Rodriguez J & **Daru BH** (2020) Mismatches and congruencies in plant sampling biases between observations and vouchered specimens. *46th conference of the South African Association of Botanists, Qwaqwa, Free State, South Africa*.
- Snyder L & Daru BH (2019) How digitization efforts at small local herbaria add to the scientific community and predicting the impact of the Ruth O'Brien herbarium. *Global Change Symposium, Texas A&M University-Corpus Christi, December.*
- **Daru BH** et al. (2019) Spatial overlaps between the global protected areas network and terrestrial hotspots of evolutionary diversity, *Evolution Conference*, *Providence*, *USA*.
- **Daru BH** et al. (2019) Temperature controls phenology in continuously flowering Protea species of subtropical Africa, *Digital Data in Biodiversity Research Conference, Yale University, USA.*
- **Daru BH** et al. (2018) Sampling biases in herbarium specimens, *Ecological Society of America meeting, New Orleans, USA.*
- **Daru BH** (2017) Widespread phylogenetic homogenization in plant communities from anthropogenic change, *Congress of the Southern African Society for Systematic Biologists, Pretoria, South Africa.*
- **Daru BH**, le Roux PC (2016) Marine plant diversity hotspots, *International Biogeography Association: The Biogeography of Ecology Special Meeting, Beijing, China.*
- **Daru BH**, Elliott TL (2016) Are phylogenies always better at biogeographic regionalization? *The 42*^{1st} *SAAB conference, Bloemfontein, South Africa.*
- **Daru BH** (2015) Analysis of climate change on flowering phenology of South African *Protea* (Proteaceae), *The 41*^{1st} *SAAB conference, Venda, South Africa.*
- **Daru BH**, Holt BG, Lessard JP, Yessoufou K, Davies TJ (2015) Phylogenetic regionalization of seagrasses, *The 41*^{1st} *SAAB conference, Venda, South Africa.*
- **Daru BH**, van der Bank M, Maurin O, Yessoufou K, Schaefer H, Slingsby J, Davies TJ (2014) A phylogenetic regionalization of the phytogeographic zones of southern Africa, 17th Congress of the Society for Conservation GIS, Pacific Grove, California, USA.

- **Daru BH**, van der Bank M, Davies TJ (2014) Tree diversity hotspots in southern Africa, 10th Postgraduate Symposium Department of Botany, University of Johannesburg, South Africa.
- **Daru BH**, van der Bank M, Maurin O, Yessoufou K, Schaefer H, Slingsby J, Davies TJ (2014) A phylogenetic reclassification of the phytogeographic zones of southern Africa, 20th Congress of the Association for the Taxonomical Study of the Flora of tropical Africa, Stellenbosch. South Africa.
- **Daru BH**, van der Bank M, Maurin O, Yessoufou K, Schaefer H, Davies TJ (2013) A phylogenetic reclassification of the phytogeographic zones of southern Africa, *International Biogeography Association: The Geography of Species Association Special Meeting, Montréal, Canada.*
- **Daru BH**, van der Bank M, Maurin O, Yessoufou K, Schaefer H, Davies TJ (2013) A phylogenetic reclassification of the phytogeographic zones of southern Africa, *Ninth Postgraduate Symposium Department of Botany, University of Johannesburg, South Africa*.
- **Daru BH**, Yessoufou K, van der Bank M, Davies TJ (2013) Extinction risk in the Eastern Arc flora, 39th SAAB conference, Drakensberg, South Africa.
- **Daru BH**, Manning JC, Boatwright JS, Maurin O, van der Bank M (2012). Phylogeny of the subfamily Alooideae (Asphodelaceae), *Congress of Southern African Society for Systematic Biology (SASSB), Arniston, Cape Town, South Africa.*
- **Moderator**: DNA barcoding Webinar (2011): All-taxon biodiversity inventory projects at the African Centre for DNA Barcoding. Presented by Prof Michelle van der Bank.
- Daru BH, Maurin O, Maclean N, Bayer MB, van der Bank M (2011). Molecular phylogeny of Haworthia (Asphodelaceae): evidence from plastid and nuclear DNA sequences, Congress of Southern African Society for Systematic Biology (SASSB), Rhodes University, South Africa.
- **Daru BH**, Tilahun D, Osei-Bonsu I, Tambal R (2009). Does isolation influence herbivory, seed set and flower visits in the spread of *Lantana camara*? A test in Kibale, Uganda, *Conference of Nigerian Tropical Biology Association (NTBA), University of Ibadan, Nigeria*.
- **Daru BH** (2007). Species diversity and abundance of fig wasps in *Ficus umbellata* and *F. exasperata*, *Conference of the Ecological Society of Nigeria (EcSN)* Jos, Nigeria.

Posters

- **Daru BH**, Karunarathne P, Schliep K (2020) phyloregion: R package for biogeographic regionalization and spatial conservation. *Conference of South African Association of Botanists, Qwaqwa, South Africa*.
- **Daru BH**, Park DS, Willis CG, Kennedy J, Davis CC (2016) Assessing fine-scale sampling bias in herbarium specimens, *Botanical Society of America, Savannah Georgia, USA.*
- **Daru BH**, van der Bank M, Davies TJ (2015) A molecular phylogenetic analysis of tree diversity hotspots in southern Africa, 35th New Phytologist Symposium. The genomes of forest trees: new frontiers of forest biology Harvard University, USA.
- **Daru BH**, Yessoufou K, Boatwright JS, van der Bank M (2012). Ecological factors shaping distribution of *Lachnaea* spp. (Thymelaeaceae), *Spring Science Poster Competition by the Royal Society of South Africa, Johannesburg, South Africa.*
- **Daru BH,** Mwansat GS, Abalaka J, Imandeh GN (2008). Species diversity and abundance of fig wasps in *Ficus* species of Amurum Forest Reserve, Nigeria (Poster Presentation), *Students Conference on Conservation Science (SCCS), University of Cambridge, UK.*

INVITED SEMINARS AND LECTURESHIPS

(*invitation by graduate students)

- 2023 *Stanford Black Bioscience Organization, Stanford University.
- 2023 *Institute of Ecology and Evolution, University of Oregon.
- 2023 Department of Integrative Biology (Botany Lunch), UC Berkeley.
- 2022 Department of Biology, Stanford University.
- 2022 College of Agric & Env Sciences (African Scholar Lecture), University of South Africa.
- 2021 Department of Ecology and Evolution, Stony Brook University.
- 2021 Department of Biology, Stanford University.
- 2021 Carnegie Department of Plant Biology at Stanford.
- 2021 Elizade University, Nigeria, Department of Biological Sciences.
- 2020 Louisiana State University, Department of Biological Sciences
- 2020 San Francisco State University, Department of Biology.
- 2019 Texas A&M University-College Station, Dept of Ecology & Evolutionary Biology.
- 2019 University of Massachusetts-Boston, Department of Biology.
- 2019 A. P. Leventis Ornithological Research Institute Jos, Nigeria.
- 2019 Consortium of Northeastern Herbaria (neherbaria.org) at Yale University.
- 2019 Texas A&M University-Corpus Christi, Department of Mathematics & Statistics.
- 2018 Yale University, Department of Ecology and Evolutionary Biology.
- 2018 Texas A&M University Corpus-Christi, Department of Life Sciences.
- 2018 University of Central Oklahoma, Biology Department.
- 2017 Harvard University Herbaria Seminar Series.
- 2017 Arnold Arboretum of Harvard University Seminar Series.
- 2017 Postdoctoral Science Café of Harvard University Seminar Series.
- 2017 University of Pennsylvania, Department of Biology.
- 2017 Harvard University Herbaria Seminar Series.
- 2016 Harvard University, Conservation Biology.
- 2014 Harvard University, Department of Organismic and Evolutionary Biology
- 2014 University of California, Berkeley, Department of Integrative Biology
- 2014 University of Pretoria, South Africa, Department of Plant Science
- 2014 A. P. Leventis Ornithological Research Institute Jos, Nigeria
- 2013 University of Pretoria, South Africa, Department of Plant Science

AWARDS

Academic Recognition

- 2015 **Winner—New Phytologist Poster Prize \$150** at the 35th New Phytologist Symposium: The genomes of forest trees: new frontiers of forest biology, Harvard University, USA.
- 2014 **Best PhD Oral Presentation** (gold medal) at the 10th Annual Symposium, Department of Botany and Plant Biotechnology, University of Johannesburg, South Africa.
- 2013 **Best PhD Oral Presentation** (gold medal) at the 9th Annual Symposium, Department of Botany and Plant Biotechnology, University of Johannesburg, South Africa.
- Third Best Poster \$41 at the Royal Society of South Africa Spring Science Poster Competition, Delta Environmental Centre, Johannesburg, South Africa.
- 2011 **Best Oral presentation by a MSc student \$164** at the congress of Southern African Society for Systematic Biology (SASSB) 2011, Rhodes University, South Africa.

Additional Support

2010 Royal Society of London/National Research Foundation Bursary: Merit postgraduate scholarship for Masters in Botany and Plant Biotechnology,

University of Johannesburg, South Africa.

2008 Tropical Biology Association (TBA) Scholarship: Full scholarship with which I

participated on the 2008 TBA field course in Kibale Forest, Uganda.

PROFESSIONAL SERVICE

UNIVERSITY SERVICE Stanford University

2023 Biology Seminar Organization

Texas A&M University-Corpus Christi

2022	Search Committee: Dean College of Science position
2018	Search Committee: Tenure-track Assistant Professor position
2018-19	Life Sciences Department 'Journal Club Series: Trends in Global Change Biology'
2018-	Island Day, official campus preview event for prospective students and their families
2018-	Member of Biology and Marine Biology Faculty Committees
2018-20	College of Science and Engineering Scholarship and Award Committee
2019	Hosted speaker for Harte Research Institute speaker series
2019-	Representative of University Commencement ceremony

Editor for Scientific Journals

Associate Editor for American Journal of Botany (2021-2022).

Reviewing Editor for eLife (2020-2022).

Guest Editor for *Philosophical Transactions of the Royal Society B* for a theme issue: "Biological collections for understanding biodiversity in the Anthropocene" (2016-2019).

Peer-Review Services for Scientific Journals

Reviewer for: Nature, Nature Communications, Nature Ecology & Evolution, Proceedings of the National Academy of Sciences USA, Scientific Reports, eLife, Conservation Biology, Diversity and Distributions, Climate Change Ecology, Molecular Ecology, Global Ecology and Biogeography, Molecular Ecology Resources, African Journal of Ecology, South African Journal of Botany, Journal of Biogeography, Tropical Ecology, Phytotaxa, and Botany Letters.

Grant Panel Service

National Science Foundation Panel member:

- 1. Systematics and Biodiversity Science Program Panelist. May 2021.
- 2. Harnessing the Data Revolution (HDR): Institutes for Data-Intensive Research in Science and Engineering [NSF 21-519]. April, 2021.

Service to initiatives, community

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2018-	N/lombor of the	N Lavac-()klahama	Pagianal	Consortium of Herbaria
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2019- Member, IUCN's Task Force on Phylogenetic Diversity

2013-16 Website Manager, South African Association of Botanists (www.sabotany.co.za)

Professional Affiliation

2016-	Botanical	Society	of A	America
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2014- Society for Conservation GIS (geographic information systems)

- 2014- International Biogeography Society
 2013- Southern African Association of Botanists
 2010- Southern African Society for Systematic Biologists
 2008- Tropical Biology Association, Cambridge UK
- 2007- Nigerian Conservation Foundation2007- Ecological Society of Nigeria.

PROFESSIONAL DEVELOPMENT

- 2019 Certificate, Best Practices for Online Course Design, Texas A&M University-Corpus Christi.
- 2016 Royal Society Discussion Meeting: *New trends in evolutionary biology: biological, philosophical and social science perspectives.* The Royal Society House, London, UK.
- 2015 Certificate of participation in African Forest Forum training workshop on *African Forestry Experts on Forest Related International Agreements*, Mombasa, Kenya.
- 2014 Certificate in *Working with Geodatabase Topology,* advanced GIS course at Asilomar Conference Grounds, California, USA.
- 2012 Advanced GIS analytic course at the University of Johannesburg, South Africa.
- 2012 Toyota Enviro Outreach plant samples collection, Cape Floristic Region, South Africa.
- 2012 Advanced R statistics course in Ecology, University of Sheffield, UK.
- 2011 Toyota Enviro Outreach plant samples collection, Maputaland biodiversity hotspot.
- 2011 R workshop in Phylogenetics and Spatial Ecology, University of Cape Town, South Africa.
- 2009 Introduction to R in Ecology, A. P. Leventis Ornithological Research Institute, Nigeria.
- 2008 Introductory Course on Molecular Ecology/DNA Barcoding at Imperial College London, UK.
- 2008 Tropical Biology Association (TBA) Field course (08/2) in Kibale Forest, Uganda.