

Curriculum vitae

Tanay Bose PhD

Research Fellow

Section Editor, Mycological Progress

Forestry and Agricultural Biotechnology Institute (FABI) | Departments of Biochemistry, Genetics and Microbiology & Zoology and Entomology | University of Pretoria | 74 Lunnon Road, Hillcrest Pretoria 0002 Gauteng, South Africa

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Personal details:

Date of birth: 21 November 1985

Nationality: Indian

Marital status: Married

Languages: English, Hindi and Bengali

Education:

1. **Doctor of Philosophy** in Microbiology, Forestry and Agricultural Biotechnology Institute, University of Pretoria; Nov 2013- Jan 2018

Thesis title: *Phytophthora* species diversity associated with native and non-native forests in South Africa

Advisor: Prof Michael J Wingfield, University of Pretoria

Co-advisors: Prof Jolanda Roux, University of Pretoria; Prof Treena I Burgess, Murdoch University

2. **Master of Science** in Botany, specialization in 'Taxonomy and Molecular Systematics', University of British Columbia; Sep 2010- Aug 2013 (*Cum Laude*)

Thesis title: Taxonomy and phylogeny of mitosporic Capnodiales and description of a new sooty mold species, *Fumiglobus pieridicola*, from British Columbia, Canada

Advisor: Prof Mary L Berbee, University of British Columbia

Co-advisor: Dr Don R Reynolds, University Herbarium, University of California, Berkeley

3. **Master of Science** in Botany, specialization in 'Plant Pathology', Presidency College, University of Calcutta, Jul 2007- Jun 2009 (*Cum Laude*; Gold medallist)

Thesis title: Study of vascular wilt disease of *Chlorophytum nepalense* (Lindley) Baker

Advisor: Dr Sumita Ghosh, Presidency College, University of Calcutta

Co-advisor: Dr Samarendranath Ghosh, Presidency College, University of Calcutta

4. **Bachelor of Science (Honours)** in Botany, University of Calcutta, Aug 2004- Jul 2007 (Minor subjects: Zoology, and Chemistry)

Current researches:

1. Microbial diversity associated with natural and commercial forestry environments in South Africa (emphasizing on oomycetes, fungi and bacteria).
2. Microbial diversity associated with the gut and frass of economically important insect pests in South Africa.
3. Selection of fungal and oomycetes disease tolerant/resistant varieties of commercially important tree species from South Africa using long-term pathogenicity trials.
4. Isolation and description of novel oomycetes and fungi from various habitats in South Africa and abroad.
5. Mycorrhizal diversities associated with endangered and endemic plants from South Africa.
6. Diversity of ophiostomatoid and endolichenic fungi in China (Collaborator Dr Runlei Chang, Shandong Normal University, China)
7. Taxonomic revision of *Rhizoctonia* species complex (with Prof Marco Thines, Senckenberg Biodiversity and Climate Research Centre, Goethe University, Frankfurt, Germany)

Work experiences:

1. University of Pretoria postdoctoral fellowship in plant microbiome research | August 2023 - ongoing
2. Forestry South Africa funded Postdoctoral Fellowship in plant health screening | Jan 2021 – July 2022
3. Sappi Forests funded postdoctoral fellowship | April 2018 – December 2020
4. Doctoral Student | Forestry and Agricultural Biotechnology Institute, University of Pretoria | Nov 2013 – Jan 2018
5. Instructor for courses in microbiology and molecular biology | University of Pretoria | Jan 2016 – Dec 2018
6. Scientific Mentor | DST-NRF Centre for Excellence in Plant Health Biotechnology (CTHB) | Mar 2014 – Mar 2018
7. Research assistant | Dr Almuth Hammerbacher (Fungal and Insect Biochemistry and Host-Pathogen Interaction | Jan 2017 to Dec 2017
8. Technician | Plant Diagnostic Clinic, Forestry and Agricultural Biotechnology Institute, University of Pretoria | Nov 2013 to Dec 2016
9. Chairman | Protea Student Residence, Department of Residence Affairs and Accommodation (TuksRes), University of Pretoria | Aug 2015 – Aug 2017
10. Chairman | TuksRes Postgraduate Research Committee, Department of Residence Affairs and Accommodation (TuksRes), University of Pretoria | Mar 2017 – Mar 2018
11. Master of Science | Department of Botany, University of British Columbia, Canada | Aug 2010 – Sep 2013
12. Instructor | Courses in plants and fungi, University of British Columbia, Canada | Sep 2010 to Jul 2013
13. Master of Science | Department of Botany, University of Calcutta, India | July 2007 – Aug 2009

Teaching experiences:

1. MBY 251 (lectures on growth, replication and survival of bacteria, energy sources, harvesting from light versus oxidation, regulation of catabolic pathways, chemotaxis, nitrogen metabolism, iron-scavenging) - Department of Biochemistry, Microbiology, Genetics, University of Pretoria, 2024-ongoing
2. PLG 483 (lectures advanced plant disease control) – Department of Plant and Soil Sciences, University of Pretoria, 2024-ongoing
3. GKD 420 (Soil fertility, soil microbiology, and plant nutrition) – Department of Plant and Soil Sciences, University of Pretoria, 2023 (soil-borne plant pathogen and disease management strategies)
4. PLG 251 (Lab course) - Department of Biochemistry, Microbiology, Genetics, University of Pretoria, 2022
5. MCP 751 (Advanced research methods in Genetics, Microbiology and Biochemistry) - Department of Microbiology, University of Pretoria, 2017
6. MBY 251 (Bacteriology lab course), Department of Microbiology, University of Pretoria, 2016
7. Scientific Mentor at DST-NRF Centre for Excellence in Tree Health Biotechnology (CTHB), 2014-2018
8. BIOL 209 (non-vascular plants and fungi) - 2010-2013, Department of Botany, University of British Columbia
9. BIOL 210 (vascular plant) - 2010-2013, Department of Botany, University of British Columbia

Pedagogical courses:

1. Instructional Skills Program for International Teaching Assistants
2. Biology TA Professional Development (BIOTAP) Certificate
3. UPstarters (Faculty of Natural and Agricultural Sciences, University of Pretoria) - Support programme for early-stage academic on teaching, post-graduate supervision and career development.

Post-graduate student supervisions:

Students	Institutions	Degree	Year started	Year finished	Primary advisor	Co-advisor
Lola Bakhareva	University of British Columbia	B.Sc. (Honours)	2012	2012	Mary L Berbee	Tanay Bose
Ellca Rathore	University of British Columbia	B.Sc. (Honours)	2012	2012	Mary L Berbee	Tanay Bose
Jacques E Theron	University of Pretoria	DST-NRF, CPHB Mentorship student	2014	2015	Tanay Bose	-
Robert J van Vuuren	University of Pretoria	DST-NRF, CPHB Mentorship student	2015	2017	Tanay Bose	-
Modjadji C Makwela	University of Pretoria	B.Sc. (Honours)	2017	2017	Almuth Hammerbacher	Tanay Bose
Modjadji C Makwela	University of Pretoria	M.Sc.	2018	2021	Almuth Hammerbacher	Tanay Bose
Khwathelani M Takalani	University of Pretoria	M.Sc.	2017	Dropped out	Teresa Coutinho	Tanay Bose
Bianca L Jones	University of Pretoria	B.Sc. (Honours)	2018	2018	Almuth Hammerbacher	Tanay Bose

Patience Modiba	University of Pretoria	M.Sc.	2018	2020	Teresa Coutinho	Tanay Bose
Kgetise P Malele	University of Pretoria	DST-NRF, CPHB Mentorship student	2021	2021	Almuth Hammerbacher	Tanay Bose
Tiphany Nkomo	University of Pretoria	B.Sc. (Honours)	2021	2021	Almuth Hammerbacher	Tanay Bose
Tiphany Nkomo	University of Pretoria	M.Sc.	2022	Ongoing	Almuth Hammerbacher	Tanay Bose Brenda Wingfield
Hendrik Johannes Esterhuizen	University of Pretoria	M.Sc.	2020	Ongoing	Almuth Hammerbacher	Tanay Bose Bernard Slippers Anna Bosman
Brittney-Aidan Jamieson	University of Pretoria	B.Sc. (Honours)	2023	2023	Tanay Bose	Almuth Hammerbacher
Thabo Moabi	University of Pretoria	M.Sc.	2023	Ongoing	Honest Machezano	Tanay Bose Pride Mudavanhu
Future Machate	University of Pretoria	PhD	2019	Ongoing	Abel Ramoelo (UP) Moses Azong Cho (CSIR)	Tanay Bose (UP) Almuth Hammerbacher (UP) Sabelo Madonsela (CSIR)
Brittney-Aidan Jamieson	University of Pretoria	M.Sc.	2024	Ongoing	Tanay Bose	Almuth Hammerbacher

Research grants:

1. University of Pretoria Post-doctoral grant (August 2023-July 2026) – ZAR 900,000
2. National Research Foundation of South Africa (Grant No: 137971) “Effects of Climate, Chemistry, and Endophytes on Eucalyptus Health” (co-applicant with Prof A Hammerbacher)– ZAR 975,000
3. University of Pretoria, Vice-Principal Funding (2019) – ZAR 50,000

Awards:

1. Forestry and Agricultural Biotechnology Institute - Best Postdoc Publication Award 2023.
2. Forestry South Africa funded postdoctoral fellow 2021-2025 on plant health screening.
3. Sappi funded postdoctoral fellow 2018-2021 on *Eucalyptus* tree health.
4. The University of Pretoria, TYRLP Fellow 2018 (Tuks Young Research Reader Programme).
5. Forestry and Agricultural Biotechnology Institute - Best Mentorship Award 2016.
6. Forestry and Agricultural Biotechnology Institute - Best Website Award 2016.
7. Recipient of Biology Teaching Assistant Professional Development (BioTAP) Certificate 2013, Department of Botany, University of British Columbia.
8. Gold Medal in Master of Science in Botany, Presidency College, University of Calcutta – 2009.

Memberships:

1. Mycological Society of America (MSA)
2. Mycological Society of India (MSI)
3. South African Society for Plant Pathology (SASPP)

4. International Society for Fungal Conservation (ISFC)

Peer reviewing of manuscripts and research proposals:

1. Associate Editor for Oomycota and Microbial Diversity, Mycological Progress ([LINK](#))
2. Reviewer for ISI-rated journal in microbial diversity, mycology and plant pathology ([web of science](#))
3. Reviewer of MSc and PhD funding proposals submitted to South Africa's National Research Foundation
4. Examiner of M.Sc. theses from South African universities.

Administration

1. Member of the Management Committee of the Tree Protection Cooperative Programme and Centre of Excellence in Plant Health Biotechnology, FABI | 2024–present
2. Representative of Postdoctoral Fellows on the Management Committee of the Forestry and Agricultural Biotechnology Institute (FABI) | 2023–present

Research visits:

1. Visiting researcher, Prof. Dominik Begerow's Laboratory, AG Geobotanik, Ruhr Universität of Bochum – (15 June – 17 August 2019)
2. Visiting researcher, Prof Treena Burgess' Laboratory, Centre for *Phytophthora* Research and Management (CPSM), Department of Biological Science, Murdoch University, Perth, Western Australia – (1 July 2014 – 30 September 2014)

Publications:

[Tanay Bose Google Scholar Profile](#) (click) | * = corresponding author; yellow highlight = current year publication; blue highlight = under peer review

1. **Bose T***, Mahomed TG, Mbatha KC, Joubert JC, Hammerbacher A* (2023) Tissue ontogeny and chemical composition influence the bacterial biodiversity in the wood and shoot tip in *Populus nigra*. Plant Biology (under review)
2. Chang R, Zhang M, Zhu Q, Zhao L, Ding M, **Bose T***, Zhao G* (2023) *Salinicola tamaricis*, an endophytic bacterium, mitigates manganese contamination and enhances salinity tolerance in *Suaeda salsa*. Frontiers in Microbiology (under review)
3. **Bose T***, Spies CFJ, Hammerbacher A, Coutinho TA (2023) *Phytophthora*: an underestimated threat to agriculture, forestry and natural ecosystems in Sub-Saharan Africa. Mycological Progress 22:78
4. Crous PW, Osieck ER, Shivas RG, Tan YP, Bishop-Hurley SL, Esteve-Raventós F, Larsson E, Luangsa-ard JJ, Pancorbo F, Balashov S, Baseia IG, Boekhout T, Chandranayaka S, Cowan DA, Cruz RHSF, Czachura P, De la Peña-Lastra S, Dovana F, Drury B, Fell J, Flakus A, Fotedar R, Jurjević Ž, Kolecka A, Mack J, Maggs-Kölling G, Mahadevakumar S, Mateos A, Mongkolsamrit S, Noisripoom W, Plaza M, Overy DP, Piątek M, Sandoval-Denis M, Vauras J, Wingfield MJ, Abell SE, Ahmadpour A, Akulov A, Alavi F, Alavi Z, Altes A, Alvarado P, Anand G, Ashtekar N, Assyov B, Banc-Prandi G, Barbosa KD, Barreto GG, Bellanger J-M, Bezerra JL, Bhat DJ, Bilanski P, **Bose T**, Bozok F, Chaves J, Costa-Rezende DH, Danteswari C, Darmostuk V, Delgado G, Denman S, Eichmeier A, Etayo J, Eyssartier G, Faulwetter S, Ganga KGG, Ghosta Y, Goh J, Góis JS, Gramaje D, Granit L, Groenewald M, Gulden G, Gusmão LFP, Hammerbacher A, Heidarian Z, Hywel-Jones N, Jankowiak R, Kaliyaperumal M, Kaygusuz O, Kezo K, Khonsanit A, Kumar S, Kuo CH, Læssøe T, Latha KPD, Loizides M, Luo SM, Maciá-Vicente JG, Manimohan P, Marbach PAS, Marinho P, Marney TS, Marques G, Martín MP, Miller AN, Mondello F, Moreno G, Mufeeda KT, Mun HY, Nau T, Nkomo T, Okrasińska A, Oliveira JPAF, Oliveira RL, Ortiz DA, Pawłowska J, Pérez-De-Gregorio MÀ, Podile AR, Portugal A, Privitera N, Rajeshkumar KC, Rauf

- I, Rian B, Rigueiro-Rodríguez A, Rivas-Torres GF, Rodríguez-Flakus P, Romero-Gordillo M, Saar I, Saba M, Santos CD, Sarma PVSRN, Siquier JL, Sleiman S, Spetik M, Sridhar KR, Stryjak-Bogacka M, Szczepańska K, Taşkın H, Tennakoon DS, Thanakitpipattana D, Trovao J, Türkekul İ, van Iperen AL, van 't Hof P, Vasquez G, Visagie CM, Wingfield BD, Wong PTW, Yang WX, Yasar M, Yarden O, Yilmaz N, Zhang N, Zhu YN, Groenewald JZ (2023) Fungal Planet description sheets: 1478–1549. *Persoonia* 50:158-310
5. Chang R, Wang Y, Liu Y, Wang Y, Li S, Zheng X, **Bose T***, Si H* (2023) Nine new species of black yeast-like lichenicolous fungi from the genus *Cladophialophora* (Chaetothyriales) from two different climatic zones of China. *Frontiers in Microbiology* 14:1191818.
 6. **Bose T***, Hammerbacher A, Slippers B, Roux, Wingfield MJ (2023) Continuous replanting could degrade soil health in short-rotation plantation forestry. *Current Forestry Reports* 9:230–250
 7. Si HL, Su Y, Wang Y, **Bose T***, Chang RL* (2022) The effects of co-culture on the expression of selected PKS genes in the lichenized fungus *Xanthoparmelia taractica*. *Mycological Progress* 22:42
 8. Si H, Wang Y, Liu Y, Li S, **Bose T***, Chang RL* (2023) Fungal diversity associated with thirty-nine lichen species revealed a new genus of endolichenic fungi, *Intumescencia* gen. nov. (Teratosphaeriaceae). *Journal of Fungi* 9:423.
 9. **Bose T***, Hammerbacher A, Jones W, Roux J, Slippers B, Wingfield MJ (2023.) Hybrid vigour in *Eucalyptus* increases resistance against *Phytophthora* root-rot. *Mycological Progress* 22:24.
 10. **Bose T***, Vivas M, Slippers B, Roux J, Kemler M, Begerow D, Witfeld F, Brachmann A, Dovey S, Wingfield MJ (2023). Retention of post-harvest residues enhances soil fungal biodiversity in *Eucalyptus* plantations. *Forest Ecology and Management* 532:120806.
 11. **Bose T***, Hammerbacher A (2023). The first report of *Phytophthora multivesiculata* causing black rot of *Cymbidium* from South Africa. *Plant Disease* 107:588.
 12. Makwela MC, Hammerbacher A*, Vivas M, Coetzee MPA, Wingfield BD, van Ede G, **Bose T** (2022). Uncovering the mycorrhizal community of two *Habenaria* orchids in South Africa. *South African Journal of Botany* 146:856-863.
 13. Makwela MC, Hammerbacher A*, Coetzee MPA, Wingfield BD, van Ede G, **Bose T** (2022). Fungal diversity associated with the rhizosphere soil of *Brachycorythis conica* subsp. *transvaalensis*, a critically endangered and endemic terrestrial orchid from South Africa. *South African Journal of Botany* 146:807-814.
 14. Chang RL, Cao W, Wang Y, Liu Y, Li X, **Bose T***, Si H* (2022). *Melanodevriesia*, a new genus of endolichenic oleaginous black yeast recovered from the Inner Mongolia Region of China. *FUSE* 9:1-9.
 15. Si HL, Zeng XX, Li XC, Su YM, **Bose T***, Chang RL* (2021) *Dlhawksworthia flavoparmeliae* sp. nov., a new endolichenic fungi from Phaeosphaeriaceae. *Phytotaxa* 525:51-58.
 16. Chang RL, Zhang X, Si H, Zhao G, Yuan X, Liu T, **Bose T**, Dai M* (2021). Ophiostomatoid species associated with pine trees (*Pinus* spp.) infested by *Cryphaluspiceae* from eastern China, including five new species. *MycoKeys* 83:181-206
 17. Si HL, Su YM, Zheng XX, Ding MY, **Bose T**, Chang RL* (2021). Phylogenetic and morphological analyses of *Coniochaeta* isolates recovered from Inner Mongolia and Yunnan revealed three new endolichenic fungal species. *MycoKeys* 83:105-121.
 18. **Bose T***, Hulbert JM, Burgess TI, Paap T, Roets F, Wingfield MJ (2021) Two novel *Phytophthora* species from the southern tip of Africa. *Mycological Progress* 20:755–767.

19. Põlme S*, Abarenkov K, Henrik Nilsson R, Lindahl BD, Clemmensen KE, Kauserud H, Nguyen N, Kjølner R, Bates ST, Baldrian P, Frøslev TG, Adojaan K, Vizzini A, Suija A, Pfister D, Baral H-O, Järv H, Madrid H, Nordén J, Liu J-K, Pawlowska J, Põldmaa K, Pärtel K, Runnel K, Hansen K, Larsson K-H, Hyde KD, Sandoval-Denis M, Smith ME, Toome-Heller M, Wijayawardene NN, Menolli N, Reynolds NK, Drenkhan R, Maharachchikumbura SSN, Gibertoni TB, Læssøe T, Davis W, Tokarev Y, Corrales A, Soares AM, Agan A, Machado AR, Argüelles-Moyao A, Detheridge A, de Meiras-Ottoni A, Verbeken A, Dutta AK, Cui B-K, Pradeep CK, Marín C, Stanton D, Gohar D, Wanasinghe DN, Otsing E, Aslani F, Griffith GW, Lumbsch TH, Grossart H-P, Masigol H, Timling I, Hiiesalu I, Oja J, Kupagme JY, Geml J, Alvarez-Manjarrez J, Ilves K, Loit K, Adamson K, Nara K, Küngas K, Rojas-Jimenez K, Bitenieks K, Irinyi L, Nagy LL, Soonvald L, Zhou L-W, Wagner L, Aime MC, Öpik M, Mujica MI, Metsoja M, Ryberg M, Vasar M, Murata M, Nelsen MP, Cleary M, Samarakoon MC, Doilom M, Bahram M, Hagh-Doust N, Dulya O, Johnston P, Kohout P, Chen Q, Tian Q, Nandi R, Amiri R, Perera RH, dos Santos Chikowski R, Mendes-Alvarenga RL, Garibay-Orijel R, Gielen R, Phookamsak R, Jayawardena RS, Rahimlou S, Karunarathna SC, Tibpromma S, Brown SP, Sepp S-K, Mundra S, Luo Z-H, **Bose T**, Vahter T, Netherway T, Yang T, May T, Varga T, Li W, Coimbra VRM, de Oliveira VRT, de Lima VX, Mikryukov VS, Lu Y, Matsuda Y, Miyamoto Y, Kõljalg U, Tedersoo L (2021). FungalTraits: a user-friendly traits database of fungi and fungus-like stramenopiles. *Fungal Diversity* 105:1–16.
20. **Bose T***, Wingfield MJ, Roux J, Burgess TI (2021) *Phytophthora* species associated with soils and roots of native and non-native trees in South Africa. *Microbial Ecology* 81: 122–133.
21. **Bose T***, Roux J, Burgess TI, Shaw C, Wingfield MJ (2019) Pathogenicity of five *Phytophthora* spp. on two important non-native plantation tree species in South Africa. *Forest Pathology* 49: e12560.
22. **Bose T***, Wingfield MJ, Roux J, Vivas M, Burgess TI (2018). Community composition and distribution of *Phytophthora* species across adjacent native and non-native forests of South Africa. *Fungal Ecology* 36:17-25.
23. **Bose T***, Burgess TI, Roux J, Wingfield MJ (2017) *Phytophthora alticola*; revised description based on new collections and a neotype. *Sydowia* 69:161-170.
24. Burgess TI*, White D, McDougall K, Garnas J, Dunstan W, Santiago C, Carnegie A, Warboys S, Cahill D, Vettraino AM, Stukely M, Liew ECY, Paap T, **Bose T**, Migliorini D, Williams B, Brigg F, Crane C, Rudman T, Hardy GESTJ (2016). Distribution and diversity of *Phytophthora* across Australia. *Pacific Conservation Biology* 23:1-13.
25. Rahimlou S*, Babaeizad V, **Bose T**, Sayari M (2016) Determination of lignin-modifying enzymes (LMEs) in *Hyphodermella* species using biochemical and molecular techniques. *Mycologia Iranica* 3: 57-63.
26. Rahimlou S*, **Bose T**, Babaeizad V, Sayari M, Tajick M (2015). Molecular data confirm mitosporic state of *Hyphodermella rosae* (Phanerochaetaceae) as the pathogen of rosaceous fruits in northern Iran. *Sydowia* 67:189-196.
27. **Bose T**, Reynolds DR, Berbee ML* (2014). Common, unsightly, and until now undescribed: *Fumiglobus pieridicola* sp. nov. a sooty mold infesting *Pieris japonica* from western North America. *Mycologia* 106: 111-114.
28. **Bose T***, Ghosh S, Ghosh SN (2010). First report of *Fusarium pallidoroseum* causing wilt disease on *Chlorophytum nepalense* (Lindley) Baker. *Journal of Mycopathological Research* 48: 111-114.

Conferences:

Oral presentations:

1. **Bose T**, Hammerbacher A, Jones W, Roux J, Slippers B, Wingfield MJ (2022) Does the severity of Phytophthora root-rot vary between genotypes of *Eucalyptus nitens*? 52nd Congress of the Southern African Society for Plant Pathology. Future Africa, University of Pretoria, South Africa (01-03 August 2022)
2. Esterhuizen HJ, **Bose T**, Slippers B, Hammerbacher A (2022) A non-destructive technique for early detection of Phytophthora root rot using hyperspectral leaf reflectance. 52nd Congress of the Southern African Society for Plant Pathology. Future Africa, University of Pretoria, South Africa (01-03 August 2022)
3. **Bose T**, Hammerbacher A, Jones W, Roux J, Slippers B, Wingfield M J (2022) Hybrid vigour in *Eucalyptus* increases resistance against Phytophthora root-rot. 10th Meeting of the IUFRO Working Party 7.02.09 Phytophthora in Forest and Natural Ecosystems. University of California, Berkeley, The USA (19 - 25 June 2022)-*Invited speaker*
4. **Bose T**, Slippers B, Roux J, Kemler M, Vivas M, Begerow D, Dovey S, Wingfield MJ (2021) Soil microbiome - a tool for improving soil health in South African plantations. 32nd Annual Meeting of the Tree Protection Co-operative Programme (TPCP) and DST/NRF Centre of Excellence in Tree Health Biotechnology (CTHB). University of Pretoria, South Africa (04 May 2021)
5. **Bose T**, Wingfield MJ, Roux J, Vivas M, Burgess TI (2019) *Phytophthora* species Associated with roots and soils from native and non-native forestry environments in South Africa. 9th Meeting of the IUFRO Working Party 7.02.09 Phytophthora in Forest and Natural Ecosystems. La Maddalena, Sardinia, Italy (18-25 October 2019)
6. Aghighi S, Sistani F, Lori Z, Sarikhan S, **Bose T** (2019) Diversity of oomycetes associated with declining *Pinus* spp. and *Cupressus* spp. in Kerman Province, Iran. 9th Meeting of the IUFRO Working Party 7.02.09 Phytophthora in Forest and Natural Ecosystems, La Maddalena, Sardinia, Italy (18-25 October 2019)
7. **Bose T**, Wingfield MJ, Roux J, Slippers B (2019) Replanting syndrome in forestry: What is the evidence? 30th Annual Meeting of the Tree Protection Co-operative Programme (TPCP) and DST/NRF Centre of Excellence in Tree Health Biotechnology (CTHB). University of Pretoria, South Africa (13-15 May 2019)
8. Makwela MC, Hammerbacher A, **Bose T** (2019) Community composition of mycorrhizae associated with endemic and endangered South African orchids. 4th Conference of the Wild Orchid Society of Southern Africa (WOSA4). Gooderson's Drakensberg Gardens Hotel, South Africa (25 - 27 January 2019)
9. **Bose T**, Roux J, Burgess TI, Shaw C, Wingfield MJ (2019) Re-evaluating the susceptibility of *Eucalyptus grandis* and *Acacia mearnsii* to five common *Phytophthora* species in South Africa. 51st Congress of the Southern African Society for Plant Pathology. Club Mykonos, Langebaan, South Africa (20 - 24 January 2019)
10. Makwela MC, Hammerbacher A, **Bose T** (2018) Identification of mycorrhizae species associated with the endemic South African orchid *Habenaria barbertonii*. 3rd Conference of the Wild Orchid Society of Southern Africa (WOSA3). Dullstroom, South Africa (19 - 21 January 2018)
11. **Bose T**, Roux J, Wingfield MJ, Burgess TI (2018) *Phytophthora* spp. in natural forests and commercial plantations in South Africa. 29th Annual Meeting of the Tree Protection Co-operative Programme (TPCP) and DST/NRF Centre of Excellence in Tree Health Biotechnology (CTHB). University of Pretoria, South Africa (14-16 May 2018)

12. **Bose T**, Roux J, Wingfield MJ, Burgess TI (2017) The hidden *Phytophthora* species: Threats to the future of plantation forestry in South Africa. 28th Annual Meeting of the Tree Protection Co-operative Programme (TPCP) and DST/NRF Centre of Excellence in Tree Health Biotechnology (CTHB). University of Pretoria, South Africa (15-17 May 2017)
13. **Bose T**, Roux J, Wingfield MJ, Burgess TI (2017) Do *Phytophthora* species move from natural forest to plantations of non-native trees in South Africa? 8th Meeting of the IUFRO Working Party 7.02.09 Phytophthora in Forest and Natural Ecosystems. Sa Pa, Vietnam (18-25 March 2017)
14. **Bose T**, Wingfield MJ, Roux J, Olivier-Espejel S, Burgess TI (2017) Are natural forests the source of *Phytophthora* species in plantations of non-native trees in South Africa? 50th Conference of South African Society for Plant Pathology (SASPP). Champagne Sports Resort, Drakensberg, South Africa (15-19 January 2017)
15. **Bose T**, Reynolds DR, Berbee ML (2013) Phylogeny of mitosporic Capnodiales and description of a new sooty mold species *Fumiglobus pierisicolus* from British Columbia, Canada. Joint Meeting of the American Phytopathological Society and the Mycological Society of America (APS and MSA). Austin, the United States of America (10 -14 August 2013)

Poster presentations:

1. Paap T, Balocchi, **Bose T**, Wingfield M (2023) A diverse range of *Phytophthora* species recovered from two South African botanical gardens. 12th International Congress Of Plant Pathology. Lyon, France (20-25 August 2023).
2. Maswanganyi K, **Bose T**, Hammerbacher A (2021) Stress-induced changes in the microbial community of *Populus nigra*. 36th Annual Meeting of the International Society of Chemical Ecology. Stellenbosch, South Africa (5-10 September 2021)
3. **Bose T**, Wingfield MJ, Roux J, Vivas M, Burgess TI (2020) Live plant baiting – a tool to understand host specificity in soil-borne *Phytophthora* species. 88th Annual Meeting of the Mycological Society of America. MSA Virtual Meeting: Mycology from the Cloud (22 July 2020)
4. **Bose T**, Roux J, Burgess TI, Shaw C, Wingfield MJ (2019) Pathogenicity of *Phytophthora* species on two commercially important non-native tree species from South Africa. 9th Meeting of the IUFRO Working Party 7.02.09 Phytophthora in Forest and Natural Ecosystems, La Maddalena, Sardinia, Italy (18-25 October 2019)
5. Modiba MP, **Bose T**, Coutinho TA (2019) Identification of Oomycetes associated with plum orchards in the Western Cape province of South Africa. 51st Congress of the Southern African Society for Plant Pathology. Club Mykonos, Langebaan, South Africa (20 - 24 January 2019)
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Teamwork and collaboration

Year	Researcher	Purpose
2024 - present	Dr Tyler Bourret	Phytophthora diversity and detection
	US Department of Agriculture (USDA) Agricultural Research Service (ARS) College Park, Maryland, United States	

2022-present	Dr Christoffel FJ Spies Plant Microbiology, Agricultural Research Council, Plant Health and Protection (ARC-PHP), Stellenbosch, South Africa	Phytophthora diversity and detection
2022 - present	Prof Marco Thines, Senckenberg Biodiversity and Climate Research Centre, Goethe University Frankfurt	Taxonomy of Ceratobasidiaceae and Oomycota
2017 - present	Prof Leho Tedersoo & Dr Sergio Polme, University of Tartu, Estonia	FungalTrait databases
2021 - present	Dr Runlei Chang, Shandong Normal University, China	Taxonomy of phytopathogenic and endolichenic fungi in China
2016 - present	Prof Almuth Hammerbacher, University of Pretoria, South Africa	Orchid mycorrhizae, various Forestry South Africa projects on disease resistance, hyperspectral sensing
2015 - present	Dr. Maria Vivas, University of Extremadura, Spain	Microbial diversity
2018 - present	Dr. Martin Kemler, University of Hamburg, Germany	Microbial diversity
2018 - present	Prof Dominik Begerow, University of Hamburg, Germany	Microbial diversity
2014 - present	Prof Treena Burgess, Murdoch University	<i>Phytophthora</i> biosystematics and diversity
2018-2020	Prof Teresa Coutinho, University of Pretoria	Diversity of oomycetes associated with stone fruits in South Africa
2010-2014	Prof Mary Berbee, University of British Columbia	Molecular systematics of Capnodiales fungi
2010 - 2013	Dr Don R Reynolds, University of California Berkeley	Systematics of epiphyllous fungi

References:

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