

January 2015

# UNIVERSITY OF PRETORIA

# CURRICULUM VITAE

# MARTIN PETRUS ALBERTUS COETZEE

# 1. BIOGRAPHICAL SKETCH

1.1 GENERAL	INFORMATION										
Surname	Coetzee										
First names	Martin Petrus Albertus			ID Number		7306215005087					
Citizenship	Citizenship RSA			Tit	le	Dr		Female		Male	Х
Place of birth	Germiston, South Africa			Date of birth		21 June 1973					
Population group	African	Coloured	Indian		Whi	te	X	<b>Other</b> (Please sp	pecify)		
Department	Genetics			Position		Senior lecturer					
Direct Telephone	012 420 4826			Direct Telefax		012 420 3960					
E-mail	martin.coetzee (at) fabi.up.ac.za										
Date of appointment	29 November 2009 Permanent full- time X				Tempora time	ary full-					

1.2 ACADEI		OBTAINED		
Degree/ Diploma	Field of study	Higher education institution	Year	Distinctions
B.Sc.	Biological Science	University of the Free State	1994	Microbiology and Biochemistry
B.Sc.Hons	Microbiology	University of the Free State	1995	Yes
M.Sc.	Microbiology	University of the Free State	1997	Yes
Ph.D.	Genetics	University of Pretoria	2004	n/a

1.3 WORK EXPERIENCE TO DA	ATE	
Name of employer	Capacity and/or type of work	Period From (mm//yy to <i>mm//yy</i> )
UP – Claude Leon Scholarship	Post doctoral fellow	01/04 to 12/05
UP	Research fellow	01/06 to 12/09
UP	Senior Lecturer	11/09 to current

# 2. TEACHING ACTIVITIES

Course	Level (e.g. second year, Masters)	Self developed (Yes or No)
Phylogenetic course for bioinformatics at SANBI (2008)	M.Sc. and PhD	Yes
Phylogenetic course for bioinformatics at Stellenbosch University (2009)	M.Sc. and PhD	Yes
Phylogenetic course for bioinformatics at the High Performance Computational Centre, Cape Town (2010)	M.Sc. and PhD	Yes
Genomes (GTS352), UP (2010, 2011, 2012, 2013)	3d Year students	Developed certain aspects of the course
Genome evolution and Phylogenetics (GTS354), UP (2014)	3d Year students	As part of a committee

2.2 Other education and pedagogic of	courses presented	
Course	Year	Institution
GST352	2010 - 2013	UP

# 3. TEACHING OUTPUTS

#### 3.1 Educational publications and products

Provide full details including full titles, names of all the authors, publishers, dates, page numbers etc. Specify your exact contribution to the publications or products. Note that the publications here should be of a didactic nature e.g. articles in educational publications, papers presented at educational conferences, etc. A summary and description of educational products developed can be provided (e.g. study guides, learning materials, multimedia productions (CDs), educational videos, web materials, text books etc.) relevant to university education.

N/A

# 4. OTHER TEACHING CONTRIBUTIONS

#### 4.1 Membership of national and international bodies

List all the teaching associations or societies to which you belong. Name your involvement, e.g. honorary member, founder member, full member, chairman, president, secretary.

N/A

N/A

#### 4.2 Visits to local and overseas universities as guest professor or lecturer in regard to teaching

- Lecturer in Molecular Phylogenetics (CIEFAP, Argentina, April 2012)

#### 4.3 Participation in national and international teaching associations, bodies, committees

List all memberships of associations and bodies, as well as teaching committees (e.g. curriculum and assessment committees, teaching review committees, etc) in which you participate. Name the type and extent of participation.

# 5. POSTGRADUATE SUPERVISION

Name of student	Degree <sup>1</sup> /Title of dissertation/ thesis and date completed	Supervisor	Co-supervisor(s)	Duration of studies (years)
BScHons				
QC Santana	BScHons Genetics (December 2008)	MPA Coetzee		1
H Badenhorst	BScHons Genetics (December 2009)	MPA Coetzee		1
C Kortenhoeven	BScHons Genetics Research (December 2010)	MPA Coetzee		1
D-P Chapman	BScHons Microbiology Research (December 2010)	J Roux	MPA Coetzee	1
JM Ambler	BScHons Genetics Research (December 2011)	MPA Coetzee	ET Steenkamp	1
PG Erasmus	BScHons Genetics (December 2012)	MPA Coetzee		1
R Botha	BScHons Genetics (December 2012)	MPA Coetzee		1
Y Musasira	BScHons Genetics (December 2013)	MPA Coetzee		1
L Potgieter	BScHons Genetics (December 2014)	MPA Coetzee		1
B Masilo	BScHons Microbiology (December 2014)	MPA Coetzee		1
MSc				
L Maphosa	M.Sc. Genetics Research (December 2004)	BD Wingfield	MPA Coetzee, MJ Wingfield	3
VG Muthelo	M.Sc. Microbiology Research (February 2009)	MPA Coetzee	BD Wingfield, MJ Wingfield and M Bogale	3
M Phasa	MSc Microbiology Research (January 2010)	ET Steenkamp	MPA Coetzee BD Wingfield MJ Wingfield	3
M Simpson	MSc Genetics Research (December 2011)	BD Wingfield	MPA Coetzee MJ Wingfield	2
JM Ambler	MSc Biochemistry - Bioinformatics Research (June 2014)	MPA Coetzee	ET Steenkamp F Joubert	2.5
M Du Plessis	MSc Microbiology Research (June 2014)	SN Venter	ET Steenkamp MPA Coetzee TA Coutinho	2.5

<sup>&</sup>lt;sup>1</sup> Indicate whether Honours, Masters research, Masters coursework with dissertation or Doctorate

Name of student	Degree <sup>2</sup> enrolled for and date of first registration	Project title	Supervisor	Co- supervisor(s)	Year of registration
QC Santana	PhD Genetics Research January 2009		MPA Coetzee	BD Wingfield ET Steenkamp MJ Wingfield	2007 (upgraded)
M Simpson	PhD Genetics Research January 2012		BD Wingfield	MPA Coetzee MJ Wingfield	2012
M Tochet	PhD Microbiology Research June 2013		J Roux	MPA Coetzee M Rajchenberg	2013
M Phasha	PhD Microbiology Research January 2012		ET Steenkamp	MPA Coetzee BD Wingfield	2012
C Botha	MSc Genetics Research January 2013		B Slipper	MPA Coetzee	2013
S Fouche	MSc Genetics Research January 2013		ET Steenkamp	MPA Coetzee BD Wingfield	2013
Y Musasira	MSc Genetics Research January 2014		MPA Coetzee	MJ Wingfield	2014
L Potgieter	MSc Genetics Research January 2015		MPA Coetzee	MJ Wingfield	2015

# 6. RESEARCH FUNDING

6.1 Obtaining research funds (	Optional)		
<b>Origin of research funds</b> (e.g. contract research, THRIP, international funding organisations, other(s)	Title of research project or programme	Duration	Money allocated (R) (Optional - exact amounts not required)
NRF Incentive Funding		2010 – 2015	R20 000
UP Incentive Funding		2010 - 2013	R20 000
UP RD Grant		2011 - 2013	R50 000

<sup>&</sup>lt;sup>2</sup> Indicate whether Honours, Masters research, Masters coursework with dissertation or Doctorate

NRF Argentina – South Africa Bilateral Agreement	Forest diseases of common interest to South Africa and Argentina (UID: 75947)	2011 - 2014	R190 000
UP IRT GRT	Genome sequencing of Armillaria fuscipes	2011 - 2012	R90 000
UP RD Grant	SNP discovery in Armillaria fuscipes	2012 - 2013	R80 000
NRF Competitive funding for rated researchers	Assessment of the threat of <i>Armillaria</i> root rot in the iconic Kirstenbosch National Botanical Garden	2014	R111 000

# 7. RESEARCH OUTPUTS

# 7.1 Publications in peer-reviewed or refereed journals

- Coetzee MPA, Wingfield BD, Coutinho TA, Wingfield MJ 2000. Identification of the causal agent of Armillaria root rot of *Pinus* species in South Africa. Mycologia 92: 777-785.
- Coetzee MPA, Wingfield BD, Harrington TC, Dalevi D, Coutinho TA, Wingfield MJ 2000. Geographical diversity of *Armillaria mellea* s. s. based on phylogenetic analysis. Mycologia 92: 105-113.
- Barnes I, Roux J, Wingfield MJ, Coetzee MPA, Wingfield BD 2001. Characterization of *Seiridium* spp. associated with cypress canker based on B-tubulin and histone sequences. Plant Disease 85: 317-321.
- Coetzee MPA, Wingfield BD, Bloomer P, Ridley GS, Kile GA, Wingfield MJ 2001. Phylogenetic relationships of Australian and New Zealand *Armillaria* species. Mycologia 93: 887-896.
- Coetzee MPA, Wingfield BD, Harrington TC, Steimel J, Coutinho TA, Wingfield MJ 2001. The root rot fungus *Armillaria mellea* introduced into South Africa by early Dutch settlers. Molecular Ecology 10: 387-396. doi: mec1187 [pii]
- Coetzee MPA, Wingfield BD, Bloomer P, Ridley GS, Wingfield MJ 2003. Molecular identification and phylogeny of *Armillaria* isolates from South America and Indo-Malaysia. Mycologia 95: 285-293.
- Coetzee MPA, Wingfield BD, Roux J, Crous PW, Denman S, Wingfield MJ 2003. Discovery of two northern hemisphere *Armillaria* species on Proteaceae in South Africa. Plant Pathology 52: 604-612.
- Jacobs A, Coetzee MPA, Wingfield BD, Jacobs K, Wingfield MJ 2003. Phylogenetic relationships among *Phialocephala* species and other ascomycetes. Mycologia 95: 637-645.
- Mwenje E, Wingfield BD, Coetzee MP, Wingfield MJ 2003. Molecular characterisation of *Armillaria* species from Zimbabwe. Mycological Research 107: 291 - 296.
- Gezahgne A, Coetzee MPA, Wingfield BD, Wingfield MJ, Roux J 2004. Identification of the Armillaria root rot pathogen in Ethiopian plantations. Forest Pathology 34: 133-145.
- Coetzee MP, Wingfield BD, Bloomer P, Wingfield MJ 2005. Phylogenetic analyses of DNA sequences reveal species partitions amongst isolates of *Armillaria* from Africa. Mycol Res 109: 1223-1234.
- Coetzee MPA, Wingfield BD, Kirisits T, Chhetri DB, Bloomer P, Wingfield MJ 2005. Identification of *Armillaria* isolates from Bhutan based on DNA sequence comparisons. Plant Pathology 54: 36-45.
- Roux J, Coetzee MPA 2005. First report of pink disease on native trees in South Africa and phylogenetic placement of *Erythricium salmonicolor* in the homobasidiomycetes. Plant Disease 89: 1158-1163.
- Keyser M, Witthuhn RC, Lamprecht C, Coetzee MPA, Britz TJ 2006. PCR-based DGGE fingerprinting and identification of methanogens detected in three different types of UASB granules. Systematic and Applied Microbiology 29: 77-84.

Maphosa L, Wingfield BD, Coetzee MPA, Mwenje E, Wingfield MJ 2006. Phylogenetic relationships among *Armillaria* species inferred from partial elongation factor 1-alpha DNA sequence data. Australasian Plant Pathology 35: 513-

520.

- Mwenje E, Wingfield BD, Coetzee MPA, Nemato H, Wingfield MJ 2006. Armillaria species on tea in Kenya identified using isozyme and DNA sequence comparisons. Plant Pathology 55: 343-350. doi: doi:10.1111/j.1365-3059.2006.01347.x
- Coetzee MPA, Maphosa L, Mwenje E, Wingfield MJ, Wingfield BD 2009. Characterisation of *Armillaria* species based on pectic isozyme analyses. Fungal Diversity 36: 9-16.
- Pildain M, Coetzee M, Rajchenberg M, Petersen R, Wingfield M, Wingfield B 2009. Molecular phylogeny of *Armillaria* from the Patagonian Andes. Mycological Progress 8: 181-194.
- Santana QC, Coetzee MPA, Steenkamp ET, Mlonyeni OX, Hammond GNA, Wingfield MJ, Wingfield BD 2009. Microsatellite discovery by deep sequencing of enriched genomic libraries. BioTechniques 46: 217-223. doi: Doi 10.2144/000113085
- Wingfield BD, Maphosa L, Coetzee MPA, Mwenje E, Wingfield MJ 2009. Characterisation of Zimbabwean Armillaria using IGS-1 sequences and AFLP analysis. Fungal Diversity 34: 187-196.
- Pildain MB, Coetzee MPA, Wingfield BD, Wingfield MJ, Rajchenberg M 2010. Taxonomy of *Armillaria* in the Patagonian forests of Argentina. Mycologia 102: 392-403. doi: 10.3852/09-105
- Van Zuydam NR, Paciura D, Jacobs K, Wingfield MJ, Coetzee MPA, Wingfield BD 2010. Barcoding and microcoding using "identiprimers" with *Leptographium* species. Mycologia 102: 1274-1287. doi: 10.3852/09-291
- Baumgartner K, Coetzee MPA, Hoffmeister D 2011. Secrets of the subterranean pathosystem of *Armillaria*. Molecular Plant Pathology 12: 515-534. doi: 10.1111/j.1364-3703.2010.00693.x
- Coetzee MPA, Bloomer P, Wingfield MJ, Wingfield BD 2011. Paleogene radiation of a plant pathogenic mushroom. Plos One 6: e28545. doi: 10.1371/journal.pone.0028545
- Coetzee MPA, Wingfield BD, Golani GD, Tjahjono B, Gafur A, Wingfield MJ 2011. A single dominant *Ganoderma* species is responsible for root rot of *Acacia mangium* and *Eucalyptus* in Sumatra. Southern Forests 73: 175-180.
- Kinge TR, Mih AM, Coetzee MPA 2012. Phylogenetic relationships among species of *Ganoderma* (Ganodermataceae, Basidiomycota) from Cameroon. Australian Journal of Botany 60: 536-538. doi: http://dx.doi.org/10.1071/BT12011
- Wingfield BD, Steenkamp ET, Santana QC, Coetzee MPA, Bam S, Barnes I, Beukes CW, Chan WY, de Vos L, Fourie G, Friend M, Gordon TR, Herron DA, Holt C, Korf I, Kvas M, Martin SH, Mlonyeni XO, Naidoo K, Phasha MM, Postma A, Reva O, Roos H, Simpson M, Slinski S, Slippers B, Sutherland R, van der Merwe NA, van der Nest MA, Venter SN, Wilken PM, Yandell M, Zipfel R, Wingfield MJ 2012. First fungal genome sequence from Africa: A preliminary analysis. South African Journal of Science 108: 104-112. doi: 10.4102/sajs.v108i1/2.537
- Naidoo K, Steenkamp ET, Coetzee MPA, Wingfield MJ, Wingfield BD 2013. Concerted evolution in the ribosomal RNA cistron. PLOS One 8(3): e59355 (doi:10.1371/journal.pone.0059355)
- Simpson MC, Wilken PM, Coetzee MP, Wingfield MJ, Wingfield BD 2013. Analysis of microsatellite markers in the genome of the plant pathogen *Ceratocystis fimbriata*. Fungal Biology 117: 545-555.
- Veléz ML, Coetzee MPA, Wingfield MJ, Rajchenberg M, Greslebin AG 2014. Evidence of low levels of genetic diversity for the *Phytophthora austrocedrae* population in Patagonia, Argentina. Plant Patholology 63: 212-220 (Online, DOI: 10.1111/ppa.12067)
- Crous PW, Wingfield MJ, Schumacher RK, Summerell BA, Giraldo A, Gené J, Guarro J, Wanasinghe DN, Hyde KD, Camporesi E, Garethjones EB, Thambugala KM, Malysheva EF, Malysheva VF, Acharya K, Álvarez J, Alvarado P, Assefa A, Barnes CW, Bartlett JS, Blanchette RA, Burgess TI, Carlavilla JR, Coetzee MPA, Damm U, Decock CA, Denbreeÿen A, Devries B, Dutta AK, Holdom DG, Rooney-Latham S, Manjón JL, Marincowitz S, Mirabolfathy M, Moreno G, Nakashima C, Papizadeh M, Shahzadehfazeli SA, Amoozegar MA, Romberg MK, Shivas RG, Stalpers JA, Stielow B, Stukely MJC, Swart WJ, Tan YP, Vanderbank M, Wood AR, Zhang Y, Groenewald JZ, 2014. Fungal Planet description sheets: 281-319. Persoonia - Molecular Phylogeny and Evolution of Fungi 33 (1): 212-289. doi:10.3767/003158514X685680.

# 7.2 Books and/or chapters in books

n/a

#### 7.3 Published full-length conference papers/keynote addresses

Coetzee MPA, Wingfield BD, Wingfield MJ, Coutinho TA 1997. Identification of the causal agent of Armillaria root rot in South African forest plantations. 9<sup>th</sup> International conference on Root and Butt Rots. Carcans-Maubuisson, France, 1-7 September 1997.

#### 7.4 Non-refereed publications or popular articles

Denman S, Coetzee MPA, Wingfield BD, Wingfield MJ, Crous PW. 2000. Armillaria root rot. A new disease of cut-flower proteas in South Africa. SAPPEX News 106. 6 pp.

Wingfield MJ, Coetzee MPA, Crous PW, Six D, Wingfield BD 2010. Fungal phoenix rising from the ashes? IMA Fungus 1: 149–153

# 7.5 Patents

n/a

#### 7.6 Technical reports

n/a

# 8. OTHER SCHOLARLY RESEARCH-BASED CONTRIBUTIONS

# 8.1 Participation in conferences, workshops and short courses - specify type of contribution

Provide full details of participation in national and international conferences etc

# 8.1.1 Papers or Posters Delivered at National Congresses:

#### Presenting author:

Coetzee M.P.A., Wingfield B.D. and Wingfield M.J. 1996. Identification of Armillaria spp. in South Africa. 34<sup>th</sup>
 Congress of the Southern African Society for Plant Pathology, Stellenbosch, 14-17 January 1996. South African Journal of Science 92, xv. (poster presentation).

- Coetzee M.P.A., Wingfield B.D., Wingfield M.J. 1997. Characterization of South African Armillaria isolates using RFLPs. 35<sup>th</sup> Congress of the southern African Society of Plant Pathology, Badplass, 19-22 January 1997. South African Journal of Science 93, vi. (oral presentation).
  - Coetzee M.P.A., Wingfield B.D., Wingfield M.J., Harrington T.C. and Coutinho T.A. 1998. Armillaria mellea, an introduced species on oak (*Quercus*) trees in Cape Town. 36<sup>th</sup> Congress of the Southern African Society for Plant Pathology, Champayne Resort, 25-28 January 1998. South African Journal of Science 94, xvi. (oral presentation).
  - Coetzee M.P.A., Wingfield B.D., Wingfield M.J. and Coutinho T.A. *1998*. The causal agent of Armillaria root rot in South African pine plantations. 36<sup>th</sup> Congress of the Southern African Society for Plant Pathology, Champayne Resort, 25-28 January 1998. *South African Journal* of Science 94, xvi. (oral presentation).
  - Coetzee M.P.A., Wingfield B.D. and Wingfield M.J. 2000. Phylogenetic relationships of the Southern Hemisphere *Armillaria* species. BIOY2K Congress, Grahamstown, South Africa (oral presentation).
  - Coetzee M.P.A., Wingfield B.D. and Wingfield M.J. 2000. Clonal diversity of *Armillaria fuscipes* in South African pine plantations. BIOY2K Congress, Grahamstown, South Africa (poster presentation).
  - Coetzee M.P.A., Wingfield B.D. Bloomer P. and Wingfield M.J. 2002. Phylogeny of Southern Hemisphere Armillaria species based on LSU gene sequences. 40<sup>th</sup> Congress of the Southern African Society for Plant Pathology, 20 23 January 2002. (oral presentation).
  - Coetzee M.P.A., Wingfield B.D. Kirisits T., Chhetri D.B. and Wingfield M.J. 2002. Molecular identification of Armillaria isolates from Bhutan. 40<sup>th</sup> Congress of the Southern African Society for Plant Pathology, 20 – 23 January 2002. (poster presentation).
  - Coetzee M.P.A., Wingfield B.D., Bloomer P. and Wingfield M.J. 2003. Phylogeny and origin of the root rot fungus *Armillaria.* 4<sup>th</sup> Congress of the Southern African Society for Systematic Biology, 9-11 July 2003. (oral presentation).
  - Coetzee M.P.A., Wingfield B.D. and Wingfield M.J. 2005. Genotypic diversity of the root rot fungus Armillaria fuscipes in South African pine plantations. 43<sup>rd</sup> Annual Congress of the Southern African Society of Plant Pathology, Hartenbos, Mossel Bay, South Africa, 23 26 January 2005. (oral presentation).
  - Coetzee M.P.A., Wingfield B.D., Bloomer P. and Wingfield M.J. 2005. Phylogenetic analysis of DNA sequences reveals species partitions amongst isolates of *Armillaria* from Africa. 5<sup>th</sup> Congress of the Southern African Society for Systematic Biology, Goudini Spa, Western Cape, South Africa, 2 4 February 2005. (oral presentation).
  - Coetzee M.P.A., M.B. Pildain, Wingfield M.J. and Wingfield B.D. 2008. Characterisation of the 5S gene and adjacent intergenic spacer regions in the root-infecting fungus, *Armillaria*. 20th Biennial Congress of the South African Genetics Society, Pretoria, South Africa, 27 29 March 2008. (oral presentation).
  - Coetzee M.P.A., M.B. Pildain, Wingfield M.J. and Wingfield B.D. 2009. Evolution of the 5S gene in the rootinfecting fungal genus *Armillaria*. 46<sup>th</sup> Congress of the Southern African Society for Plant Pathology, and 6<sup>th</sup>

Congress of the African Mycological Society, Gordon's Bay, South Africa, 25-28 January 2009. (oral presentation).

- Coetzee M.P.A., Wingfield B.D. and Wingfield M.J. 2011. Species diversity within the Ganoderma lucidum species complex in Southern Africa. South African Society for Systematic Biology, 9th Conference, Grahamstown, South Africa, 19-21 January 2011. (oral presentation).
- Coetzee M.P.A., Muthelo V.G., Wingfield M.J. and Wingfield B.D. 2012. Ganoderma root rot: The scourge of *Jacaranda mimosifolia* in the "City of Jacarandas". 38<sup>th</sup> Conference of the South African Association of Botanists, University of Pretoria, Pretoria, South Africa, 15 18 January 2012. (oral presentation).
- Coetzee M.P.A., Coutinho T., Slippers B., Steenkamp E.T., Venter S.N., Wingfield B.D., Wingfield M.J. 2013.
  Genomics rapidly influencing research of forest tree health in South Africa and globally. 48<sup>th</sup> Congress of the Southern African Society for Plant Pathology, ATKV Klein Kariba, Bela Bela, 20 -24 January 2013. (oral presentiation).
- Coetzee M.P.A., Ambler J.M., Joubert F., Steenkamp E.T. 2014. Characterisation of gene silencing mechanisms within the genome of *Armillaria fuscipes*. South African Genetics Society and South African Society for Bioinformatics Joint Congress, Kwalata Game Ranch, South Africa, 23 - 26 September 2014. (oral presentation)
- du Plessis M., Steenkamp E.T., Coetzee M.P.A., Coutinho T.A., Venter S.N. 2014. Phylogenomics as a tool in bacterial systematics. 11th Meeting of the Southern African Society for Systematic Biology, Hogsback, South Africa, 6 - 9 April 2014. (oral presentation)

#### Co-author:

- Gezahgne A., Coetzee M.P.A., Roux, J. and Wingfield M.J. 2002. Armillaria root rot from Ethiopia. 40<sup>th</sup> Congress of the Southern African Society for Plant Pathology, 20 – 23 January 2002.
- Santana Q.C., Coetzee M.P.A., Steenkamp E.T., Wingfield M.J. and Wingfield B.D. 2008. Rapid isolation of microsatellites using ISSR-PCR and pyrosequencing. 20<sup>th</sup> Biennial Congress of the South African Genetics Society, Pretoria, South Africa, 27 – 29 March 2008. (poster presentation).
- Muthelo V.G., Coetzee M.P.A., Bogale M., Wingfield M.J. and Wingfield B.D. 2008. Identification of Ganoderma isolates associated with root and butt rot of Jacaranda mimosifolia in Pretoria. 20<sup>th</sup> Biennial Congress of the South African Genetics Society, Pretoria, South Africa, 27 29 March 2008. (poster presentation).
- Santana Q.C., Coetzee M.P.A., Steenkamp E.T., Wingfield M.J. and Wingfield B.D. 2008. Rapid discovery of microsatellites in *Fusarium circinatum* using ISSR-PCR and 454 genome sequencing. 46<sup>th</sup> Congress of the Southern African Society for Plant Pathology, and 6<sup>th</sup> Congress of the African Mycological Society, Gordon's Bay, South Africa, 25-28 January 2009. (oral presentation).
- Phasha, M.M., Coetzee, M.P.A., Wingfield, B.D. and Steenkamp, E.T. The characterization of introns in housekeeping genes of four plant pathogenic species of *Fusarium*. 48<sup>th</sup> Congress of the Southern African Society

for Plant Pathology, Kruger National Park, 23-26 January 2011.

- Simpson M.C., Wilken P.M., Coetzee M.P.A., Wingfield M.J. and Wingfield B.D. Evaluation of microsatellites in the genome of *Ceratocystis fimbriata*. 48<sup>th</sup> Congress of the Southern African Society for Plant Pathology, Kruger National Park, 23-26 January 2011.
- Santana Q.C., M.P.A. Coetzee, Makhari O.M., Wingfield M.J., Wingfield B.D. and Steenkamp E.T. Population dynamics of *Fusarium circinatum* from a pitch canker outbreak in South Africa. Proceedings of the 47<sup>th</sup> Congress of the Southern African Society for Plant Pathology (SASPP), 23-26 January 2011, Berg-en-Dal, Kruger National Park, South Africa.
- Naidoo K., Coetzee M.P.A., Steenkamp E., Slippers B., Wingfield M.J. and Wingfield B.D. Gene conversion of the Ribosomal RNA cistron. 38<sup>th</sup> Conference of the South African Association of Botanists, University of Pretoria, Pretoria, South Africa, 15 – 18 January 2012. (oral presentation).
- Ambler JM, Coetzee M. 2012. A study of quelling and repeat induced point mutation in the pathogenic fungus *Fusarium circinatum*. South African Genetics & Bioinformatics and Computational Biology Society Conference, 10 -12 September 2012. (poster presentation).
- Du Plessis M., Steenkamp E.T., Coetzee M.P.A., Coutinho T.A., Venter S.N. 2013. The evolution of the *Pantoea* core genome. 18th Biennial Congress of the South African Society for Microbiology, 24-27 November 2013. (poster presentation).
- Fouché S., Slinski S.L., Wingfield B.D., Coetzee M.P.A., Steenkamp E.T. 2013. Chromosome polymorphism in *Fusarium circinatum*. SouthAfrican Society for Microbiology Conference, 24-27 November 2013. (poster presentation).
- Tchotet J.M.T., Coetzee M.P.A., Rajchenberg M., Roux J. 2014. Identification of wood rotting fungi in the Garden Route National Park of South Africa. 20th Association for the Taxonomic Study of the Flora of Tropical Africa (AETFAT) Congress, Stellenbosch, South Africa. 13-17 January 2014 (poster presentation).

#### 8.1.2 Papers or Posters Delivered at International Congresses:

#### Presenting author:

- Coetzee M.P.A., Wingfield B.D., Wingfield M.J. and Coutinho T.A. *1996*. Identification of *Armillaria* in South Africa. Joint Annual Meeting of the American Phytpathological Society of America and the Mycological Society of America. Indianapolis, Indiana, USA. (poster presentation)
- Coetzee M.P.A., Wingield B.D., Wingfield M.J. and Coutinho T.A. 1997. Identification of the causal agent of Armillaria Root Rot in South African forest plantations. Proceedings of the 9<sup>th</sup> International Conference on Root and Butt Rot of Forest Trees, Carcans-Maubuisson, France, 1-7 September 1997. INRA, Paris. Pp.49-61. (oral presentation)

- Coetzee M.P.A., Wingfield B.D., Wingfield M.J., Coutinho T.A. and Harrington T.C. 1998. Armillaria mellea sensu stricto, introduced into Cape Town from Europe. 7<sup>th</sup> International Congress of Plant Pathology, Edinburgh, Scotland, 9-15 August 1998. (poster presentation)
  - Coetzee M.P.A., Wingfield B.D. and Wingfield M.J. 1999. A diagnostic key based on PCR and RFLPs for Armillaria species from different parts of the world. 5<sup>th</sup> International DNA Fingerprinting Conference, Port Elizabeth, South Africa, 17-22 January 1999. (poster presentation)
  - Coetzee M.P.A., Wingfield B.D., Wingfield M.J. and Ridley G.S. *1999*. Phylogenetic relationships of Australasian Armillaria species. 9<sup>th</sup> International Congress of Bacteriology and Applied Microbiology, Sydney, Australia, 16-20 August 1999. (oral presentation)
  - Coetzee M.P.A., Wingfield B.D., Bloomer P. and Wingfield M.J. 2001. Phylogeny of the Southern Hemisphere Armillaria species. Joint Meeting of the American Phytopathological Society, Mycological Society of America and Society of Nematologists, Sal Lake City, USA, 25-29 August 2002. (oral presentation)
  - Coetzee M.P.A., Wingfield B.D., Bloomer P. and Wingfield M.J. 2002. Biogeography and possible origin of *Armillaria* species. 7<sup>th</sup> International Mycological Congress, Oslo, Norway, 11-17 August 2002. (oral presentation).
  - Coetzee M.P.A., Wingfield B.D., Kirisits T., Chhetri D.B. and Wingfield M.J. 2002. Indetification of Armillaria isolates from Bhutan based on ITS and IGS-1 sequences. 7<sup>th</sup> International Mycological Congress, Oslo, Norway, 11-17 August 2002. (poster Presentation).
  - Coetzee M.P.A., Maphosa L., Mwenje E., Wingfield B.D. and Wingfield M.J. 2005. Biochemical and DNA based characterization of *Armillaria* spp. Joint Annual Meeting of the Mycological Society of Japan and the Mycological Society of America, Hilo, Hawaii, 30 July – 5 August 2005. (poster presentation).
  - Coetzee M.P.A., Wingfield B.D. and Wingfield M.J. 2005. Genotypic diversity of the root rot fungus *Armillaria fuscipes* in South African pine plantations. IUFRO 2005, Tree Biotechnology meeting, Pretoria, South Africa, 6-11 November 2005. (poster presentation).
  - Coetzee M.P.A., Wingfield B.D., Maphosa L., Mwenje E. and Wingfield M.J. 2006. Phylogenetic analysis of Armillaria species based on combined DNA sequence and phenotypic data. 8<sup>th</sup> International Mycological Congress, Cairns, Australia, 20-25 August 2006. (oral presentation).
  - Coetzee M.P.A, Wingfield B.D. and Wingfield M.J. 2006. Genotypic Diversity of Armillaria fuscipes in South African Pine Plantations. 8<sup>th</sup> International Mycological Congress, Cairns, Australia, 20-25 August 2006. (poster presentation).
  - Coetzee M.P.A., Wingfield M.J., Korhonen K., Wingfield M.J. 2010 Phylogenetic relationships between biological species of *Armillaria* from China and *Armillaria* species from other regions of the world. 9<sup>th</sup> International Mycologcial Congress, Edinburgh, UK, 1-6 August 2010 (poster presentation)
  - Coetzee M.P.A., Phasha M., Wingfield B.D., Steenkamp E.T. 2012. In silico identification and characterization of

alternative splicing in the genome of the plant pathogenic fungus *Fusarium circinatum*. Genome Informatics, Welcome Trust Scientific Conference, Cambridge, UK, 6-9 September 2012 (poster presentation)

- Coetzee M.P.A., Wingfield M.J. 2013. Biodiversity of fungi and fungal pathogens in natural woody ecosystems and in forest plantations of South Africa. China – South Africa Symposium Fungal Bioresources and Application. Beijing, China, 18 – 19 March 2013 (oral presentation)
- Coetzee M.P.A., Santana Q.C., Wingfield M.J., Wingfield B.D., Steenkamp E.T. Assessment of synteny in the genomes of the phytopathogenic fungi, *Fusarium circinatum* and *Fusarium verticillioides*. EMBO CONFERENCES: Comparative Genomics of Eukaryotic Microorganisms: Complexity Patterns in Eukaryotic Genomes, Sant Feliu de Guixols, Spain, 19 - 24 October 2013 (poster presentation)
- Santana Q.C., Coetzee M.P.A., Wingfield M.J., Wingfield B.D., Steenkamp E.T. 2014. Assessment of synteny in the genomes of two phylogenetically closely related phytopathogenic fungi, Fusarium circinatum and Fusarium verticillioides. 10th International Mycological Congress, Bankok, Thailand, 3 8 August 2014. (poster presentation)

#### Co-author:

- Wingfield B.D., Coetzee M.P.A. and Wingfield M.J. 2004. Phylogeographic studies on tree pathogens reveal differing patterns of speciation and host-pathogen co-evolution. Annual Meeting of the American Phytopathological Society, Anaheim, California, USA, August 2004. *Phytpathology* 94: S119.
- Wingfield B.D., Coetzee M.P.A., Maposa L., Mwenje E. and Wingfield M.J. 2005. African Armillaria species: increasingly better understood. Joint Annual Meeting of the Mycological Society of Japan and the Mycological Society of America, Hilo, Hawaii, 30 July 5 August 2005. (oral presentation).
- Santana Q.C., Coetzee M.P.A., Steenkamp E.T., Wingfield M.J. and Wingfield B.D. 2009. Microsatellite discovery in *Fusarium circinatum* using ISSR-PCR and deep sequencing sequencing. Annual meeting of the Mycological Society of America, Snowbird, Utah, USA, 25-29 July 2009. (oral presentation).
- Santana Q.C., Coetzee M.P.A., Steenkamp E.T., Wingfield M.J. and Wingfield B.D. 2011. Microsatellite composition across five *Fusarium* species. The 26<sup>th</sup> Fungal Genetics Conference, 15-20 March 2011, Asilomar, California, United States of America. (poster presentation)

Workshops	organized and presented:
2000.	Phylogenetics Workshop, Forestry and Agricultural Biotechnology Institute (FABI), April 2000.
2002.	Fungal Phylogenetics and Genetics Workshop, 40th Congress of the Southern
	African Society for Plant Pathology, Forestry and Agricultural Biotechnology Institute (FABI), 19 January 2002.
2004.	Workshop on Phylogenetic Methods. Forestry and Agricultural Biotechnology Institute (FABI), 15-16 April 2004.
	Workshop on Phylogenetic Methods. Forestry and Agricultural Biotechnology Institute (FABI), 23-27 August 2004.
2005.	Workshop on Phylogenetic Methods. Forestry and Agricultural Biotechnology Institute (FABI), 4-8 April 2005.
	Workshop on Phylogenetic Methods. Forestry and Agricultural Biotechnology Institute (FABI), 23-27 August 2005.
2006.	Workshop on Molecular Phylogenetic Methods. Forestry and Agricultural Biotechnology Institute (FABI), 22-26 May 2006.
	Workshop on Molecular Phylogenetic Methods. Forestry and Agricultural Biotechnology Institute (FABI), 2-6 October 2006.
2007.	Workshop on Molecular Phylogenetic Methods. Forestry and Agricultural Biotechnology Institute (FABI), 28 May – 1 June 2007.
	Workshop on Molecular Phylogenetic Methods. Forestry and Agricultural Biotechnology Institute (FABI), 29 October – 2 November 2007.
2008.	Workshop on Advanced Molecular Phylogenetic Methods. Forestry and Agricultural Biotechnology Institute (FABI), 26 – 30 May 2008.
	Workshop on Advanced Molecular Phylogenetic Methods. Forestry and Agricultural Biotechnology Institute (FABI), 6 – 10 October 2008.
2009.	Workshop on Advanced Molecular Phylogenetic Methods. Forestry and Agricultural Biotechnology Institute (FABI), 25 - 29 May 2009.

	Workshop on Advanced Molecular Phylogenetic Methods. Forestry and Agricultural
	Biotechnology Institute (FABI), 26 – 30 October 2009.
2010.	Workshop on Advanced Molecular Phylogenetic Methods. Forestry and Agricultural
	Biotechnology Institute (FABI), 17 - 21 May 2010.
	Workshop on Advanced Molecular Phylogenetic Methods. Forestry and Agricultural
	Biotechnology Institute (FABI), 1 – 5 November 2010.
2011.	Workshop on Advanced Molecular Phylogenetic Methods. Forestry and Agricultural
	Biotechnology Institute (FABI), 16 – 20 May 2011.
	Workshop on Advanced Molecular Phylogenetic Methods. Forestry and Agricultural
	Biotechnology Institute (FABI), 14 – 18 November 2011.
2012.	Workshop on Advanced Molecular Phylogenetic Methods. Forestry and Agricultural
	Biotechnology Institute (FABI), 21 – 25 May 2012.
	Workshop on Advanced Molecular Phylogenetic Methods. Forestry and Agricultural
	Biotechnology Institute (FABI), 19 -23 November 2012.
	Methods in Molecular Phylogenetics at CIEFAP (Centro de Inestigación y Extensión
	Forest Andino Patagónico) in Chubut (Argentina), 15 - 27 May 2012.
2013.	Workshop on Advanced Molecular Phylogenetic Methods. Forestry and Agricultural
	Biotechnology Institute (FABI), 20 - 24 May 2013.
	Workshop on Advanced Molecular Phylogenetic Methods. Forestry and Agricultural
	Biotechnology Institute (FABI), 11 - 15 November 2013.
2014.	Workshop on Advanced Molecular Phylogenetic Methods. Forestry and Agricultural
	Biotechnology Institute (FABI), 19 - 23 May 2013.
	Phylogenomics workshop. Forestry and Agricultural Biotechnology Institute (FABI),
	17 -21 November 2014.

#### Workshops and courses attended:

- Workshop on Molecular Evolution, Marine Biological Laboratory, Woods Hole, Massachusetts, USA, 27 July-8 August 2003 (during PhD studies).
- Population genetics course. Presented by Drs. Celeste Linde and John Leslie. University of Pretoria, Pretoria, South Africa, November 2004.
- Workshop on Statistical based Phylogenetics. Southern African Society for Systematic Biology, University of Stellenbosch, Stellenbosch, South Africa, 30 January- 1 February 2005.
- Nomenclature course. Presented by Dr. Hugh Glen (National Biodiversity Institute). University of Pretoria, Pretoria, South Africa, 27-30 June 2005.
- African Centre for Gene Technologies (ACGT) Bioinformatics and Functional Genomics Workshop. Wits University, South Africa, 25 January 2006.
- SABI Workshop on Phylogenetic hypothesis testing using HYPHY. Pre-congress workshop of the South African Genetics Society, University of Pretoria, 25-26 March 2008.

# Meetings attended:

- SABI Forum Meeting. Port Elizabeth, 25 February 2010.

# **Conference organization**

Served on the organizing committee of the 20<sup>th</sup> Annual Congress of the South African Genetics Society (Held at the University of Pretoria, 25 – 29 March 2008).

# 8.2 Teamwork and collaboration with others:

Other researchers (national and international)

- Dr. Wolfgang Maier (Ruhr University, Bochum, Germany)
- Dr. Belen Pildain (Forest Protection Area, Centro de Invest Forestal Andino Patagónico (CIEFAP), Esquel, Chubut, Argentina)
- Dr. Laura Velez (Forest Protection Area, Centro de Invest Forestal Andino Patagónico (CIEFAP), Esquel, Chubut, Argentina)
- Dr. Mario Rajchenberg (Forest Protection Area, Centro de Invest Forestal Andino Patagónico (CIEFAP), Esquel, Chubut, Argentina)
- Dr. Sandra Denman (Centre for Forestry and Climate Change, Forest Research, Alice Holt Lodge, Farnham, Surrey, England)

- Dr. Eddie Mwenje (Department of Applied Biology and Biochemistry, National University of Science and Technology, Bulawayo, Zimbabwe)
- Prof. Emma Steenkamp (Department of Microbiology and Plant Pathology, University of Pretoria, Pretoria, South Africa).
- Prof. Jolanda Roux (Department of Microbiology and Plant Pathology, University of Pretoria, Pretoria, South Africa).
- Prof. Brenda Wingfield (Department of Genetics, University of Pretoria, Pretoria, South Africa).
- Prof. Paulette Bloomer (Department of Genetics, University of Pretoria, Pretoria, South Africa).
- Prof. Mike Wingfield (Forestry and Agricultural Biotechnology Institute (FABI), University of Pretoria, Pretoria, South Africa).
- Prof. Mark Yandell (University of Utah, USA).
- Prof. Kendra Baumgartner (UC Davis, USA).
- Prof. Marinda Oosthuizen (Department of Veterinary Tropical Diseases, Faculty of Veterinary Science, University of Pretoria, Pretoria, South Africa).
- Dr. Albé van der Merwe (Department of Genetics, University of Pretoria, Pretoria, South Africa).

# 8.3 Membership in national and international bodies

- Royal Society of South Africa (RSSA) full member
- South African Association for the Advancement of Science (S2A3) full member
- Southern African Society for Plant Pathology (SASPP) full member
- South African Society for Microbiology (SASM) full member
- South African Society of Biochemistry and Molecular Biology (SASBMB) full member
- Southern African Society for Systematic Biology (SASSB) full member
- South African Association of Botanist (SAAB) full member
- South African Society for Bioinformatics (SASBi) full member

#### 8.4 Visits to local and overseas universities or research institutes as guest professor or researcher

• Disease survey in Tanzania, Uganda and Zanzibar during PhD studies (13 May – 1 June, 2000).

- Disease survey in Namibia (31 January 12 February, 2006)
- Field collection of Ganoderma isolates in Sumatra, Indonesia (14 April 6 May, 2006).
- Field collection of Amylostereum and Armillaria in Germany (29 September 17 October 2009)
- Field collection of *Armillaria* in Argentina and guest lecturer in Molecular Phylogenetic Methods (10 April 27 May 2012)

# 9. ARTISTIC OUTPUTS (if applicable)

n/a

# **10. MANAGEMENT AND ADMINISTRATIVE DUTIES**

10.1 List your involvement in departmental activities (e.g. administrative functions), faculty (e.g. Faculty Committees) or other university activities.

- FABI management committee member
- TPCP management committee member
- CTHB management committee member

# 11. COMMUNITY SERVICE OR PROFESSIONAL SKILLS

# 11.1 Outreach projects

(e.g. project titles, institutions and communities involved, etc.)

I am responsible for coordinating the Outreach Programme of the Centre of Excellence in Tree Health Biotechnology (CTHB). This programme engages CTHB students who are participating in the UPwithScience programme, the National Science Week and presentations at schools as well as other invited science related exhibitions. The programme primarily aims at informing learners about career opportunities in science, but also exposes them to life in the scientific environment through demonstrating experiments and providing hands-on experience in laboratories.

#### 11.2 Professional service performed

NRF Postdoctoral Fellowship panel reviewer (7 – 8 February 2012) NRF Postdoctoral Fellowship panel reviewer (6 – 7 February 2013) NRF Postdoctoral Fellowship panel reviewer (22 October 2014)

# 11.3 Clinical service

n/a

# 11.4 Involvement with other universities/scientific institutions

External examiner for Midrand Graduate Institute (MGI) – July 2009 External examiner for North West University (MSc dissertation, January 2014)

#### 11.5 Referee duties

Manuscripts reviewed for:

- Australasian Journal of Plant Pathology
- European Journal of Plant Pathology
- Fungal Biology
- Forest Pathology
- Molecular Phylogenetics and Evolution
- Mycologia
- Mycological Research
- Molecular Ecology
- Molecular Ecology Resources
- Plant Pathology

- PloS One
- BMC Evolutionary Biology

# 12. AWARDS AND SCIENTIFIC/SCHOLARLY RECOGNITION

Evaluation status as scientist/scholar
 NRF Y2
 Google Scholar H index 16 (December 2014)
 ISI H index 15 (December 2014)

#### 12.2 Research awards and prizes

Full details are required

- Andries Brink-Sasol Prize for best M.Sc. dissertation in Microbiology (1998).
- Dean's medal (1998; Awarded to the best Master's student in the Faculty of Science, University of the Orange Free State).
- Senate medal and prize (1998; Awarded to the best Master's student at the University of the Orange Free State).
- S2A3 Gencor bronze medal of the South African Association for the Advancement of Science (1998; Awarded to a Master's student who completed an exceptionally meritorious Master's degree dissertation).
- Mellon Foundation Award (1999-2001) Mellon postgraduate mentoring programme, administered by the University of Pretoria and funded by the Andrew W. Mellon Foundation, USA.
- Claude Harris Leon Foundation Postdoctoral Fellowship (2004-2005).
- UP Research Fellowship, University of Pretoria (2006-2009).

# **12.3 Teaching awards and prizes** *n/a*

# 12.4 Artistic awards and prizes

n/a