

# **Andi Wilson**

## **Curriculum Vitae**

**Department of Genetics  
Forestry & Agricultural Biotechnology Institute  
University of Pretoria  
Pretoria  
0028  
South Africa**

## PERSONAL INFORMATION

<b>Date of Birth</b>	16 September 1991	
<b>Research Address</b>	Shaw Lab, Forestry and Agricultural Biotechnology Institute (FABI), Department of Genetics, University of Pretoria	
<b>Citizenship</b>	South African	
<b>Contact Details</b>	(+27) 82 822 2573 Andi.wilson@fabi.up.ac.za	
<b>Website</b>	<a href="http://www.fabinet.up.ac.za/index.php/peopleprofile?profile=1109">www.fabinet.up.ac.za/index.php/peopleprofile?profile=1109</a>	
<b>ORCID Website</b>	<a href="https://orcid.org/0000-0002-3239-0045">https://orcid.org/0000-0002-3239-0045</a>	

## EDUCATION

<b>2016 - Current</b>	<b>Doctor of philosophy (PhD): Genetics</b> University of Pretoria
<b>2014 - 2015</b>	<b>Master of Science (MSc): Genetics</b> University of Pretoria <i>Cum laude</i> (82%)
<b>2013</b>	<b>Bachelor of Science-Honours (BSc (Hons)): Genetics</b> University of Pretoria <i>Cum laude</i> (79.3%)
<b>2010 - 2012</b>	<b>Bachelor of Science (BSc): Human Genetics</b> University of Pretoria <i>Cum laude</i> (79.8%)
<b>2005 - 2009</b>	<b>High School: Mathematics, Physical Sciences, Life Sciences, Accounting, English &amp; Afrikaans</b> Uplands College <i>Cum laude</i> (85.2%)

**RESEARCH OUTPUTS:  
PEER-REVIEWED PUBLICATIONS**

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- 2018**     **Liu, F., G. Li, J. Roux, I. Barnes, A.M. Wilson, M.J. Wingfield and S. Chen**  
Nine novel species of *Huntia* from southern China with three distinct mating strategies and variable levels of pathogenicity. Mycologia.
- 2018**     **Marin-Felix, Y., M. Hernandez-Restrepo, M.J. Wingfield, A. Akulov, A.J. Carnegie, R. Cheewangkoon, D. Gramaje, J.Z. Groenewald, V. Guarnaccia, F. Halleen, L. Lombard, J. Luangsaard, S. Marincowitz, A. Moslemi, L. Mostert, W. Quaedvlieg, R.K. Schumacher, C.F.J. Spies, R. Thangavel, P.W.J. Taylor, A.M. Wilson, B.D. Wingfield, A.R. Wood, and P.W. Crous**  
Genera of phytopathogenic fungi: GOPHY 2. Studies in Mycology 92: 47 – 133.
- 2018**     **Wilson, A.M., M.A. van der Nest, P.M. Wilken, M.J. Wingfield and B.D. Wingfield**  
Pheromone expression reveals putative mechanism of unisexuality in a saprobic ascomycete fungus. PLOS One 13(3):e0192517
- 2016**     **Wingfield, B.D., T.A. Duong, A. Hammerbacher, M.A. van der Nest, A.M. Wilson, R. Chang, Z.W. de Beer, E.T. Steenkamp, P.M. Wilken, K. Naidoo, and M.J. Wingfield**  
Draft genome sequences for *Ceratocystis fagacearum*, *C. harringtonii*, *Grosmannia penicillata*, and *Huntia bhutanensis*. IMA Fungus 7(2):317-323
- 2015**     **Wilson, A.M., P.M. Wilken, M.A. van der Nest, E.T. Steenkamp, M.J. Wingfield and B.D. Wingfield**  
Homothallism: An Umbrella Term for describing Diverse Sexual Behaviours.  
IMA Fungus 6(1): 207-214.
- 2015**     **Wilson, A.M., T. Godlonton, M.A. van der Nest, P.M. Wilken, M.J. Wingfield and B.D. Wingfield**  
Unisexual Reproduction in *Huntia moniliformis*.  
Fungal Genetics and Biology 80: 1-9.
- 2014**     **Van der Nest, M.A., P.M. Wilken, K. Naidoo, D. Roodt, J. Crouch, J.E. Demers, L.A. Beirn, S. Sanchez-Ramirez, M. Stata, J. Monclavo, Z.W. De Beer, L. De Vos, T.R. Gordon, Q.C. Santana, S.L. Slinkski, S.J. Taerum, A.M. Wilson, M.J. Wingfield and B.D. Wingfield**

Draft Genome Sequences of *Amanita jacksonii*, *Ceratocystis albifundus*, *Fusarium circinatum*, *Huntia omanensis*, *Leptographium procerum*, *Rutstroemia sydowniana* and *Sclerotinia echinophila*.

IMA Fungus 5: 473-485

**2014**

**Van der Nest, M.A., W. Bihon, L. De Vos, K. Naidoo, D. Roodt, E. Rubagotti, B. Slippers, E.T. Steenkamp, P.M. Wilken, A.M. Wilson, M.J. Wingfield and B.D. Wingfield**

Draft Genome Sequence of *Diplodia sapinea*, *Ceratocystis manginecans*, and *Ceratocystis moniliformis*.

IMA Fungus 5: 135-140

**RESEARCH OUTPUT:  
CONFERENCE ABSTRACTS**

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- 2018**     **A.M. Wilson, P.M. Wilken, M.A. van der Nest, M.J. Wingfield & B.D. Wingfield**  
Pheromone expression in the unisexual fungus, *Huntiaella moniliformis* (poster presentation)  
International Congress of Plant Pathology, 29 July – 3 August,  
Hynes Convention Center, Boston, USA
- 2018**     **A.M. Wilson, P.M. Wilken, M.A. van der Nest, M.J. Wingfield & B.D. Wingfield**  
Characterization of *MAT1-2-7*: a novel MAT gene in the wood-infecting fungus *Huntiaella omanensis* (poster presentation)  
International Congress of Plant Pathology, 29 July – 3 August,  
Hynes Convention Center, Boston, USA
- 2018**     **A.M. Wilson, P.M. Wilken, M.A. van der Nest, M.J. Wingfield & B.D. Wingfield**  
Characterization of *MAT1-2-7*; a novel mating gene in *Huntiaella omanensis* (oral presentation)  
South African Society of Microbiology Conference, 4 – 7 April  
Misty Hills Hotel & Conference Venue, Johannesburg, South Africa
- 2017**     **A.M. Wilson, P.M. Wilken, M.A. van der Nest, M.J. Wingfield & B.D. Wingfield**  
Unpacking the Molecular Mechanism behind Unisexual Reproduction in *Huntiaella moniliformis* (poster presentation)  
Life Sciences Symposium, 18 – 19 May  
Pennsylvania State University, State College, USA
- 2017**     **A.M. Wilson, P.M. Wilken, M.A. van der Nest, M.J. Wingfield & B.D. Wingfield**  
Unpacking the Molecular Mechanism behind Unisexual Reproduction in *Huntiaella moniliformis* (oral & poster presentations)  
Fungal Genetics Conference, 14 – 19 March  
Asilomar Conference Grounds, Pacific Grove, USA

- 2016**      **Wilson, A. M., M. A. van der Nest, P. M. Wilken, M. J. Wingfield and B. D. Wingfield**  
Understanding Unisexual Reproduction in *Huntia moniliformis* (oral presentation)  
South African Genetics Society/South African Society of Bioinformatics Congress, 20 – 23 September  
Durban, South Africa
- 2015**      **Wilson, A.M., P.M. Wilken, M.A. Van der Nest, M.J. Wingfield and B.D. Wingfield**  
Unisexual Reproduction in *Huntia moniliformis* (poster presentation)  
Fungal Genetics Conference, 17 – 22 March  
Asilomar Conference Grounds, Pacific Grove, USA
- 2015**      **Wilson, A.M., P.M. Wilken, M.A. Van der Nest, M.J. Wingfield and B.D. Wingfield**  
Characterization of the *MAT* Locus in the saprobe *Huntia omanensis* (poster presentation)  
South African Association of Botanists Congress  
Venda, South Africa
- 2015**      **Wilson, A.M., P.M. Wilken, M.A. Van der Nest, M.J. Wingfield and B.D. Wingfield**  
Characterization of the *MAT* Locus in the saprobe *Huntia omanensis* (poster presentation)  
South African Society for Plant Pathology, 18 – 21 January  
University of the Free State, Bloemfontein, South Africa

**RESEARCH OUTPUT:  
OTHER SCIENCE COMMUNICATION**

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- 2018**      **Wilson, A.M.**  
Sex: birds do it, bees do it - and fungi do it too. Here's how, and why it matters  
The Conversation Africa.

## AWARDS & SCHOLARSHIPS:

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2018	<b>For Women in Science Doctoral Fellowship</b> L'Oréal-UNESCO
2018	<b>Travel Award</b> WhiteSci Travel Award Scheme
2018	<b>Travel Award for PhD Student</b> Genes Journal
2018	<b>Best PhD Presentation at the SASM Conference</b> South African Society of Microbiology
2017-2018	<b>Scarce Skills Scholarship for Doctoral Students</b> National Research Foundation
2017	<b>FABlan of the Year</b> Forestry & Agricultural Biotechnology Institute
2017	<b>Woman in Science Award: PhD Fellowship</b> Department of Science & Technology
2017	<b>Study Abroad Bursary</b> University of Pretoria
2017	<b>PhD Student Bursary</b> University of Pretoria
2016	<b>Best MSc Student of 2015/16</b> Forestry & Agricultural Biotechnology Institute
2016	<b>Mentorship Award</b> Forestry & Agricultural Biotechnology Institute
2016	<b>Merit Certificate for Academics for MSc: Genetics Degree</b> University of Pretoria
2016	<b>Grantholder Linked Bursary for Master's Students</b> National Research Foundation
2014	<b>Academic Honorary Colours for BSc(Hons): Human Genetics</b> University of Pretoria

**MEMBERSHIP TO ASSOCIATIONS  
AND SOCIETIES :**

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<b>2018</b>	<b>FABI Social Club</b>
<b>2018</b>	<b>CTHB Mentorship Program Committee</b>
<b>2018</b>	<b>South African Genetics Society (SAGS)</b>
<b>2018</b>	<b>South African Society of Microbiology (SASM)</b>
<b>2017 - Current</b>	<b>Genetics Society of America (GSA)</b>
<b>2011 - Current</b>	<b>Golden Key Society</b>
<b>2016 - Current</b>	<b>Postgraduate Student Association of Natural and Agricultural Sciences</b> FABI Representative & Secretary
<b>2014</b>	<b>FABI Social Club</b>
<b>2011-2011</b>	<b>TuksVillage Residence Management Committee</b> Head of the Academic Portfolio

**EXPERIENCE :**

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**International  
Lab Visits**

**Pennsylvania State University**  
6 Aug – 30 September 2018

**Pennsylvania State University**  
27 April – 30 June 2017

**Research  
Techniques**

**Molecular Techniques**

Conventional and reverse transcription PCR, agarose gel electrophoresis, Sanger sequencing, DNA and RNA extractions



## Teaching & Tutoring

### **Bioinformatic Techniques**

Draft genome assembly, genome mining and gene identification, primer design, RNA-Seq analysis

### **Mycological Techniques**

Fungal isolation, culturing and maintenance, single ascospore isolations and matings

#### **2018**

Third year level molecular genetics

Grades 10, 11 and 12 physical sciences, mathematics and advanced program mathematics

#### **2014 - 2017**

Third year level population genetics

#### **2015 - 2016**

Second year level molecular genetics

#### **2014**

First year level molecular biology

#### **2013**

First year level genetics

## Other Relevant Experiences

#### **2014 - Current**

Mentor in the Centre of Excellence in Tree Health Biotechnology (CTHB) mentorship program at FABI

#### **2014 - Current**

Work experience student at FABI

#### **2017**

Genome Annotation Workshop

#### **2017**

Genome Annotation Workshop

**2014**

*Ceratocystis* Genome Annotation Jamboree

**2011 - 2012**

Mentorship student in the Centre of Excellence in Tree Health Biotechnology (CTHB) mentorship program at FABI