MARJA MOSTERT-O'NEILL

POSTDOCTORAL FELLOW

CONTACT

Marja Mostert-ONeill Profile
Forestry & Agricultural Biotechnology Institute (FABI)

marja.oneill@up.ac.za

+27 76 394 2526

Pretoria, South Africa

SKILLS

- Project Management
- Verbal & Written Communication
- Microsoft Office & Google Drive
- R Programming Language
- SNP Genotypic Data Analysis
- Molecular Laboratory Techniques

ONLINE

linkedin.com/in/marja-oneill/

researchgate.net/profile/Marja_Mostert-ONeill

@MarjaONeill

orcid.org/0000-0002-6318-3508

SUMMARY

Passionate about finding solutions to complex problems and the pursuit of knowledge. Over ten years of experience in academic research projects. Recently obtained a Ph.D. in Genetics. Balancing a part-time position as Project Coordinator and a full-time Ph.D. study required efficiency, accuracy and exceptional time-management skills. Enjoy working in an academic environment as it allows continuous personal growth and ample opportunity to share knowledge and experiences with others.

WORK EXPERIENCE (2012-2021)

Project Coordinator (part-time)

Forest Molecular Genetics Programme | Apr. 2017 - Mar. 2021

- Project management of and reporting on multiple population genetics and genomics research activities
- Technical support to postgraduate students and postdoctoral fellows on high-throughput genotyping data generation and analysis
- Liaison between the Forest Molecular Genetics Program, academic- and industry collaborators, and genomics service providers

Project Coordinator (full-time)

Forest Molecular Genetics Programme | Jan. 2014 - Mar. 2017

- Same as above with the addition of marketing, communication and organizing annual research symposia

Senior Research & Administrative Assistant (part-time)

Forest Molecular Genetics Programme | Nov. 2012 - Dec. 2013

- Implementation of a new platform for single nucleotide polymorphism (SNP) data analysis
- Liaison between the Forest Molecular Genetics Program, academic- and industry collaborators, and genomics service providers
- Organizing research-related conference and travel arrangements for students and academic staff
- Marketing, communication and organizing annual research symposia

EDUCATION

Ph.D. Genetics

University of Pretoria (2021)

Thesis title: Genomic consequences of natural and artificial selection in wild and advanced breeding populations of *Eucalyptus grandis*

M.Sc. Genetics

University of Pretoria (2009)

Dissertation title: Functional analysis of the secondary cell wall associated *cellulose synthase* genes of *Eucalyptus* trees in *Arabidopsis thaliana*

B.Sc. (Hons.) Genetics

University of Pretoria (2005)

B.Sc. Genetics

University of Pretoria (2004)

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POSTDOCTORAL FELLOW

RECENT AWARDS

Best Oral Presentation at the Southern African Plant Breeding Symposium (2020)

Best Ph.D. Student Presentation at the Department of Biochemistry, Genetics & Microbiology Symposium (2019)

National Research Foundation Doctoral Bursary (2017-2020)

University of Pretoria Doctoral Bursary (2017-2019)

EXPERTISE & INTERESTS

Population Genetics

Landscape Genomics

Selection & Adaptation

Cytonuclear Coordination

Hybrid Compatibility

Marker-Assisted Breeding

Science Communication

REFERENCES

Prof. Alexander A. Myburg
Director of Forest Molecular Genetics Programme, University of Pretoria
(Current Line-Manager & Ph.D. Supervisor)

Prof. Sanushka Naidoo
Head of Department Biochemistry, Genetics & Microbiology, University of Pretoria
(Master's Degree Co-Supervisor)

Dr Juan J. Acosta
Camcore, Department of Forestry & Environmental Resources, NC State University
(Ph.D. Co-Supervisor)

(Contact details available upon request)

PUBLICATIONS (2019-2021)

Mostert-O'Neill MM, Reynolds SM, Acosta JJ, Lee DJ, Borevitz JO, Myburg AA. 2021. Genomic evidence of introgression and adaptation in a model subtropical tree species, *Eucalyptus grandis*. Molecular Ecology (doi:10.1111/mec.15615)

Mhoswa L, O'Neill MM, Mphahlele MM, Oates CN, Payn KG, Slippers B, Myburg AA, Naidoo S. 2020. A genome-wide association study for resistance to the insect pest *Leptocybe invasa* in *Eucalyptus grandis* reveals genomic regions and positional candidate defence genes. Plant and Cell Physiology (doi:10.1093/pcp/pcaa057)

Mphahlele MM, Isik F, Mostert-O'Neill MM, Reynolds SM, Hodge GR, Myburg AA. 2020. Expected benefits of genomic selection for growth and wood quality traits in *Eucalyptus grandis*. *Tree Genetics & Genomes* (doi:10.1007/s11295-020-01443-1)

Brown K, Takawira LT, O'Neill MM, Mizrachi E, Myburg AA, Hussey SG. 2019. Identification and functional evaluation of accessible chromatin associated with wood formation in *Eucalyptus grandis*. New Phytologist (doi.org/10.1111/nph.15897)

CONFERENCE PRESENTATIONS (2019-2021)

Mostert-O'Neill MM, Reynolds SM, Acosta JJ, Borevitz JO, Myburg AA. 2021. Domestication in progress: How a century of artificial selection has changed the genomes of a wood fibre crop, *Eucalyptus grandis*. American Society of Plant Biologists (ASPB) Plant Biology Worldwide Summit, 19 -23 July, Virtual Conference, USA (oral & poster)

Mostert-O'Neill MM, Borevitz JO, Acosta JJ, Reynolds SM, Mphahlele MM, Van den Berg G, Verryn SD, Myburg AA. 2020. Domesticating *Eucalyptus grandis* for changing climates using landscape genomics. Southern African Plant Breeding Symposium, 8 -11 March, Pretoria, South Africa (oral)

O'Neill MM, Reynolds SM, Lee DJ, Acosta JJ, Borevitz JO and Myburg AA. 2019. Genomic evidence of introgression and adaptation in *Eucalyptus grandis*, a model subtropical species. IUFRO Tree Biotechnology Meeting, 23 – 28 June, Raleigh, NC, USA (oral)

O'Neill MM, Reynolds SM, Lee DJ, Acosta JJ, Borevitz JO and Myburg AA. 2019. The genetic landscape of adaptive variation in native *Eucalyptus grandis*. Eucalypt Genetics Conference, 18 – 21 February, Hobart, Australia (oral)

TEACHING & MENTORSHIP

Postgraduate level

- Co-supervisor on two M.Sc. and four B.Sc. (Hons.) projects
- Student advisory committee member on one Ph.D., three M.Sc. and one B.Sc. (Hons.) projects
- Developed and presented five workshops related to scientific communication and time management
- Developed and presented two invited lectures for Tree Breeding Course presented to forest tree breeders and postgraduate students

Undergraduate level

- Acted as research and academic mentor to one final year undergraduate student
- Tutor, teaching assistant and laboratory instructor for five first- and second year Genetics undergraduate modules

MARJA MOSTERT-O'NEILL

DETAILED WORK EXPERIENCE

(ALSO SEE TEACHING & MENTORSHIP SECTION)

Project Coordinator (part-time)

Forest Molecular Genetics Programme, University of Pretoria | Apr. 2017 - Mar. 2021 | 12 hours per week

- Project management of and reporting on multiple population genetics and genomics research activities
- Technical support to postgraduate students and postdoctoral fellows on high-throughput genotyping data generation and analysis
- Liaison between the Forest Molecular Genetics Program, academic- and industry collaborators, and genomics service providers

Project Coordinator (full-time)

Forest Molecular Genetics Programme, University of Pretoria | Jan. 2014 - Mar. 2017

- Same as above with the addition of marketing, communication and organizing annual research symposia

Senior Research & Administrative Assistant (part-time)

Forest Molecular Genetics Programme, University of Pretoria | Nov. 2012 - Dec. 2013 | 30 hours per week

- Implementation of a new platform for single nucleotide polymorphism (SNP) data analysis
- Liaison between the Forest Molecular Genetics Program, academic- and industry collaborators, and genomics service providers
- Organizing research-related conference and travel arrangements for students and academic staff
- Marketing, communication and organizing annual research symposia

Research & Administrative Assistant (part-time)

Forest Molecular Genetics Programme, University of Pretoria | May 2011 - Oct. 2012 | 25 hours per week

- Organizing research-related conference and travel arrangements for students and academic staff
- Marketing, communication and organizing annual research symposia
- Administrative assistance in generating research grant applications and reports
- Next-generation sequencing whole genome data analyses

Research & Administrative Assistant (full-time)

Forest Molecular Genetics Programme, University of Pretoria | Jul. 2009 - Nov. 2010

- Molecular laboratory research on circadian rhythms in forest trees
- Microsatellite DNA marker analysis of eucalypts and pines for tree identification, clonal identity verification, parentage analysis and detection of pollen contamination as part of the DNA Fingerprinting Technology Platform
- Procurement of laboratory consumables and management of the inter-departmental LightCycler® qPCR facility

Senior Research Assistant (full-time)

Dept. Plant Production & Soil Sciences, University of Pretoria | Jan. 2009 - Jun. 2009

- Laboratory management, including development of laboratory consumables inventory and procurement system, organizing group academic and social activities, communication with service providers and suppliers
- Administrative assistance, which entailed developing lecture materials for third year undergraduate courses, compiling research grant applications and reports

Technical Assistant (part-time)

Forest Molecular Genetics Programme, University of Pretoria | Feb. 2006 - Dec. 2008 | 3 hours per week

- Inventory and procurement of laboratory consumables

Undergraduate Technical Assistant (part-time)

Forest Molecular Genetics Programme, University of Pretoria | Feb. 2004 - Nov. 2004 | 6 hours per week

- General assistance with molecular laboratory techniques
- Literature searches

MARJA MOSTERT-O'NEILL

TEACHING & MENTORSHIP

POSTGRADUATE STUDENT CO-SUPERVISION

Ms Hannah Tate (17036446) | M.Sc. Genetics
Dept. Biochemistry, Genetics & Microbiology, University of Pretoria | Jan. 2021 - ongoing
Preliminary project title: Exploring the chloroplast haplotype diversity across and within species with a focus on *Eucalyptus grandis*

Ms Raven Wienk (13231708) | M.Sc. Microbiology
Dept. Biochemistry, Genetics & Microbiology, University of Pretoria | Jan. 2019 - ongoing
Preliminary project title: Genetic diversity & population structure analysis of South African avocado rootstock germplasm using SNP markers

Ms Hannah Tate (17036446) | B.Sc. (Hons.) Genetics
Dept. Biochemistry, Genetics & Microbiology, University of Pretoria | Jan. 2020 - Dec. 2020
Project title: Chloroplast SNP haplotype diversity in *Eucalyptus* tree species

Ms Anneri Lötter (14014442) | B.Sc. (Hons.) Genetics
Dept. Biochemistry, Genetics & Microbiology, University of Pretoria | Jan. 2018 - Dec. 2018
Project title: Genome-wide ancestry mapping of *Eucalyptus grandis* x *E. urophylla* hybrids

Ms Julia Candotti (14010560) | B.Sc. (Hons.) Genetics
Dept. Genetics, University of Pretoria | Jan. 2017 - Dec. 2017
Project title: Nested Association Mapping (NAM) in *Eucalyptus* hybrids (*cum laude*)

Mr Stephanus Engelbrecht (12016642) | B.Sc. (Hons.) Genetics
Dept. Genetics, University of Pretoria | Jan. 2015 - Dec. 2015
Project title: High-throughput multiplexed SNP genotyping for DNA fingerprinting of *Eucalyptus* species and hybrids

POSTGRADUATE STUDENT ADVISORY COMMITTEE MEMBERSHIP

Ms Julia Candotti (14010560) | M.Sc. Genetics
Dept. Biochemistry, Genetics & Microbiology, University of Pretoria | Jan. 2018 - Dec. 2019
Project title: Genomic dissection of cellulose pulp processing traits in fast-growing *Eucalyptus* hybrids

Ms Lizette Loubser (4515596) | M.Sc. Bioinformatics
Dept. Biochemistry, Genetics & Microbiology, University of Pretoria | Jan. 2018 - Dec. 2019
Project title: eQTL dissection and systems genetics of wood biorefinery traits in *Eucalyptus*

Mr Stephanus Henning (13091752) | M.Sc. Genetics
Dept. Biochemistry, Genetics & Microbiology, University of Pretoria | Jan. 2017 - ongoing
Preliminary project title: Genomic diversity atlas of *Eucalyptus* towards effective genome-wide genetic resource management in plantation breeding

Ms Lorraine Mhoswa (13326903) | Ph.D. Genetics
Dept. Biochemistry, Genetics & Microbiology, University of Pretoria | Jan. 2014 - ongoing
Preliminary project title: Genome wide association study for *Leptocybe invasa* resistance and associated chemotypes in *Eucalyptus grandis*

Ms Afrah Khairalla | B.Sc. (Hons.) Bioinformatics
Dept. Biochemistry, University of Pretoria | Jan. 2013 - Dec. 2013
Project title: Bioinformatics on whole-genome resequencing data analysis

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TEACHING & MENTORSHIP

WORKSHOPS & INVITED LECTURES

The Write Stuff Workshop 2020
Population Genomics Team Student Initiatives | Oct. 2020 | Pretoria, South Africa
Develop and present student workshop on Motivation & Inspiration for Scientific Writing to ~10 postgraduate students

Presentation Do's & Don'ts Workshop 2019
Forest Molecular Genetics Programme Student Initiatives | Nov. 2019 | Pretoria, South Africa
Develop and present student workshop on Best Practice for Oral & Poster Presentations to ~20 postgraduate students

Procrastination & Time Management Workshop 2019
Forest Molecular Genetics Programme Student Initiatives | Jan. 2019 | Pretoria, South Africa
Develop and present student workshop on How to Beat Procrastination & Improve Time Management to ~20 postgraduate students

Presentation Do's & Don'ts Workshop 2018
Forest Molecular Genetics Programme Student Initiatives | Oct. 2018 | Pretoria, South Africa
Develop and present student workshop on Best Practice for Oral & Poster Presentations to ~20 postgraduate students

Procrastination & Time Management Workshop 2018
Forest Molecular Genetics Programme Student Initiatives | May 2018 | Pretoria, South Africa
Develop and present student workshop on How to Beat Procrastination & Improve Time Management to ~20 postgraduate students

Tree Breeding Course 2018 – Marker-Assisted Selection Module
Creation Breeding Innovations Tree Breeding Course | Aug. 2018 | Pretoria, South Africa
Invited lecture: Develop and teach module for Tree Breeding Course attended by 20 to 30 forest tree breeders and postgraduate students

Tree Breeding Course 2017 – Marker-Assisted Selection Module
Creation Breeding Innovations Tree Breeding Course | Aug. 2017 | Pretoria, South Africa
Invited lecture: Develop and teach module for Tree Breeding Course attended by 20 to 30 forest tree breeders and postgraduate students

UNDERGRADUATE TEACHING ASSISTANCE

Second Year Introductory Genetics GTS 262 Teaching Assistant & Laboratory Instructor
Dept. Genetics, University of Pretoria | Jul. 2007 - Nov. 2007 | 9 hours per week

Second Year Introductory Genetics GTS 261 Teaching Assistant & Laboratory Instructor
Dept. Genetics, University of Pretoria | Feb. 2007 - Jun. 2007 | 9 hours per week

First Year Introductory Genetics GTS 161 Tutor
Dept. Genetics, University of Pretoria | Jul. 2006 - Nov. 2006 | 9 hours per week

First Year Introduction to Molecular Biology MLB 111 Tutor
Dept. Biochemistry, University of Pretoria | Feb. 2006 - Jun. 2006 | 9 hours per week

First Year Introductory Genetics GTS 161 Teaching Assistant
Dept. Genetics, University of Pretoria | Jul. 2005 - Nov. 2005 | 9 hours per week

UNDERGRADUATE & SCHOOL LEVEL MENTORSHIP

Mr Bernard Smit (16039794) | B.Sc. Biotechnology
Dept. Biochemistry, Genetics & Microbiology, University of Pretoria | Jan. 2018 - Dec. 2018
Mentor to Mr Smit under the Forest Molecular Genetics Undergraduate Mentorship Programme

Ms Jancke Marais | Gr. 6 Laerskool Monumentpark
Gauteng North Junior Science Expo Regional Finals | May 2018 - Jul. 2018
Mentor to Ms Marais on her Junior Science Expo project (silver awarded)

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RESEARCH OUTPUTS

ISI-RATED PEER-REVIEWED PUBLICATIONS (5)

Mostert-O'Neill MM, Reynolds SM, Acosta JJ, Lee DJ, Borevitz JO, Myburg AA. 2021. Genomic evidence of introgression and adaptation in a model subtropical tree species, *Eucalyptus grandis*. Molecular Ecology (doi:10.1111/mec.15615)

Mphahlele MM, Isik F, **Mostert-O'Neill MM**, Reynolds SM, Hodge GR, Myburg AA. 2020. Expected benefits of genomic selection for growth and wood quality traits in *Eucalyptus grandis*. Tree Genetics & Genomes (doi:10.1007/s11295-020-01443-1)

Mhoswa L, **O'Neill MM**, Mphahlele MM, Oates CN, Payn KG, Slippers B, Myburg AA, Naidoo S. 2020. A genome-wide association study for resistance to the insect pest *Leptocybe invasa* in *Eucalyptus grandis* reveals genomic regions and positional candidate defence genes. Plant and Cell Physiology (doi:10.1093/pcp/pcaa057)

Brown K, Takawira LT, **O'Neill MM**, Mizrachi E, Myburg AA, Hussey SG. 2019. Identification and functional evaluation of accessible chromatin associated with wood formation in *Eucalyptus grandis*. New Phytologist (doi.org/10.1111/nph.15897)

Myburg AA, Bradfield J, Cowley E, Creux N, de Castro M, Hatherell T, Mphahlele M, **O'Neill MM**, Ranik M, Solomon L. 2008. Forest and fibre genomics: biotechnology tools for applied tree improvement. Southern Forests: a Journal of Forest Science (doi:10.2989/SOUTH.FOR.2008.70.2.1.529)

OTHER PUBLICATIONS

Mostert-O'Neill MM, Myburg AA. 2021. Can wild populations help our eucalypts adapt to climate change? TIP-Mag. Vol.2

INTERNATIONAL CONFERENCE CONTRIBUTIONS (11)

Mostert-O'Neill MM, Reynolds SM, Acosta JJ, Borevitz JO, Myburg AA. 2021. Domestication in progress: How a century of artificial selection has changed the genomes of a wood fibre crop, *Eucalyptus grandis*. American Society of Plant Biologists (ASPB) Plant Biology Worldwide Summit, 19 -23 July, Virtual Conference, USA (oral & poster)

O'Neill MM, Reynolds SM, Lee DJ, Acosta JJ, Borevitz JO, Myburg AA. 2019. Genomic evidence of introgression and adaptation in *Eucalyptus grandis*, a model subtropical species. IUFRO Tree Biotechnology Meeting, 23 – 28 June 2019, Raleigh, NC, USA (oral)

Candotti J, **O'Neill MM**, Reynolds SM, Naidoo R, Jones N, Mizrachi E, Myburg AA. 2019. Genetic dissection in a multi-parent *Eucalyptus* F1 hybrid mapping population. IUFRO Tree Biotechnology Meeting, 23 – 28 June 2019, Raleigh, NC, USA (poster & flash talk)

Lötter A, Henning JS, Engelbrecht S, **O'Neill MM**, Reynolds SM, Mphahlele MM, Payn KG, Myburg AA. 2019. Local ancestry mapping in advanced generation *Eucalyptus grandis* x *E. nitens* hybrids. IUFRO Tree Biotechnology Meeting, 23 – 28 June 2019, Raleigh, NC, USA (poster & flash talk)

O'Neill MM, Reynolds SM, Lee DJ, Acosta JJ, Borevitz JO, Myburg AA. 2019. The genetic landscape of adaptive variation in native *Eucalyptus grandis*. Eucalypt Genetics Conference, 18 – 21 February 2019, Hobart, Australia (oral)

Candotti J, **O'Neill MM**, Reynolds SM, Naidoo R, Jones N, Mizrachi E, Myburg AA. 2019. Genetic dissection of growth and wood development in nested, multi-parent *Eucalyptus* hybrid populations. Eucalypt Genetics Conference, 18 – 21 February 2019, Hobart, Australia (flash talk)

Reynolds SM, Henning JS, Lotter A, Engelbrecht S, **O'Neill MM**, Mphahlele MM, Verryn SD, Payn KG, Jones N, Kanzler A, Myburg AA. 2019. Establishing a genome diversity atlas for *Eucalyptus* and its applications to molecular breeding in advanced generation interspecific hybrids. Eucalypt Genetics Conference, 18 – 21 February 2019, Hobart, Australia (poster)

Mphahlele MM, Van Deventer F, Reynolds SM, **O'Neill MM**, Hodge GR, Isik F, Myburg AA. 2015. Genotyping and phenotyping of a *Eucalyptus grandis* training population towards the development of genomic selection models. IUFRO Tree Biotechnology Conference, 8 – 12 June, Florence, Italy (poster)

Myburg AA, Calvert M, Singh P, Mbanjo G, Van der Merwe K, **O'Neill MM**, Reynolds M, Christie N, Hussey SG, Mizrachi E. 2014. Population genomics unravels genetic diversity and regulation of growth and development in *Eucalyptus*. Australasian Genomics Technology Association Meeting, 12 – 15 October, Melbourne, Australia (oral)

Mbanjo EGN, **O'Neill MM**, Reynolds SM, Jones N, Kanzler A, Myburg AA. 2014. High-density SNP based genetic map of an interspecific backcross pedigree of *Eucalyptus grandis* x *E. urophylla*. Plant and Animal Genomes (PAG) Symposium, January 12 – 16, San Diego, USA (poster)

O'Neill MM, Ranik M, Myburg AA. 2007. Functional analysis of the secondary cell wall-associated cellulose synthase (CesA) genes of *Eucalyptus grandis*. IUFRO Tree Biotechnology Meeting, June 3 – 8, Ponta Delgada, Azores, Portugal (poster)

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RESEARCH OUTPUTS

LOCAL CONFERENCE CONTRIBUTIONS (12)

Mostert-O'Neill MM, Borevitz JO, Acosta JJ, Reynolds SM, Mphahlele MM, Van den Berg G, Verryn SD, Myburg AA. 2020. Domesticating Eucalyptus grandis for changing climates using landscape genomics. Southern African Plant Breeding Symposium, 8 – 11 March, Pretoria, South Africa (oral)

Candotti J, **Mostert-O'Neill MM**, Reynolds SM, Naidoo R, Jones N, Mizrachi M, Myburg AA. 2020. QTL mapping and analysis of segregation distortion in a multi-parent Eucalyptus F1 hybrid mapping population planted across multiple environments. Southern African Plant Breeding Symposium, 8 – 11 March, Pretoria, South Africa (flash talk)

O'Neill MM, Reynolds SM, Acosta JJ, Borevitz JO, Myburg AA. 2018. Spatial and adaptive population structure of native Eucalyptus grandis. South African Society for Bioinformatics & South African Genetics Society (SASBi-SAGS) Joint Conference, 16 – 18 October, Golden Gate Highlands National Park, South Africa (oral)

Henning JS, **O'Neill MM**, Reynolds SM, Engelbrecht S, Payn KG, Van der Merwe A, Myburg AA. 2018. *Eucalyptus* genomic diversity atlas: towards genome-based genetic resource management in commercially planted eucalypts. South African Society for Bioinformatics & South African Genetics Society (SASBi-SAGS) Joint Conference, 16 – 18 October, Golden Gate Highlands National Park, South Africa (oral)

Candotti J, **O'Neill MM**, Reynolds SM, Naidoo S, Kanzler A, Jones N, Mizrachi E, Myburg AA. 2018. Towards nested, multi-parent genetic dissection of growth and wood development in *Eucalyptus* hybrid populations. South African Society for Bioinformatics & South African Genetics Society (SASBi-SAGS) Joint Conference, 16 – 18 October, Golden Gate Highlands National Park, South Africa (poster)

Mhoswa L, **O'Neill MM**, Mphahlele MM, Oates C, Payn KG, Slippers B, Myburg AA, Naidoo S. 2018. A genome-wide association study for tolerance to the insect pest *Leptocybe invasa* in *Eucalyptus grandis* reveals genomic regions and positional candidate defence genes. South African Society for Bioinformatics & South African Genetics Society (SASBi-SAGS) Joint Conference, 16 – 18 October, Golden Gate Highlands National Park, South Africa (poster)

Reynolds SM, Tii-Kuzu YJ, Ranade SS, **O'Neill MM**, Henning JS, Swain TL, Meyer B, Verryn SD, Mphahlele MM , Van Deventer F, Van der Hoef A, Nel A, Le Roux T, De Waal L, Acosta JJ, Isik F, Hodge GR, Payn KG, Kanzler A, Naidoo S, Myburg AA. 2017. The development of a genomic diversity atlas for pine and eucalypt species of importance to the South African forestry industry. South African Forestry Research Seventh Forest Science Symposium, 18 – 20 July, Pietermaritzburg, South Africa (oral)

Mhoswa L, **O'Neill MM**, Mphahlele MM, Slippers B, Myburg AA, Naidoo S. 2016. Genome-wide association study (GWAS) of *Leptocybe invasa* resistance in *Eucalyptus grandis*. South African Society for Bioinformatics & South African Genetics Society (SASBi-SAGS) Joint Conference, 20 – 23 September, Durban, South Africa (oral)

O'Neill MM, Reynolds SM, Mphahlele M, Louw A, Galloway G, Jones N, Kanzler A, Du Plessis, Pienaar B, Myburg AA. 2014. High-throughput SNP marker genotyping for genomic selection of growth and wood properties in *Eucalyptus*. Sixth Forest Science Symposium, 29 – 30 July, Pietermaritzburg, South Africa (poster)

Mphahlele MM, Hodge GR, Isik F, Du Plessis M, Pienaar B, Van Deventer F, Reynolds SM, **O'Neill MM**, Myburg AA. 2014. Opportunities and challenges of genomic selection for growth, wood properties and disease resistance in *Eucalyptus grandis* breeding. Sixth Forest Science Symposium, 29 – 30 July, Pietermaritzburg, South Africa (poster)

Van Dyk MM, Reynolds SM, **O'Neill MM**, Ralikonyana P, Myburg AA. 2010. DNA fingerprinting: a platform for clonal identification and parentage analysis in breeding programmes. Fourth Forest Science Symposium, 3 – 4 August, Pietermaritzburg, South Africa (oral)

O'Neill MM, Myburg AA. 2008. Functional analysis of the *Eucalyptus grandis* secondary cell wall associated *cellulose synthase 1* (*EgCesA1*) gene in *Arabidopsis thaliana*. South African Genetics Society (SAGS) Symposium, March 26 – 29, Pretoria, South Africa (poster)

MARJA MOSTERT-O'NEILL

SCHOLARSHIPS

UNDERGRADUATE

UP with Science Scholarship
University of Pretoria | Jan. 2002 - Dec. 2004 | ~R 45,000 (100% tuition fees)

POSTGRADUATE

Achievement Scholarship (B.Sc. Hons)
University of Pretoria | Jan. 2005 - Dec. 2005 | R 25,000

Free-Standing Honours Scholarship (B.Sc. Hons)
National Research Foundation (NRF) | Jan. 2005 - Dec. 2005 | R 20,000

Achievement Scholarship (M.Sc.)
University of Pretoria | Jan. 2006 - Dec. 2007 | R 25,000

Grant Holder-Linked Master's Scholarship (M.Sc.)
National Research Foundation (NRF) | Jan. 2006 - Dec. 2007 | R 40,000

UP Doctoral Research Bursary (Ph.D.)
University of Pretoria | Jan. 2017 - Dec. 2019 | R 260,000

NRF Doctoral Innovation Bursary (Ph.D.)
National Research Foundation (NRF) | Jan. 2017 - Dec. 2019 | R 360,000

NRF Travel Grant (Ph.D.)
National Research Foundation (NRF) | Jun. 2019 | R 50,000

NRF Doctoral Extension Bursary (Ph.D.)
National Research Foundation (NRF) | Jan. 2020 - Dec. 2020 | R 120,000