CURRICULUM VITAE

Felipe Alejandro Balocchi Schalchli

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GENERAL INFORMATION

Nationality: Chilean

Languages: English (fluent), Spanish (native)

Drivers License: Chilean driver's license (International driver's license and/or official translation in the

Chilean consulate for its use in South Africa).

Research profiles: ResearchGate – FABInet – Google Scholar

Research interests: Forest pathology, plant pathology, mycology, ecology, biological invasions, climate change

Additional skills: Use of MS Office (Intermediate-advanced)

Basic statistical analyses (R or SAS)

Capturing GPS coordinates and routes

EDUCATION		
2022	PhD in Plant Pathology (C) Department of Plant and Soil Sciences Faculty of Natural Resources University of Pretoria	Pretoria, South Africa
2016	MSc in Forestry Sciences University of Concepción Department of Silviculture Faculty of Forestry Sciences	Concepción, Chile
2013	Engineer in Plant Biotechnology University of Concepción Department of Silviculture Faculty of Forestry Sciences	Concepción, Chile
2012	Bachelor of Plant Biotechnology University of Concepción Department of Silviculture Faculty of Forestry Sciences	Concepción, Chile
2007	Secondary education Kingston College School	Concepción, Chile

INTERNATIONAL COURSES AND/OR WORKSHOPS			
2021	'Introductory Microsatellite Workshop' Presented at the Forestry and Agricultural Biotechnology Institute (FABI) of the University of Pretoria, in collaboration with Thermo Fisher.	Pretoria, South Africa	
2018	'Advanced Phylogenetics Workshop' Presented by: Prof. Martin Coetzee, Department of Biochemistry, Genetics and Microbiology, University of Pretoria; and Dr Jane Wright, Inqaba Biotec, South Africa.	Pretoria, South Africa	
2015	'Genetic analysis in phytopathogen populations' Presented by: Dr. Eduardo Mizubuti, Department of Phytopathology of the Federal University of Vicosa, Brazil	Concepción, Chile	

2014	'Phytophthora spp. in forest environments' Presented by: Dr. Thomas Jung, Center for Mediterranean Bioresources and Food (MeditBio), University of Algarve, Portugal	Concepción, Chile
2013	'Phytophthora: Taxonomy, Isolation, Cultivation, Preservation, Pathogenicity and Control' Presented by: Dr. Álvaro Figueredo Dos Santos, EMBRAPA Forests, Brazil	Concepción, Chile
2013	'Biological Control of Plant Diseases' Presented by: Dr. Wagner Bettiol, EMBRAPA Forests, Brazil	Concepción, Chile
2013	'Phytophthora spp.: An Ingenious Assassin of Plants' Presented by: Dr. Eduardo Mizubuti, Department of Phytopathology of the Federal University of Vicosa, Brazil	Concepción, Chile
2013	'Evaluation of the Quality of Products Based on Trichoderma' Presented by Dr. Wagner Bettiol, EMBRAPA Forests, Brazil	Concepción, Chile
2013	'Field and nursery diseases of Eucalyptus' Presented by: Prof. Acelino Couto Alfenas, Department of Phytopathology of the Federal University of Vicosa, Brazil	Concepción, Chile

WORK EXPERIENCE

Jan. 2018 -TPCP Diagnostic Clinic, Forestry and Agricultural Biotechnology Institute Jun. 2021 (FABI), University of Pretoria

Pretoria, South Africa

Member of the TPCP Diagnostic clinic, provision of plant health services to the South African forestry industry.

Tasks:

- Sample processing: fungal and oomycete isolations, insect collections.
- Fungal identification through morphology and DNA based techniques.
- Assistance in field trips and sample collection.

Oct. 2014 -Forest Pathology Laboratory, University of Concepción (UdeC) Jul. 2017

Concepción, Chile

Research assistant project "FIC-R Transfer: Centre for diagnosis and management of diseases and pests" ('Centro de diagnóstico y manejo de enfermedades y plagas'). Responsible for:

- Field extension and sample collection.
- Sample processing: fungal and oomycete isolations, insect collections, fungal identification through morphology and DNA based techniques.
- Bibliographic research and preparation of diagnostic reports.
- Reaching potential stakeholders.

Jan. 2017 -Forest Pathology Laboratory, University of Concepción (UdeC) Jul. 2017

Providing professional service to third-party clients:

Concepción / Linares, Chile

- Phytosanitary assessment on natural stands of Austrocedrus chilensis (Cypress of the Cordillera), with an emphasis on the detection of the oomycete Phytophthora austrocedrae and the aphid Cinara cupressi.
- Field extension and sample collection.
- Sample processing: fungal and oomycete isolations, insect collections, fungal identification through morphology and DNA based techniques.
- Bibliographic research and preparation of diagnostic reports.

Sep. 2015 – Jul. 2017

Forest Pathology Laboratory, University of Concepción (UdeC)

Concepción / Parral, Chile

Research assistant in joint project of the University of Concepcion and the Agricultural and Forestry Company, CAF El Alamo: 'Epidemiology and control of canker and leaf spot caused by *Septoria musiva* in poplar plantations' Responsible for:

- Disease scoring on plantations and nursery stands.
- Monitoring disease progression (monthly).
- Collection of samples and fungal isolations.
- Green house pathogenicity tests.
- In vitro fungicide-sensitivity tests.
- Information processing and reporting.

May. 2016 – Jul. 2017

Forest Pathology Laboratory, University of Concepción (UdeC)

Concepción / Trongol Alto,Chile

Research assistant in joint project of the University of Concepción and Forestal Mininco SA (Chilean Forestry enterprise): 'Aetiology of the death of branches of *Araucaria araucana* in native forests belonging to Forestal Mininco SA' Responsible for:

- Project design, planning and logistic arrangements.
- Field prospections and selection of sites of interest
- Design of disease scoring, monitoring, and sampling strategies.
- Plant and soil sample collection and analyses.
- Fungal and Oomycete isolations.

Mar. 2011 – Mar. 2014

Forest Pathology Laboratory, University of Concepción (UdeC)

Concepción / Los Ángeles,

Voluntary research assistant in project 'Development of biotechnological tools for the control of *Fusarium circinatum* in nurseries of *Pinus radiata*'.

Assisting on:

- Establishment of greenhouse trials
- Sample processing in laboratory
- Statistical analysis of results.

Dec. 2011-Mar. 2012

Silvo-Agricultural Biotechnology Laboratory, Faculty of Forest Sciences and Renewable Resources, Universidad Austral of Chile (UACh)

Valdivia, Chile

Chile

Professional practice:

- Assessing the utility of microsatellite markers in multiplex reactions to certify the origin of the propagation material for clones of Eucalyptus globulus.
- Phylogenetic analyses using allele data.
- Searching and testing previously developed microsatellite primers for species of *Nothofagus* individually and as multiplex reactions.

TEACHING EXPERIENCE

Aug. 2012 – Jul. 2017

Faculty of Forestry Sciences, University of Concepción (UdeC)

Concepción,

Chile

Giving lectures at undergraduate courses (replacements to main lecturers) and laboratory classes for the careers Plant Biotechnology Engineering and Forestry Engineering.

Courses:

- 'Plant health and Seed selection and germination techniques'
- 'Forest health'
- 'Microbiology'

Responsible for:

- Teaching auxiliary classes.
- Planning and execution of laboratory activities.
- Marking tests and reports.

Mar. 2014 – Jul. 2014

Talentos Udec, Social Responsibility Studies Programme, University of Concepción (UdeC)

Concepción, Chile

Teacher at complementary school for secondary education students with high skills.

- Design of the course 'Knowing the world of biotechnology': classes and theoretical activities.
- Involvement in school activities and seminars.

AWARDED FUNDING

Innova Bío Bío 12.288-EM.TES: 'Development of mycoherbicides for the forest weeds French broom and Scotch broom'. Project beneficiary, funding used for the MSc research project. Concepción, Chile, 2013-2016.

FONDEF ID16I10341: 'Development of bioherbicides for the weeds French broom (*Genista monspessulana*), Scotch broom (*Cytisus scoparius*) and gorse (*Ulex europaeus*)'. Research funding awarded based on the MSc project results. Concepción, Chile, 2016.

PUBLICATIONS IN SCIENTIFIC JOURNALS

- Balocchi F, Wingfield MJ, Paap T, Ahumada R, Barnes I (2022) Pathogens of the Araucariaceae: How much do we know? Current Forestry Reports. https://doi.org/10.1007/s40725-022-00164-z
- Burgess TI, Oliva J, Sapsford SJ, Sakalidis ML, Balocchi F, Paap T (2022) Anthropogenic disturbances and the emergence of native diseases; a threat to forest health. Current Forestry Reports. https://doi.org/10.1007/s40725-022-00163-0
- Balocchi F, Wingfield MJ, Ahumada R, Barnes I (2021) *Pewenomyces kutranfy* gen nov. et sp. nov. causal agent of an important canker disease on *Araucaria araucana* in Chile. Plant Pathology 70: 1243-1259. https://doi.org/10.1111/ppa.13353

ATTENDANCE AT CONGRESSES AND SEMINARS

- Balocchi F. Araucaria (*Araucaria araucana*) canker disease in Chile (2022) Oral presentation at the TPCP 33rd annual meeting of the Tree Protection Co-operative Programme (TPCP) and the DSI NRF Centre of Excelence in Plant Health Biotechnology (CPHB). Pretoria, South Africa.
- IUFRO Forest Health Webinar Series. Technical staff and discussion panel. Available at: (https://www.fabinet.up.ac.za/index.php/events/Forest%20Health%20Webinar%20Series).
- Balocchi F, Ahumada R, Wingfield MJ, Barnes I (2020) A new genus and species of Coryneliaceae (Coryneliales) causing a serious canker disease on *Araucaria araucana* in Chile (Poster). The Mycological Society of America: MSA 2020: Mycology from the Cloud. DOI: 10.13140/RG.2.2.34372.96642
- Ahumada R, Balocchi F (2018) Daño foliar de *Araucaria*, Avances en la determinación de las causas. Chilean National Forest Corporation (CONAF), 2nd Meeting on the 'Daño Foliar de *Araucaria*'. Temuco, Chile.
- Sanfuentes E, Balocchi F, Moraga-Suazo P, Venegas J, Retamal L (2018) *Sphaerulina musiva* causing stem cankers in poplar plantations in Chile. IUFRO Working Group 2.08.04: Seventh International Poplar Symposium: New bioeconomies: exploring the potential role of Salicaceae. Buenos Aires, Argentina.
- Balocchi F, Sanfuentes E (2017) Epidemiology and control of canker and leaf spot caused by Septoria musiva in poplar plantations. Oral presentation at the Technical Committee of Leucoptera sinuella and other pests of Salicaceae. Talca, Chile.
- Balocchi F, Sanfuentes E (2015) Pathogenic fungi associated to weeds *Genista monspessulana* and *Cytisus scoparius* and susceptibility in species of forest interest. Oral presentation at the XXIV Chilean Congress of Phytopathology. Viña del Mar, Chile.
- Balocchi F, Aguilar F, Barria V, Sanfuentes E (2013) Pathogenic fungi associated with seeds of *Nothofagus* spp. Poster exhibition at the 64th Congress of the Chilean Agronomic Society and XXI Chilean Congress of Phytopathology. Viña del Mar, Chile. DOI:10.13140/RG.2.2.15079.16809