

Curriculum Vitae

Name: Myriam Alejandra Solís García

Date of Birth: 1/01/1991

City: Concepción

Country: Chile

e-mail: msolis@udec.cl myriamsolisgar@gmail.com

EDUCATION

2017-2019 UNIVERSITY OF CONCEPCION,
FACULTY OF BIOLOGY SCIENCES.

MSc.Biochemistry and Bioinformatics.

Thesis title: Annotation and characterization of MYB-R2R3 transcription factors of *Euclayptus nitens* Maiden. under cold acclimation profile.

Supervisor: Dr. Alexis Salas B. University of Concepción. Co-supervisor: Dra. Sofía Valenzuela, Dra.Marta Fernández. University of Concepción.

2010-2015 UNIVERSITY OF CONCEPCION
FACULTY OF FOREST SCIENCES.

Plant Biotechnology Engineering.

Thesis title: Determination of sensitivity to cyprodinil + fludioxonil in populations of *Botrytis cinerea* Pers.:Fr. in nurseries of *Eucalyptus* spp. Genotypic and phenotypic characterization of the pathogen population.

Supervisor:Dr.Eugenio SanfuentesV. University of Concepción. Co-supervisor: MSc.Marcela Esterio. University of Chile.

1995-2008 Secondary education. Concepción,Chile. ETCHEGOYEN SCHOOL

WORK EXPERIENCE

Mar.2013 - Dec.2015

FACULTY OF FOREST SCIENCES,
UNIVERSITY OF CONCEPCIÓN. Concepción,Chile.

Teaching assistant courses “Plant health”, “Methods of detection of fungi in seeds” and “Biotechnological Tools in Phytopathology” for the undergraduate career Plant biotechnology engineering .

Responsible for: Planning and execution of laboratory activities. Teaching classes and correcting evaluations.

Dec.2013 - Dec.2015

FACULTY OF FOREST SCIENCES,
UNIVERSITY OF CONCEPCIÓN Concepción,Chile.

Teaching assistant in the course Forest health: for the undergraduate career Forestry Engineering.

Responsible for: Planning and execution of laboratory activities and field trip. Teaching classes and correcting evaluations.

Sep.2013

UNIVERSITY OF CONCEPCIÓN. Concepción,Chile

Organizer of the Debate "Transgenics: Myths and Realities", academic activity in the framework of the undergraduate course "Biosecurity and Bioethics" in the career of Plant Biotechnology Engineering

Sep.2013-Dec.2013

UNIVERSITY OF CONCEPCIÓN Concepción,Chile

Scientific talks through conducting lectures in schools of the Concepción.
Theme: Different aspects of Biotechnology

Jan. 2014 – Mar.2014

FRUITING AND MOLECULAR PHYTOPATHOLOGY LAB, FACULTY OF
AGRONOMY SCIENCES, UNIVERSITY OF CHILE. Santiago, Chile.

Professional practice. Works in molecular and phenotype characterization of *Botrytis cinerea* in vineyards and blueberries, through the use of duplex PCR for molecular characterization and for phenotypic characterization use of mycelial growth, sporulation and virulence in host. Determination of the resistance of botrytis cinerea to different groups of fungicides.

May.2015

FACULTY OF FOREST SCIENCES,
UNIVERSITY OF CONCEPCIÓN Concepción,Chile.

Designer of the chemical control plan of *Botrytis cinerea* for the national company forest "Forestal Mininco" S.A.

Oct.2015

FACULTY OF FOREST SCIENCES,
UNIVERSITY OF CONCEPCIÓN Concepción,Chile.

Professor of mycology replacement for the compulsory subject Microbiology to the career of Plant Biotechnology Engineering.

Apr.2015-Mar.2016

FOREST PATHOLOGY LAB,
FACULTY OF FOREST SCIENCES,
UNIVERSITY OF CONCEPCIÓN Concepción,Chile.

Research assistant Project FONDEF IdeA CA "Endolyptus: Endophytic bacteria and fungi as biocontrol agents for diseases and promotion of growth in *Eucalyptus* spp." Planning of *in-vitro* and greenhouse biocontrol trials.Isolation and morphological and molecular characterization of endophytic fungi of *Eucalyptus* and biocontrol product formulation.

Mar.2017-Nov.2017

FACULTY OF BIOLOGY SCIENCES ,
UNIVERSITY OF CONCEPCIÓN Concepción,Chile

Professor in the project "1024 programmers for the BíoBío (Concepción)".

Teach basic notions of programming to children of public schools in Concepción, to cover the growing demand of programmers that is required.

Mar.2017 - Dec.2018

FACULTY OF BIOLOGY SCIENCES,
UNIVERSITY OF CONCEPCIÓN Concepción,Chile.

Professor assistant of Biochemistry for the career of Biology,Marine Biology and Anthropology at the Universidad de Concepción.

Exposure and evaluation of general biochemistry and molecular biology content.

Jan.2018

Professor of the summer course at the University of Concepción, "Python in science". In charge of topics, Python introduction to variables and types of variables, flow, functions and use of tools for graphics such as Matplotlib.

Mar.2018- Dec 2019

Member of the company Datagen, specialists in genomic sequence analysis for the detection of variants such as SNPs associated with diseases in humans, as well as in the determination of new varieties of plant species with resistance to some type of stress.

Collaboration in RNAseq sequence processing and gene annotation.

Octob. 2018- Dec 2019

Coordinator in the project "1024 programmers for the BíoBío (Concepción)".

Direct the teaching of Python in children and adults of the Bío-Bío region, Chile.

<https://1024programadores.cl/>

ATTENDANCE AT CONGRESSES AND SEMINARS

Assistant to the seminar on "Applications of Biotechnology in the agroforestry area", Friday, May 30, 2014, Universidad de Concepción.

Poster Exhibition at the XXIII Congress of the Chilean Society of Phytopathology, "Sensitivity of *Botrytis cinerea* isolates collected in nurseries of *Eucalyptus* spp., for cyprodinil + fludioxonil and their relationship with phenotypic characteristics and potential hostility, December, 2014, Chile, Talca, Maule Region. Myriam Solís, Marcela Esterio and Eugenio Sanfuentes.

Oral presentation at the XXIV Chilean Phytopathology Society Congress. "Determination of sensitivity to cyprodinil + fludioxonil, genotypes and phenotypes of *Botrytis cinerea* isolates obtained from eucalyptus nurseries" Myriam Solís. CHILE, Viña del Mar, 2015.

Poster Exhibition at the second scientific meeting "Resilience in plants". " MYB R2R3 in the cold response of *Eucalyptus nitens*. University of Talca, Chile. Jul 23-24, Talca, 2018.

Poster Exhibition at the International Society for Computational Biology, SOIBIO and EMBnet Joint Bioinformatics Conference 2018 (ISCB-LA SOIBIO EMBnet 2018). "MYB transcription factors in response to the low temperature of *Eucalyptus* spp." Myriam Solís, Alexis Salas, Marta Fernández. Viña del Mar, Nov 5-9, 2018.

PRINCIPAL GRADUATE COURSES

"Genetic analysis in phytopathogen populations". Dictated by Dr. Eduardo Mizubuti of the Department of Phytopathology of the Federal *University of Vicosa* - Brazil. Concepción, Chile, 2015.

"Evaluation of the Quality of Products Based on Trichoderma". Dictated by Dr. Wagner Bettiol of the agricultural research EMBRAPA Forests. Concepción, Chile, 2014.

Techniques known

Isolation and storage of phytopathogenic fungi and endophytes microorganism

Methods of inoculation of phytopathogenic fungi endophytes microorganism

Determination of EC50 in tests with different types of fungicide

PCR /real time-duplex.

Genetic mapping programs BWA-Bowtie2 and the IGV viewer

R software for statistical analysis and analysis of expression in-silico (edgeR/limma)

Use of python language in Jupyter using bioinformatics tools

Use of FastQC and PrinSeq for the processing of sequences

Sequence assembly programs CAP3, Trinity, others.

Use of BLAST and BLAST software tools in the terminal

Use of MSA programs (multiple sequence alignment) and clustering and genetic inference methods to establish an evolutionary relationship between nucleotide and peptide sequences in RaxML,MEGA,Jalview.

Use of programs for structural determination of proteins and modeling (MODELLER, RaptorX)

Use of PyMOL for the structural study of proteins