EVELIA LORENA COSS NAVARRETE

Postdoctoral fellowship at Laboratorio Internacional de Investigacion Sobre el Genoma Humano - UNAM | Gene regulation | Evolution | Bioinformatics | Autoimmune diseases | lncRNAs

EDUCATION

2023 | 2018

PhD, Plant Biotechnology

Centro de Investigacion y de Estudios Avanzados del IPN (Cinvestav), UGA-Langebio

Guanajuato, Mexico

- Dr. Selene Fernandez Valverde
- Identification and characterization of conserved long non-coding RNAs in Brassicaceae.
- Grade: 9.3/10. First person to graduate from the generation.

2018 | 2016

M. Sc., Plant Biotechnology

Centro de Investigacion y de Estudios Avanzados del IPN (Cinvestav), UGA-Langebio

Guanajuato, Mexico

- Dr. Raul Alvarez Venegas and Dr. Stefan de Folter
- Effect of priming activation on bean nodule development and its relationship against Pseudomonas syringae pv. phaseolicola.
- Grade: 9.4/10. Second person to graduate from the generation.

2016 | 2012

B.Sc.,Biotechnology Engineering

Universidad Politecnica de Sinaloa (UPSIN).

Sinaloa, Mexico

- Grade: 9.6/10.

RESEARCH EXPERIENCE

2015

Professional Practices 3 | Undergraduate Thesis Student

Centro de Investigacion y de Estudios Avanzados del IPN (Cinvestav), Irapuato.

Queretaro, Mexico

- Dr. Raul Alvarez Venegas, Dr. Aaron Barraza Celis and Dr. Alejandra Hernandez Barrera
- Histochemical analysis of the effect of bean (Phaseolus vulgaris l.) trithorax group methyltransferases during nodulation.

CONTACT

ecoss@liigh.unam.mx

EveliaCoss

EveliaCoss

PROGRAMMING LANGUAGES

Expertise: R and Rstudio, Bash, AWK

Familiarity: Git/Github, python

LANGUAGES

Spanish - Native

English - B2 (TOEFL-IBT)

Made with the R package pagedown.

The source code is available at EveliaCoss/CV and is powered by nstrayer/cv.

Last updated on 2023-08-29.

2015

Research Stay 1 (Delfin project)

Universidad Politecnica de Sinaloa (UPSIN). Sinaloa, Mexico

- Dr. Jesus Aaron Salazar Leyva
- Characterization of the proteolytic properties of the crude extract of aguama fruit (Bromelia pinguin L).
- Protease analysis by zymography.

2014

Professional Practices 2

Centro de Investigacion y de Estudios Avanzados del IPN (Cinvestav), Irapuato. Guanajuato, Mexico

- Dr. Raul Alvarez Venegas and Dr. Aaron Barraza Celis
- Analysis of histone methyltransferases expression in different tissues of bean (Phaseolus vulgaris) plant.

2014

Social Service

Facultad de Ciencias del Mar (FACIMAR), Universidad Autonoma de Sinaloa (UAS) Sinaloa, Mexico

- Dr. Miguel Angel Hurtado Oliva and M.C. Idalia Osuna Ruiz
- Standardization of biochemical methods in aquatic organisms.

2014

Research Stay 1 (Delfin project)

Facultad de Ciencias del Mar (FACIMAR), Universidad Autonoma de Sinaloa (UAS) Sinaloa, Mexico

- M.C. Idalia Osuna Ruiz.
- Standardization of biochemical methods for microalgae.

2013

Professional Practices 1

Centro de Investigacion en Alimentacion y Desarrollo (CIAD) Sinaloa, Mexico

- M.P.A. Noemi Garcia Aguilar and M.C. Gabriela Velasco Blanco
- Cultivation of herbs (Mentha spicata), oregano (Origanum vulgare), radish (Raphanus sativus), green forage and Tilapia (Oreochromis sp) in an aquaponic system.

TEACHING EXPERIENCE

2023

CDSB 2023 - Quality control in scRNA-Seq

Virtual event

- Instructor for CDSB2023
- Comunidad de Desarrolladores de Software en Bioinformatica (CDSB), Nodo Nacional de Bioinformatica

2023

Introduction to RNA-seq data analysis with R

Estudios Superiores, Unidad Juriquilla (ENES), UNAM

Queretaro, Mexico

- Main instructor: Dr. Alejandra Medina-Rivera
- Instructor for RNAseq_classFEB2023
- Bioinformatics and Statistics 2, Genomic Sciences Program

2023

Data analysis with R

Centro de Ciencias Matematicas (CCM), UNAM

Virtual event

- Instructor for Manipulacion_de_datos
- R-ladies Morelia

2022

Helper in R Workshop and Git/Github

Centro de Ciencias Matematicas (CCM), UNAM

Virtual event

- Main instructor: Dr. Abraham Avelar Rivas, M.Sc. Diego Garfias Gallegos and M.Sc. Claudia Zirion Martinez
- Helper for Software Carpentry
- Software Carpentry

2022

Rmarkdown Introduction

Centro de Ciencias Matematicas (CCM), UNAM

Virtual event

- Instructor for Rmarkdown
- R-ladies Morelia

2022

Data analysis and graphs in R

Centro de Ciencias Matematicas (CCM), UNAM

Virtual event

- Instructor for Marvel_vs_DCcomics
- R-ladies Morelia

DATA SCIENCE WRITING

2022

Plants & Python: A series of lessons in coding, plant biology, computation, and bioinformatics

- VanBuren R , Rougon-Cardoso A, Amezquita EJ, Coss-Navarrete EL, Espinosa-Jaime A, Gonzalez-Iturbe OA, Luckie-Duque AC, Mendoza-Galindo E, Pardo J, Rodriguez-Guerrero G, Rosiles-Loeza PY, Vasquez-Cruz M, Fernandez-Valverde SL, Hernandez-Hernandez T, Palande S, and Chitwood. DH. Plants & Python: A series of lessons in coding, plant biology, computation, and bioinformatics, (2022). The Plant Cell, Volume 34, Issue 7, July 2022, Page e1, https://doi.org/10.1093/plcell/koac187

PUBLICATIONS

2022

Transcriptome-guided annotation and functional classification of long non-coding RNAs in Arabidopsis thaliana

- Corona-Gomez, J.A., Coss-Navarrete, E.L., Garcia-Lopez, I.J. et al. Transcriptome-guided annotation and functional classification of long non-coding RNAs in Arabidopsis thaliana. Sci Rep 12, 14063 (2022). https://doi.org/10.1038/s41598-022-18254-0

2020

Capter 6- Induction of plant resistance to biotic stress by priming with B-aminobutyric acid (BABA) and its effect on nitrogen-fixing nodule development

- Coss-Navarrete EL, Diaz-Valle A, Alvarez-Venegas R. Chapter 6 - Induction of plant resistance to biotic stress by priming with B-aminobutyric acid (BABA) and its effect on nitrogen-fixing nodule development, Editor(s): Mohammad Anwar Hossain, Fulai Liu, David J. Burritt, Masayuki Fujita, Bingru Huang, Priming-Mediated Stress and Cross-Stress Tolerance in Crop Plants, Academic Press, 2020, Pages 101-114, ISBN 9780128178928, https://doi.org/10.1016/B978-0-12-817892-8.00006-4.

2018

Down-regulation of PvTRX1h increases nodule number and affects auxin, starch, and metabolic fingerprints in the common bean (Phaseolus vulgaris L.)

- Barraza A, Coss-Navarrete EL, Vizuet-de-Rueda JC, Martinez-Aguilar K, Hernandez-Chavez JL, Ordaz-Ortiz JJ, Winkler R, Tiessen A, Alvarez-Venegas R. Down-regulation of PvTRX1h increases nodule number and affects auxin, starch, and metabolic fingerprints in the common bean (Phaseolus vulgaris L.) (2018). Plant Science, Volume 274,Pages 45-58, ISSN 0168-9452, https://doi.org/10.1016/j.plantsci.2018.05.006

2017

CARACTERIZACION PARCIAL DE LA ACTIVIDAD COAGULANTE Y CASEINOLITICA DE LAS PROTEASAS DEL FRUTO DE AGUAMA (Bromelia pinguin L.)

- Moreno-Henandez, J. M., Hernandez-Mancillas, X. D., Coss Navarrete, E. L., Banuelos-Perez, M. de J., Salazar-Leyva, J. A., Osuna-Ruiz, I., Rodriguez-Tirado, V. A., & Mazorra-Manzano, M. Angel. (2017). CARACTERIZACION PARCIAL DE LA ACTIVIDAD COAGULANTE Y CASEINOLITICA DE LAS PROTEASAS DEL FRUTO DE AGUAMA (Bromelia pinguin L.). Biotecnia, 19(2), 19-24. https://doi.org/10.18633/biotecnia.v19i2.380

2016

Partial Characterization of the Proteolytic Properties of an Enzymatic Extract From Aguama Bromelia pinguin L. Fruit Grown in Mexico

- Moreno-Hernandez, JM, Hernandez-Mancillas, XD, Coss-Navarrete, EL, Mazorra-Manzano, MA, Osuna-Ruiz I, Rodriguez-Tirado, VA, Salazar Leyva JA. Partial Characterization of the Proteolytic Properties of an Enzymatic Extract From Aguama Bromelia pinguin L. Fruit Grown in Mexico. Appl Biochem Biotechnol 182, 181-196 (2017). https://doi.org/10.1007/s12010-016-2319-x

TALKS AND POSTERS

2022

Sociedad Mexicana de Bioqumica (SMB) X

Poster — Yucatan, Mexico

- Co-authors: M.C. Evelia Lorena Coss Navarrete, Dr. Jose Antonio Corona-Gomez, Dr. Laurence Hurst, Dr. Stewart Gillmor, Dr. Katarzyna Oktaba, and Dr. Selene L. Fernandez-Valverde
- Conservation analysis of sequence-divergent lincRNAs in Brassicaceae

2021

FASEB 2021: The Mechanisms of Plany Development

Poster — Virtual event

- Co-authors: M.C. Evelia Lorena Coss Navarrete, Dr. Jose Antonio Corona-Gomez, Dr. Laurence Hurst, Dr. Stewart Gillmor, Dr. Katarzyna Oktaba, and Dr. Selene L. Fernandez-Valverde
- Transcriptomic-informed annotation and functional classification of long non-coding RNAs in Arabidopsis thaliana

2021

EMBL Symposium 2021: The Non-Coding Genome

Poster — Virtual event

- Co-authors: M.C. Evelia Lorena Coss Navarrete, Dr. Jose Antonio Corona-Gomez, Dr. Laurence Hurst, Dr. Stewart Gillmor, Dr. Katarzyna Oktaba, and Dr. Selene L. Fernandez-Valverde
- Transcriptomic-informed annotation and functional classification of long non-coding RNAs in Arabidopsis thaliana

2015

2nd Interinstitutional Congress of Young Researchers

Talk — Chihuahua, Mexico

- Co-authors: Coss Navarrete EL, Hernandez-Mancillas, XD, Salazar Leyva, JA.
- Biochemical characterization of a crude protease extract obtained from the wild plant aguama (Bromelia pinguin) native to southern Sinaloa.
- Biotechnology and agricultural science

2014

Delfin, Programa Interinstitucional para el fortalecimiento de la investigacion y el posgrado del pacifico

Talk — Nayarit, Mexico

- Co-authors: Coss Navarrete EL, Osuna-Ruiz I
- Standardization of biochemical methods in aquatic organisms.

COURSES

2023

CDSB 2023: Creando paquetes de R/Bioconductor para analisis transcriptomico de celula unica

Instructor and helper

Virtual event

- Main instructor: Dr. Joselyn Cristina Chavez Fuentes, Dr. Leonardo Collado-Torres, Dr. Alejandra Medina Rivera, Dra. Evelia Lorena Coss Navarrete, Dr. Laura Gomez Romero, Dr. Yalbi Balderas Martinez, Dr. Mirna Vazquez Rosas Landa, M.C. Jose Antonio Ovando Ricardez, M.C. Erick Cuevas Fernandez and Andres Arredondo Cruz
- CDSB2023, DE in scRNA-SEq and R/Bioconductor packages
- Comunidad de Desarrolladores de Software en Bioinform<U+00E1>tica (CDSB), Nodo Nacional de Bioinformatica

2022

Analysis of biological and biomedical transcriptomic data using Artificial Intelligence (AI) and Machine Learning methods (ML) methods with R

UNAM

Queretaro, Mexico

- Main instructor: Dr. Javier De Las Rivas (CSIC-USAL-IBSAL, Spain), Dr. Maribel Hernandez Rosales (CINVESTAV, Mexico), Dr. Enrique De Las Rosa (CSIC-USAL-IBSAL, Spain), and Dr. Flavio Spetale (CIFASIS-CONICET-UNR, Argentina).
- ISCB-LA SoIBio BioNetMX Symposium 2022
- RiaBio 2022

2022

The art and method of writing a Scientific Manuscript

Virtual event

- Main instructor: Dr. Susan Marriott
- BioScience Writers

2021

Genetic variants search

Virtual event

- Main instructor: Dr. Victor Flores
- ATGenomics

2021

Network analysis using igraph for R: a primer

Virtual event

- Main instructor: Dr. Guillermo de Anda Jauregui
- 2nd Workshop in advanced Bioinformatics

2021

Co-expression networks

Virtual event

- Main instructor: Dr. Katja Nowick
- 2nd Workshop in advanced Bioinformatics

2021

Network medicine

Virtual event

- Main instructor: Dr. Deisy Gypsi
- 2nd Workshop in advanced Bioinformatics

2019

CABANA workshop: Introduction to R and Bioconductor for genomic analyses

Centro de Investigacion y de Estudios Avanzados del IPN (Cinvestav), UGA-Langebio

Guanajuato, Mexico

- Main instructor: Dr. Cei Abreu Goodger and Dr. Benilton Carvalho
- CABANA

2019

Theoretical and Practical HiC Workshop: Wet-Lab and Bioinformatics

Centro de Investigacion y de Estudios Avanzados del IPN (Cinvestav), UGA-Langebio

Guanajuato, Mexico

- Main instructor: Dr. Selene Fernandez-Valverde, Dr. Francisco Perez. America Ramirez and Emilio Sotelo
- The Royal Society

2012

Mantenimiento correctivo de Computadoras

Universidad de Occidente Unidad Mazatlan

Sinaloa, Mexico

- Main instructor: M.C. Raymundo Magana

SCIENCE COMMUNICATION

2022

Conservacion de lincRNAs en Brassicaceaes

Talk

Virtual event

- Ciclo de “Bases y Bytes: Platicas de Bioinformatica”
- Universidad Politecnica de Sinaloa (UPSIN).

2021

PODCAST animalitos & plantitas: EP01 El cafe mas caro del mundo con Evelia Coss

Talk

Podcast

- The Biologist Apprentice

2021

Tercer mesa redonda “Trayectorias academicas”

Talk

Virtual event

- El Rincon de la Ciencia

2019

Identificacion y caracterizacion de ARNs largos no codificantes conservados en Brasicaceas

Talk

Guanajuato, Mexico

- Semana Tecnologica
- Tecnologico Nacional de Mexico, Instituto Tecnologico Superior de Purisima del Rincon