

# EVELIA LORENA COSS NAVARRETE

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



## EDUCATION

2023

- **Certified Instructor with The Carpentries**

The Carpentries

- Instructors: Verónica Jiménez Jacinto, Heladia Salgado, Paula Pappalardo, Macarena Quiroga
- Instructor Training
- <https://msquiroga89.github.io/2023-11-29-online/>

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.

## CONTACT

✉ [ecoss@liigh.unam.mx](mailto:ecoss@liigh.unam.mx)

🐦 [EveliaCoss](#)

⌚ [EveliaCoss](#)

## PROGRAMMING LANGUAGES

Expertise: R and Rstudio, Bash,

AWK, markdown/Rmarkdown

Familiarity: Git/Github, python,

HTML, CSS

## LANGUAGES

Spanish - Native

English - B1 (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 2025-12-25.

## 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.
- 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.  
• <https://www.sciencedirect.com/science/article/abs/pii/S0168945218300815>
- 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.  
• [http://200.23.35.7/archivos/productos/docencia/practicas/200300421\\_1.pdf](http://200.23.35.7/archivos/productos/docencia/practicas/200300421_1.pdf)



## OTHER EXPERIENCE AND PROFESSIONAL MEMBERSHIPS

- 2024-present • **R-Ladies Mexico**
- Organizing committee of the annual meeting of Rladies Mexico
  - Web page: <https://rladiesmx.netlify.app/>
- 2024-present • **ISCB Wikipedia**
- Dr. Nelly Selem
  - Information: <https://www.iscb.org/iscb-wikipedia-wikidata-competition>
- 2024-present • **ISCB RSG-Mexico**
- Web page: <https://rsg-mexico.iscb.org/>
- 2024-present • **International Society for Computational Biology (ISCB)**
- Membership ID: 41317
- 2024-present • **The Carpentries**
- Web page: <https://carpentries.org/>
  - Certified Instructor
- 2024 | 2021 • **RNA Society**
- <https://www.rnasociety.org/>
- 2023-present • **Comunidad de Desarrolladores de Software en Bioinformatica (CDSB)**
- Github: <https://github.com/ComunidadBioInfo/cdsb2023>
  - Instructor and helper, <https://comunidadbioinfo.github.io/es/authors/eveliacoss/>
- 2023-present • **Iberoamerican Society for Bioinformatics (RiaBio)**
- Web page: <https://www.cyted.org/RIABIO>
- 2023-present • **Project JAGUAR**
- Web page: <https://jaguar.liigh.unam.mx/>
  - Bioinformatics

- 2022-present
  - **Registro Mexicano de lupus (LupusRgMX)**
    - Web page: <https://lupusrgmx.liigh.unam.mx/quienes-somos.html>
    - Founding Member
  - **R-Ladies, Morelia**
    - Github: <https://r-ladies-morelia.github.io/>, Web page: <https://r-ladies-morelia.github.io/project/>
    - Founding Member



## HONORS

- Current
  - 2025
    - **Funding recipient, RSG Funding Program 2025 (RSG Mexico)**  
Regional Student Groups
      - Open-Source Enablers: Infrastructure, Good Practices & Reproducibility for students and young researchers in Bioinformatics in Mexico
      - <https://docs.google.com/document/d/169Wuwo4OQZ59-mLiqWFQFc3GexFKEDeekVdSBcQ1S9I/edit?usp=sharing>
    - **Posdoctoral Fellowship, CONACYT**
      - Mecanismos de regulación genética en la enfermedad de Lupus Eritematoso Sistémico. 01/02/2026 - 31/01/2029
      - PROCEDIMIENTO DE RENOVACIÓN 2025 DE ESTANCIAS POSDOCTORALES POR MÉXICO
    - **First Prize - CAMDA 2025**  
Organized by CAMDA
      - Presenter: Anton Pashkov. Team: Adriana Haydeé Contreras-Peruyero, Yesenia Villicaña-Molina, Nelly Sélem-Mojica, Francisco Santiago Nieto-de-la-Rosa, Víctor Muñiz-Sánchez, Anton Pashkov, Johanna Atenea Carreón-Baltazar, Luis Raúl Figueroa-Martínez, Evelia Lorena Coss-Navarrete, César Augusto Aguilar-Martínez, Varinia López-Ramírez, Mariana Jaired Ruíz-Amaro, Johanna Castelán Camarillo
      - Title: A Hybrid Pipeline for Feature Reduction, and Ordinal Classification to Predict Antimicrobial Resistance from Genetic Profiles
      - Announcement of winners: ISMB/ECCB 2025

- 2025
- **Second Prize - ISCB Student Wikipedia Competition announcement  
2024-25: Non-English Track**  
ISMB ECCB 2025 Award 📍 Liverpool, England
    - Sebastian Urquiza, Evelia Coss and David Alberto Garcia
    - Spanish version: Formato FASTQ. Web page: [https://es.wikipedia.org/wiki/Formato\\_FASTQ](https://es.wikipedia.org/wiki/Formato_FASTQ)
    - Announcement of winners: ISMB/ECCB 2025
- 2024
- **Best Poster Award (Graduate Category) at the XLVIII Annual Meeting of the Chilean Society for Biochemistry and Molecular Biology**  
Organized by Sociedad Bioquímica y Biología molecular de Chile 📍 Chile
    - Presenter: Sebastian Urquiza Zurich. Team: Sebastian Urquiza, Evelia Lorena Coss-Navarrete, Allan Peñaloza-Otarola, Paulo P. Amara, Sergio Lavandero, Vinicius Marcaja-Countino
    - Director: Vinicius Marcaja-Countino.
    - Transcriptome-guided assembly for coding and non-coding RNAs in cardiac hypertrophy induced by norepinephrine. Book: <chrome-extension://efaidnbmnnibpcajpcgkclefindmkaj/https://www.sbbmch.cl/wp-content/uploads/2024/10/LibroResumenSBBMCh2024.pdf>
- 2025-  
2028
- **SNI Candidate / Candidato a SNI**
    - Reconocimiento en el Sistema Nacional de Investigadoras e Investigadores 2024. 09/12/2024-31/01/2028
- 2024-  
2026
- **Posdoctoral Fellowship, CONACYT**
    - Mecanismos de regulación genética en la enfermedad de Lupus Eritematoso Sistémico. 01/02/2024 al 31/01/2026
    - Estancias Posdoctorales por México Convocatoria 2023(1)
- 2018-  
2022
- **PhD Fellowship, CONACYT**
- 2016-  
2018
- **MsC. Fellowship, CONACYT**

## TEACHING EXPERIENCE

- 2025
- **Workshop sobre Git / Github 2025**  
VieRnes de Bioinformática en el LIIGH-UNAM 📍 Virtual event
    - Instructor
    - March 7 and 14, 2025
    - Github: [https://github.com/EveliaCoss/Workshop\\_GitGitHub2025](https://github.com/EveliaCoss/Workshop_GitGitHub2025)

2025

● **Introduction to RNA-seq data analysis with R**

Estudios Superiores, Unidad Juriquilla (ENES), UNAM

📍 Queretaro, Mexico

- Main instructor: Dr. Alejandra Medina-Rivera
- Feb 25 and 27, March 4 and 6, 2025, Instructor for RNAseq\_classFEB2025
- Bioinformatics and Statistics 2, Genomic Sciences Program. Github: [https://github.com/EveliaCoss/RNAseq\\_classFEB2025](https://github.com/EveliaCoss/RNAseq_classFEB2025)

2024

● **Workshop Unix Shell**

Centro de Ciencias Matematicas (CCM), UNAM and LIIGH-UNAM

📍 Virtual event

- Instructor for the Software carpentry
- Dec 10-11, 2024. Course officially registered in The Carpentries. Web page: <https://iscb-rsg-mexico.github.io/2024-12-10-Workshop-Bash/>
- Github of web page: <https://github.com/ISCB-RSG-MEXICO/2024-12-10-Workshop-Bash>. Github tutorial: [https://github.com/ISCB-RSG-MEXICO/Workshop\\_Bash2024](https://github.com/ISCB-RSG-MEXICO/Workshop_Bash2024). Main page: [https://iscb-rsg-mexico.github.io/Workshop\\_Bash2024/](https://iscb-rsg-mexico.github.io/Workshop_Bash2024/)

2024

● **Programacion defensiva en ggplot2**

VieRnes de Bioinformática en el LIIGH-UNAM

📍 Virtual event

- Instructor
- Nov 1, 2024
- Github: [https://github.com/EveliaCoss/Defensiva\\_ggplot2024](https://github.com/EveliaCoss/Defensiva_ggplot2024)

2024

● **Tutorial scATACseq**

Universidad CES

📍 Medellin, Colombia

- Invitation by Wellcome Connecting Science
- Workshop Single Cell Genomic Approaches to Study the Immune System - Latin America & the Caribbean (9-11 November 2024) <https://coursesandconferences.wellcomeconnectingscience.org/event/single-cell-genomic-approaches-to-study-the-immune-system-latin-america-the-caribbean-20241109/>
- Github: [https://github.com/WCSCourses/Single\\_Cell\\_Genomics\\_ImmuneSys\\_24](https://github.com/WCSCourses/Single_Cell_Genomics_ImmuneSys_24); Github: [https://github.com/EveliaCoss/Tutorial\\_ISCB\\_LATAM\\_scATACseq](https://github.com/EveliaCoss/Tutorial_ISCB_LATAM_scATACseq)

2024

● **Workshop Bash 2024**

ENES, Juriquilla

📍 Queretaro, Mexico

- Invitation by Dr. Miriam Bravo
- Web page: [https://eveliacoss.github.io/Workshop\\_Bash2024/](https://eveliacoss.github.io/Workshop_Bash2024/)

2024

● **Workshop sobre git/Github 2024**

ENES, Juriquilla

📍 Queretaro, Mexico

- Invitation by Dr. Jair Santiago Garcia
- Web page: [https://eveliacoss.github.io/Workshop\\_GitGitHub2024/](https://eveliacoss.github.io/Workshop_GitGitHub2024/)

- 2024
- **Crea tu página web en R**  
• Instructor  
• Github: [https://github.com/EveliaCoss/make\\_yourWebpage](https://github.com/EveliaCoss/make_yourWebpage)
- 2024
- **Viernes de Bioinformatica (Bioinformatics Friday) - second part**  
Laboratorio Internacional de Investigacion sobre el Genoma Humano (LIIGH) UNAM  
• Course coordinator: Evelia Coss  
• Instructor and coordinator for ViernesBioinfo2024  
• Github: [https://github.com/EveliaCoss/ViernesBioinfo2024\\_parte2](https://github.com/EveliaCoss/ViernesBioinfo2024_parte2)
- 2024
- **Viernes de Bioinformatica (Bioinformatics Friday)**  
Laboratorio Internacional de Investigacion sobre el Genoma Humano (LIIGH) UNAM  
• Course coordinator: Evelia Coss  
• Instructor and coordinator for ViernesBioinfo2024  
• Github: <https://github.com/EveliaCoss/ViernesBioinfo2024>, Web page: <https://viernesbioinformatica.github.io/playlist/>
- 2024
- **Introduction to RNA-seq data analysis with R**  
Estudios Superiores, Unidad Juriquila (ENES), UNAM  
• Main instructor: Dr. Alejandra Medina-Rivera  
• Instructor for RNAseq\_classFEB2024  
• Bioinformatics and Statistics 2, Genomic Sciences Program. Github: [https://github.com/EveliaCoss/RNAseq\\_classFEB2023.git](https://github.com/EveliaCoss/RNAseq_classFEB2023.git)
- 2023
- **CDSB 2023 - Quality control in scRNA-Seq**  
• Helper  
• Instructor for CDSB2023  
• Comunidad de Desarrolladores de Software en Bioinformatica (CDSB), Nodo Nacional de Bioinformatica, Github: <https://github.com/ComunidadBioInfo/cdsb2023.git>
- 2023
- **Make your CV in R**  
Centro de Ciencias Matematicas (CCM), UNAM  
• Instructor for Make\_yourCV  
• R-ladies Morelia, Github: [https://github.com/EveliaCoss/Make\\_yourCV](https://github.com/EveliaCoss/Make_yourCV)

2023

● **Workshop: Analysis of RNA-Seq Data**

Laboratorio Internacional de Investigacion sobre el Genoma Humano (LIIGH) UNAM

 Virtual event

- Course coordinator: Evelia Coss
- Instructor and coordinator for RNASeq\_Workshop\_Nov2023
- Github: [https://github.com/EveliaCoss/RNASeq\\_Workshop\\_Nov2023](https://github.com/EveliaCoss/RNASeq_Workshop_Nov2023)

2023

● **Workshop: Database analysis in the medical area. Creating your analysis flows with R/Bioconductor.**

Centro Universitario de Ciencias de la Salud (CUCS) de la Universidad de Guadalajara (UdG)

 Guadalajara, Mexico

- Instructor for Curso\_ProgramacionR\_CUCS\_Oct2023
- PhD in Human Genetics, Github: [https://github.com/EveliaCoss/Curso\\_ProgramacionR\\_CUCS\\_Oct2023](https://github.com/EveliaCoss/Curso_ProgramacionR_CUCS_Oct2023)

2023

● **Viernes de Bioinformatica (Bioinformatics Friday)**

Laboratorio Internacional de Investigacion sobre el Genoma Humano (LIIGH) UNAM

 Queretaro, Mexico

- Course coordinator: Evelia Coss
- Instructor and coordinator for ViernesBioinfo2023
- Github: <https://github.com/EveliaCoss/ViernesBioinfo2023>

2023

● **Web application development in R (shinyapp)**

Estudios Superiores, Unidad Juriquilla (ENES), UNAM

 Queretaro, Mexico

- Instructor and coordinator for TuneameShinyApp\_ClassOct2023
- Github: [https://github.com/EveliaCoss/TuneameShinyApp\\_ClassOct2023](https://github.com/EveliaCoss/TuneameShinyApp_ClassOct2023)

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, Github: [https://github.com/EveliaCoss/RNAseq\\_classFEB2023.git](https://github.com/EveliaCoss/RNAseq_classFEB2023.git)

2023

● **Data analysis with R**

Centro de Ciencias Matematicas (CCM), UNAM

 Virtual event

- Instructor for Manipulacion\_de\_datos
- R-ladies Morelia, Github: [https://github.com/R-Ladies-Morelia/Manipulacion\\_de\\_datos.git](https://github.com/R-Ladies-Morelia/Manipulacion_de_datos.git)

- 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, Web page: <https://czirion.github.io/2022-06-11-R-UNAM/>
- 2022 ● **Rmarkdown Introduction** Centro de Ciencias Matematicas (CCM), UNAM  Virtual event
- Instructor for Rmarkdown
  - R-ladies Morelia, Github: [https://github.com/EveliaCoss/Rladies-Morelia /tree/f2781e5484a665e750fc482484a771dfff28612e/Rmarkdown](https://github.com/EveliaCoss/Rladies-Morelia/tree/f2781e5484a665e750fc482484a771dfff28612e/Rmarkdown)
- 2022 ● **Data analysis and graphs in R** Centro de Ciencias Matematicas (CCM), UNAM  Virtual event
- Instructor for Marvel\_vs\_DCcomics
  - R-ladies Morelia, Github: [https://github.com/EveliaCoss/Rladies-Morelia /tree/f2781e5484a665e750fc482484a771dfff28612e/Marvel\\_vs\\_DCcomics](https://github.com/EveliaCoss/Rladies-Morelia/tree/f2781e5484a665e750fc482484a771dfff28612e/Marvel_vs_DCcomics)

## DATA SCIENCE WRITING

- 2025 ● **Comunidades bioinformáticas sin fronteras**
- Co-authors: Evelia Lorena Coss-Navarrete, Erika Viridiana Cruz Bonilla y Nelly Sélem Mojica
  - Biotecnología en Movimiento, Año 10. Número 40, cap 6 (31 marzo 2025)
  - <https://biotecmov.ibt.unam.mx/numeros/40/>
- 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>
  - [https://drive.google.com/file/d/1Na0z9k4lgb6\\_N3u\\_pJD9L1nrhxhC6qLG /view?usp=sharing](https://drive.google.com/file/d/1Na0z9k4lgb6_N3u_pJD9L1nrhxhC6qLG/view?usp=sharing)



## PUBLICATIONS

2025

- **Preprint: Gene expression profiling of dendritic cell tolerance dysfunction in women with Systemic lupus erythematosus**

- Co-first author
- A. L. Hernández-Ledesma, E. L. Coss-Navarrete, S. Salazar-Magaña, D. Ramírez-Espinosa, L. Tinajero-Nieto, E. Torres-Valdez, A. Peña-Ayala, G. Félix-Rodríguez, G. Frontana-Vázquez, J. S. García-Sotelo, G. Trynka, F. Rosetti, S. L. Fernández-Valverde, M. Gutiérrez-Arcelus, D. Alpízar-Rodríguez, A. Medina-Rivera. biorxiv
- <https://www.biorxiv.org/content/10.64898/2025.12.21.695630v1>

2024

- **AB1113 ALLELE SPECIFIC GENE EXPRESSION DURING TOLERANCE INDUCTION ON DENDRITIC CELLS FROM MEXICAN WOMEN WITH SYSTEMIC LUPUS ERYTHEMATOSUS**

- A. L. Hernández-Ledesma, S. Salazar-Magaña, E. L. Coss-Navarrete, K. J. Nuñez-Reza, L. Tinajero Nieto, A. Peña-Ayala, E. Torres-Valdez, G. Felix Rodriguez, G. Frontana-Vázquez, F. Rosetti, S. L. Fernández-Valverde, M. Gutierrez Arcelus, D. Alpizar-Rodriguez, A. Medina-Rivera
- [https://ard.bmjjournals.org/content/83/Suppl\\_1/1887](https://ard.bmjjournals.org/content/83/Suppl_1/1887)

2022

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

- Co-first author
- 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>
- [https://drive.google.com/file/d/14eieFholzolNUvb2cXCgQZXutz2\\_LCgQ/view?usp=sharing](https://drive.google.com/file/d/14eieFholzolNUvb2cXCgQZXutz2_LCgQ/view?usp=sharing)

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>.
- [https://drive.google.com/file/d/1dOIM\\_RAvX1uM\\_1mIesK2-GgupOo02xz2/view?usp=sharing](https://drive.google.com/file/d/1dOIM_RAvX1uM_1mIesK2-GgupOo02xz2/view?usp=sharing)

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>
  - [https://drive.google.com/file/d/1XGfxNGEu-G7\\_oOsaCunYwY1x38uEU1Bc/view?usp=sharing](https://drive.google.com/file/d/1XGfxNGEu-G7_oOsaCunYwY1x38uEU1Bc/view?usp=sharing)

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>
- <https://drive.google.com/file/d/1Mb4WMwiDlv7ud4EubcjhhndLDueWtX8m/view?usp=sharing>

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>
- <https://drive.google.com/file/d/1G12ZL4t2ZN0LxIQtbjMnJTFhQJBPYikQ/view?usp=sharing>



## TALKS AND POSTERS

2025

- PANLAR 2025
  - Poster
  - 📍 Ciudad de Mexico, Mexico
- Presenter: Evelia Coss
- April 23-26, 2025. Poster only
- <https://docs.google.com/presentation/d/1IF-BStJJlv05HpcKsl0nfW5jslnQ1SgV/edit?usp=sharing&ouid=115061201453977266962&rtpof=true&sd=true>

2024

- **XLVIII Anual Meeting, Chilean Society for Biochemistry and Molecular Biology**  
Poster
  - Presenter: Sebastian Urquiza Zurich.
  - Co-authors: Sebastian Urquiza Zurich, Evelia Coss-Navarrete, Peñaloza-Otárola, Paulo P. Amaral3, Sergio Lavandero, Vinicius Marcaja-Countino
  - Transcriptome-guided assembly for coding and non-coding RNAs in cardiac hypertrophy induced by norepinephrine. Book: <chrome-extension://efaidnbmnnibpcajpcgkclefindmkaj/https://www.sbbmch.cl/wp-content/uploads/2024/10/LibroResumenSBBMCh2024.pdf>

2024

- **ISCB-Latin America SolBio CCBCOL - International Conference on Bioinformatics**  
Poster  Medellin, Colombia
  - Presenter: Evelia Coss
  - Nov 12-15, 2024 On-site event, Colombia Poster only
  - [https://docs.google.com/presentation/d/12Xn\\_vJOJx5HMOLROxIbwXGnEcdmYVcfO/edit?usp=sharing&ouid=115061201453977266962&rtpof=true&sd=true](https://docs.google.com/presentation/d/12Xn_vJOJx5HMOLROxIbwXGnEcdmYVcfO/edit?usp=sharing&ouid=115061201453977266962&rtpof=true&sd=true)

2024

- **Intelligent Systems for Molecular Biology (ISMB) congress**  
Poster  Montreal, Canada
  - Presenter: Evelia Coss
  - July 12-16, 2024
  - <https://drive.google.com/file/d/1MzG29tUEpcxPM16idFTgS7pZZWDj3tD0/view?usp=sharing>

2024

- **Días académicos en el LIIGH - Internal Seminar**  
Talk  Juriquilla, Queretaro
  - Presenter: Evelia Coss
  - Project JAGUAR: mapping immune cell diversity across Latin America
  - Video: [https://www.youtube.com/watch?v=uI2Y7kOcJaA&ab\\_channel=LIIGH\\_UNAM](https://www.youtube.com/watch?v=uI2Y7kOcJaA&ab_channel=LIIGH_UNAM)

2023

- **Chan Zuckerberg Science Initiative (CZI) - anual meeting**  
Talk  Carlsbad, California, USA
  - Presenter: Evelia Coss
  - Project JAGUAR: mapping immune cell diversity across Latin America
  - Ancestry Networks for the Human Cell Atlas

2022

- **Sociedad Mexicana de Bioquímica (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 Plant 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

2025

- **Hackathon CAMDA 2025**  
Assistant participant

📍 Morelia, Mexico

- June 9-13, 2025. Organizer: ISCB, RSG-Mexico and CCM-UNAM
- Research focus: Gene discovery in bacterial resistance pathways
- Title: A Hybrid Pipeline for Feature Reduction, and Ordinal Classification to Predict Antimicrobial Resistance from Genetic Profiles

2025

- **CABANANet: Train the Trainers**  
Instructor and helper

📍 Queretaro, Mexico

- April 29-30, 2025
- Github: [https://github.com/EveliaCoss/CABANANet\\_TrainTrainers2025](https://github.com/EveliaCoss/CABANANet_TrainTrainers2025)

- 2025
- **RLadies-Morelia: Reprohack 2025**  
Instructor and helper  Queretaro, Mexico
    - April 28, 2025
    - Github: [https://github.com/ISCB-RSG-MEXICO/Rephack2025\\_RLadiesMorelia\\_RSGMexico](https://github.com/ISCB-RSG-MEXICO/Rephack2025_RLadiesMorelia_RSGMexico)
- 2025
- **Curso gratis de Minería Genómica**  
Instructor and helper  Queretaro, Mexico
    - April 29-30, 2025
    - Github: <https://github.com/ISCB-RSG-MEXICO/2025-04-29-MineriaGenomica>
- 2024
- **Analyzing PBMCs Single Cell ATAC- Seq and Multiome data: Theory and practice**  
Instructor and helper  Medellin, Colombia
    - November 9-11, 2024 On-site event, Colombia Organizer: Wellcome Connecting Science Location: to be confirmed Instructors: Evelia Coss and Diego Ramirez
    - Github: [https://github.com/EveliaCoss/Tutorial\\_ISCB\\_LATAM\\_scATACseq](https://github.com/EveliaCoss/Tutorial_ISCB_LATAM_scATACseq)
- 2024
- **Workshop CDSB 2024: Desarrollo de paquetes de R/Bioconductor**  
helper  virtual event
    - October 28-31, 2024
    - Github: <https://github.com/ComunidadBioInfo/cdsb2024>
- 2024
- **ISCB- Youth Bioinformatics Symposium**  
 Montreal, Canada
    - July 12, 2024 On-site event, Montreal, Canada Course related with: Introduction to Python in Science and Biology.
- 2024
- **Tutorial VT4: Computational Approaches for identifying context-specific transcription factors using single-cell multi-omics datasets**  
 Virtual event
    - July 9, 2024 Github: <https://github.com/osmanbeyoglulab/Tutorials-on-ISMB-2024>
- 2024
- **Scientific writing course**  
 Virtual event
    - June 19, 2024, Instructor: Ian Scott Kinney

- 2024
- **Hackathon 2024: R-Ladies Morelia and R-Ladies Querétaro meeting**  
Instructor and helper  Morelia, Mexico
    - May 31 and June 1, 2024 Hackaton 2024: [https://github.com/R-Ladies-Morelia/CursosRladiesMorelia\\_RladiesQueretaro\\_2024/tree/main/Hackaton2024](https://github.com/R-Ladies-Morelia/CursosRladiesMorelia_RladiesQueretaro_2024/tree/main/Hackaton2024) Best practices in R (Instructor: Evelia Coss): [https://github.com/EveliaCoss/Buenaspracticas\\_R\\_Mayo2024](https://github.com/EveliaCoss/Buenaspracticas_R_Mayo2024)
- 2024
- **Best practices in R**  
Instructor  Juriquilla, Queretaro
    - Instructor: Evelia Coss
    - June 19, 2024
    - Web page: [https://github.com/EveliaCoss/Buenaspracticas\\_R\\_Mayo2024](https://github.com/EveliaCoss/Buenaspracticas_R_Mayo2024)
- 2024
- **R-Ladies, Morelia courses**  Virtual event
    - Feb 29, April 25, 2024, Web page: <https://www.meetup.com/es-ES/r ladies-morelia/>
- 2024
- **Global Bioinformatics Education Summit 2024 (GBES)**  Virtual event
    - Document
- 2024
- **Python Programming and Graphing**  Puebla, Mexico  
Helper
    - Instructors: Shaday Guerrero, Gabriel Alarcón Carranza. Helpers: Haydee Peruyero, Heladia Salgado, Evelia Coss
    - Web page: <https://helysalgado.github.io/2024-05-27-csvconf/>
    - The Carpentries
- 2024
- **Data Analysis - Python, Bash and GIT**  Morelia, Mexico  
Helper
    - Instructors: Haydee Peruyero, Shaday Guerrero, Miguel Angel Magana
    - Web page: <https://miguel-mx.github.io/2024-01-24-ccm-unam-sw/>
    - The Carpentries
- 2023
- **Instructor training with The Carpentries**  Virtual event
    - The Carpentries

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 Bioinformática (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 SolBio 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**  
• Main instructor: Dr. Deisy Gypsi  
• 2nd Workshop in advanced Bioinformatics
- Virtual event
- 2019
- **CABANA workshop: Introduction to R and Bioconductor for genomic analyses**  
Centro de Investigacion y de Estudios Avanzados del IPN (Cinvestav),  
UGA-Langebio  
• Main instructor: Dr. Cei Abreu Goodger and Dr. Benilton Carvalho  
• CABANA
- Guanajuato, Mexico
- 2019
- **Theoretical and Practical HiC Workshop: Wet-Lab and Bioinformatics**  
Centro de Investigacion y de Estudios Avanzados del IPN (Cinvestav),  
UGA-Langebio  
• Main instructor: Dr. Selene Fernandez-Valverde, Dr. Francisco Perez.  
America Ramirez and Emilio Sotelo  
• The Royal Society
- Guanajuato, Mexico
- 2012
- **Mantenimiento correctivo de Computadoras**  
Universidad de Occidente Unidad Mazatlan  
• Main instructor: M.C. Raymundo Magana
- Sinaloa, Mexico

## SCIENCE COMMUNICATION

- 2025
- **Conversatorio Mujeres en la bioinformática**  
Talk  
• UNAM celebra a Las Bioinformáticas  
<https://www.lajornadamorelos.mx/sociedad/unam-celebra-a-las-bioinformaticas/>
- Hibrid event
- 2025
- **De los datos a las comunidades: prácticas responsables en ciencia abierta**  
Talk  
• Maestría en Biomedicina experimental. 26 octubre 2025  
• Universidad Autónoma “Benito Juárez” de Oaxaca, Facultad de Medicina y Cirugía  
<https://www.facebook.com/share/p/lLshLUNHQH/>
- Virtual event

- 2024
- **Preguntale a una científica**  
Talk  Queretaro, Mexico
    - Talk
    - Comision Interna para la igualdad de Genero (CInIG)
- 2023
- **Los Neutrofilos, chile del que pica o chile del que no pica?**  
Paper
    - Co-authors: Karr de Leon S, Coss-Navarrete EL, Brunck ME.
    - El linfocito - numero 3 (Diciembre 2023)
    - link : <https://sociedadmexicanadeinmunologia.org/revista-edicion-3/>
- 2023
- **Transcriptome-guided annotation and functional classification of long non-coding RNAs in *Arabidopsis thaliana***  
Talk  Virtual event
    - Sociedad Peruana de Bioinformática y Biología computacional
    - Journal Club de Bioinformática. 26 sep 2023
    - <https://www.facebook.com/share/p/1A5kuA6SJW/>
- 2023
- **Project JAGUAR: Mapeo de la diversidad de células inmunitarias en América Latina**  
Talk  Virtual event
    - Ciclo de “Bases y Bytes 2023: Pláticas de Bioinformática”
    - Universidad Politécnica de Sinaloa (UPSiN).
- 2022
- **Conservación de lincRNAs en Brassicaceae**  
Talk  Virtual event
    - Ciclo de “Bases y Bytes: Pláticas de Bioinformática”
    - Universidad Politécnica de Sinaloa (UPSiN).
- 2021
- **PODCAST animalitos & plantitas: EP01 El café más caro del mundo con Evelia Coss**  
Talk  Podcast
    - The Biologist Apprentice
    - Video: [https://www.youtube.com/watch?v=6kz\\_biv6PNs&t=13s](https://www.youtube.com/watch?v=6kz_biv6PNs&t=13s)
- 2021
- **Tercer mesa redonda “Trayectorias académicas”**  
Talk  Virtual event
    - El Rincón de la Ciencia
    - Video: <https://www.facebook.com/elrincondelacienciasfr/videos/296828961881946/>

2019

- **Identificacion y caracterizacion de ARNs largos no codificantes conservados en Brasicaceas**  
Talk  Guanajuato, Mexico
  - Semana Tecnológica
  - Tecnológico Nacional de Mexico, Instituto Tecnológico Superior de Purísima del Rincón