Frida Sophia **Orozco Ruiz**

RESEARCH ENGINEER

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Interested in Gene Network Evolution and their Non-linear Dynamic properties applied to the Complex Biological System of Cancer.

Education

M.Sc., Life Sciences *Paris, France*

ÉCOLE NORMALE SUPÉRIEURE (ENS) - PSL *2022 — 2023*

- Graduated with honors
- Systems biology, genomics and bioinformatics speciality

B.Sc., Genomic Sciences *Querétaro, México*

NATIONAL AUTONOMOUS UNIVERSITY OF MEXICO (UNAM) *2018 — 2022*

- Graduated with honors

Research Experience

Research Engineer *Paris, France*

COMPUTATIONAL SYSTEMS BIOLOGY OF CANCER (U900), INSTITUT CURIE *November 2023 – Present*

- PROJECT – Development of Boolean Models on the topics of EMT and MET

Master 2 thesis student *Paris, France*

COMPUTATIONAL SYSTEMS BIOLOGY OF CANCER (U900), INSTITUT CURIE *January 2023 – June 2023*

- PROJECT – Literature based Boolean Modeling of Epithelial to Mesenchymal Transition (EMT) and the reverse process (MET) in cancer
- Supervision – Laurence Calzone, PhD

Undergradute thesis student *Querétaro, México*

EVOLUTIONARY SYSTEMS BIOLOGY LABORATORY, INTERNATIONAL LABORATORY FOR HUMAN GENOME RESEARCH

(LIIGH),NATIONAL AUTONOMOUS UNIVERSITY OF MEXICO (UNAM), JURIQUILLA CAMPUS *February 2021 – August 2022*

- PROJECT – Expression and Evolutionary Dynamics of a Genetic Circuit with Positive and Negative Feedback Loops
- Supervision – Mariana Gómez-Schiavon, PhD

Research intern *Querétaro, México*

THE CANCER GENETICS AND BIOINFORMATICS LABORATORY, INTERNATIONAL LABORATORY FOR HUMAN GENOME RESEARCH

(LIIGH),NATIONAL AUTONOMOUS UNIVERSITY OF MEXICO (UNAM), JURIQUILLA CAMPUS *August 2021 – March 2022*

- PROJECT – Characterization of immune infiltration and tumor microenvironment in Acral Lentiginous Melanoma using deconvolution methods on bulk RNA-seq data
- Supervision – C. Daniela Robles-Espinoza, PhD

Computer Skills and Languages

COMPUTER SKILLS

- Most experience – R and R Studio, Bash, Git
- Some experience – Python, Matlab, C++, Perl, HTML, Php, MySQL
- Bioinformatic skills – RNA-seq, ChIP-seq

LANGUAGES

- Spanish – Native
- English – Fluent

Talks, Posters and Selected Course Attendances

PerMedCoE summer school: from pathway modelling tools to cell-level simulations *Barcelona, Spain*

EMBL-EBI EUROPEAN BIOINFORMATICS INSTITUTE *2023*

- Poster presentation: 'Boolean Model of Epithelial to Mesenchymal Transition and Mesenchymal to Epithelial Transition in Cancer Cells'

4th International Summer Symposium on Systems Biology (SysBioMX 4) *México*

INMEGEN Instituto Nacional de Medicina Genómica *2022*

- Small talk and poster presentation: 'Expression and Evolutionary Dynamics of a Genetic Circuit with Positive and Negative Feedback Loops'

Computational Systems Biology of Cancer: Multimodal Data Integration *Paris, France*

Institut Curie *2022*

Academic Writing Course *Querétaro, México*

National Autonomous University of Mexico (UNAM) *2022*

Schoolarships

Q-Life master scholarship *Paris, France*

École Normale Supérieure (ENS) - PSL *2022*

- Awarded on a competitive basis by the Q-Life Institute of Convergence

Teaching Experience

Systems Biology, Undergraduate course for Genomic Sciences Program *Querétaro, México*

National Autonomous University of Mexico (UNAM), Juriquilla Campus *Spring 2022*

- Teaching Assistant and Guest Lecturer: 'Principles of biochemical oscillators'
- Course professor: Dr. Mariana Gómez-Schiavon

Certifications

Teachig Knowledge Test (TKT) *Querétaro, México*

Cambridge English *2017*