

Curriculum vitae

Miguel Ángel González Arias

PERSONAL INFORMATION

Place and date of birth: Mexico city, Mexico. April 08, 1996 (28 years old)

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Socials: X (Twitter), @miangoar; GitHub, @miangoar; Personal website, miangoaren.github.io

EDUCATION

Master degree in Biochemical Sciences (graduated with honors)

Institute of Biotechnology, National Autonomous University of Mexico (UNAM)

Cuernavaca, Morelos

Aug. 2020 – Mar. 2024

- Thesis: [Comparative evaluation of protein language models for betalactamase classification and prediction of their catalytic activity](#)
- Advisors: [Alejandro Angel Garciarrubio Granados](#) and [Lorenzo Patrick Segovia Forcella](#)
- Second advisors: [José Arcadio Farías Rico](#) and [Francisco Xavier Soberón Mainero](#)

Bachelors degree in Biology

Faculty of Sciences, UNAM

Coyoacan, Mexico city

Aug. 2015 – Jan 2021

- Thesis: [Genome reconstruction from metagenomes of the Gulf of Mexico](#)
- Advisor: [Lorenzo P. Segovia Forcella](#)

Certified proficiency in English (equivalent to B2)

National School of Languages, Linguistics and Translation, UNAM

Coyoacan, Mexico city

Nov. 2019

SKILLS AND EXPERIENCE

Biology: molecular biology, biochemistry, protein evolution, protein structure and function, phylogenomics, microbial ecology, metagenomics, next generation sequencing, comparative genomics, systems biology.

Informatics: python, R (basics), bash (Linux-GNU), computer hardware, data warling, data visualization, machine learning, deep learning, high performance computing (Oracle Grid Engine), cloud computing (Microsoft Azure and Google Colab), office suite tools, ChatGPT.

Languages: Spanish (native), English (B2).

Soft skills: organization, self-taught, story telling, curiosity, adaptability, friendly.

TEACHING EXPERIENCE

- **(Bachelor's thesis advising) Díaz López, Emiliano (2024). Evaluation of virtual phlogenomic methodologies for the identification and classification of Archaea**
Gustavo A. Madero, Mexico city, National School of Biological Sciences (IPN), May. 2024
- **(Lecture) Introduction to microbial genomics and taxogenomics**
Coyoacan, Mexico city, Institute of Marine Sciences and Limnology, UNAM, Sep. 2023
- **(Lecture) Introduction to protein science with machine learning**
Cuernavaca, Morelos, Center for Genomic Sciences, UNAM, Feb. 2023
- **(Lecture) Introduction to microbial ecology and metagenomics**
Coyoacan, Mexico city, Faculty of Sciences, UNAM, Jun. 2021
- **(Lecture) Genome reconstruction from metagenomes**
International, Virtual event in colaboration with WinterGenomics, Jun. 2020

SCIENCE COMMUNICATION EXPERIENCE

Genome workshop <i>American Educational Center</i>	Cuernavaca, Morelos Nov. 2019
Festival of sciences and humanities <i>UNAM science Museum (Universum)</i>	Coyoacan, Mexico city Oct. 2019
Resource: Personal blogpost on protein science and other topics <i>Social media</i>	
Resource: Annual biology student tips series <i>Social media</i>	

COURSES AND SCHOLARSHIPS

Awarded scholarship: 1st Latin american workshop on genome mining <i>Mathematics Research Center</i>	Guanajuato, Mexico 2022
Awarded scholarship: Representation Learning in Biology ISMB/ECCB 2021 <i>Virtual event</i>	International 2021
Awarded scholarship: Introduction to cloud computing with Microsoft Azure (AZ-900) <i>Virtual event</i>	Mexico 2021
Awarded scholarship: Scholarship for master's studies by the UNAM <i>Institute of Biotechnology, UNAM</i>	Cuernavaca, Morelos 2021
Course: Tools for the analysis of metagenomic data <i>Institute of Biotechnology, UNAM</i>	Cuernavaca, Morelos 2020
Awarded scholarship: 4th International Symposium on Bioinformatics <i>National Institute of Public Health</i>	Cuernavaca, Morelos 2019
Course: Whole metagenome shotgun analysis and comparative genomics <i>Gulf of Mexico Research Consortium</i>	Cuernavaca, Morelos 2018

ACADEMIC REFERENCES

- **Lorenzo Patrick Segovia Forcella**
Institute of Biotechnology, UNAM
Contact: lorenzo.segovia@ibt.unam.mx
- **Alejandro Angel Garcarrubio Granados**
Institute of Biotechnology, UNAM
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- **José Arcadio Farías Rico**
Center for Genomic Sciences, UNAM
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- **José Luis Puente García**
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- **Claudia Martínez Anaya**
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- **Luis David Alcaraz Peraza**
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