MARIANA ESCOBAR-RODRIGUEZ

Erasmus Mundus Master Programme in Evolutionary Biology (MEME)

MSc in Evolutionary Biology

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Education

2021 - Present

Erasmus Mundus Master Programme in Evolutionary Biology (MEME)

University of Groningen University of Montpellier

2017 - 2021

BSc in Genomic Sciences

Graduated with Honours Center for Genomic Sciences National Autonomous University of Mexico

Research Experience

February 2023 -

MSc Research Intern at the Microbial Paleogenomics Unit, Pasteur Institute

Supervisor: Dr. Nicolás Rascovan

Macrobial Paleogenomics Unit, Pasteur Institute

- Prevalence and diversity of Antibiotic Resistance Genes over the last millennia

September 2022 - February 2023

MSc Research Intern at the Viral Ecology and Evolution Lab, University of Groningen

Supervisor: Dr. Sebastian Lequime

Microbial Ecology Group, University of Groningen

- Evolution of endogenous viral elements in Formicidae

April 2022 - July 2022

MSc Research Intern at the Phylogenetics and Molecular Evolution Lab, ISEM

Supervisor: Dr. Frédéric Delsuc

Institute of Evolutionary Science of Montpellier, University of Montpellier

- Molecular evolution and expression of the salivary mucin genes MUC5B and MUC7 in mammals

September 2020 - September 2021

Undergraduate Senior Thesis at the Veeramah Lab, Stony Brook University

Supervisor: Dr. Krishna R. Veeramah

Department of Ecology and Evolution, Stony Brook University

- Evaluation of genotype imputation of ancient DNA: a simulation study

September 2019 - October 2020

Research Intern at the Paleogenomic Consortium, INMEGEN

Supervisor: Dr. Federico Sánchez-Quinto

Department of Computational Genomics, National Institute of Genomic Medicine (INMEGEN)

- Genomic analysis of ancient Mediterranean remains

December 2019 - February 2020

Research Intern at the Laboratory of Adaptive Genomics, University of Potsdam

Supervisor: Dr. Michael Hofreiter

Department of Mathematics and Natural Sciences, University of Potsdam

- Genomic analysis of historical samples of Canis lupus baileyi (Mexican wolf)

September 2018 - October 2020

Research Intern at the Laboratory of Systems and Synthetic Biology, UNAM

Supervisor: Dr. Diego Cortez-Quezada Center for Genomic Sciences, UNAM

- Temperature-dependent sex determination in Lepidochelys olivacea (sea turtle)

Publications

Taron, U; Salado, I; **Escobar-Rodríguez, M**; Westbury, M; Butschkau, S; Paijmans, J; von Holdt, B; Hofreiter, M & Leonard, J. A sliver of the past: the decimation of the genetic diversity of the Mexican wolf. (2021) Molecular Ecology DOI:10.1111/mec.16037

Grants

AMR axis - 2023 - Pasteur Institute Investigating the prevalence and diversity of Antibiotic Resistance Genes in human commensal microbes over the last millennia. €6,000

Teaching Experience

2019

Teaching assistant of Phyloinformatics course

Undergraduate Program on Genomic Sciences Center for Genomic Sciences, UNAM

Honors and Awards

2021 - Present

Erasmus Mundus Joint Master Degree (EMJMD) scholarship

Awarded by the Erasmus+ Programme of the European Union

2021

Bachelor of Science with Honours

Awarded by the National Autonomous University of Mexico

2019 - 2020

Research Methods Training Scholarship

Awarded by the National Autonomous University of Mexico

Skills

- Familiar with Python, R and Bash.
- Server and cluster management for bioinformatic purposes
- Fluent Spanish and English

Interests

My current interests are human and animal diversity, population genetics, ancient DNA, and the application of genomic and computational tools to examine patterns of genetic variation from different time points in history.