Mora Jove Groussman, Ph.D.

Bioinformatics Scientist
mora@jovian.bio · 425-444-7806 · Seattle, WA · https://jovian.bio
LinkedIn: https://www.linkedin.com/in/mora-jove-groussman/ | GitHub: github.com/morajove
Previously published as Ryan D. Groussman prior to 2024

PROFESSIONAL SUMMARY

Bioinformatics expert with a Ph.D. in Oceanography, specializing in multi-modal analysis of high-dimensional data in marine microbial ecology. Proven track record in developing novel algorithms and tools for large-scale genomic and transcriptomic analyses, with a focus on uncovering complex biological interactions in marine ecosystems.

SKILLS

Technical Skills: Multi-modal analysis of high-dimensional data, advanced statistical methods, machine learning, genomics, transcriptomics, proteomics, metagenomics, complex data visualization
Programming Languages: Python (biopython, numpy, pandas), R (Bioconductor, tidyverse), Linux/Unix shell scripting
Bioinformatics Tools: BLAST, Bowtie, Trinity, DESeq2, SLURM, Docker, Singularity

PROFESSIONAL EXPERIENCE

Postdoctoral Scholar, University of Washington, School of Oceanography (Jan 2023 – Jan 2024)
- Designed and published MarFERReT, a comprehensive marine microbial eukaryote protein reference library, adding hundreds of new species and validating tens of millions of reference proteins
- Developed pipelines and novel algorithms for reproducible cross-validation of genetic reference data, enhancing the accuracy of marine microbial community analyses
- Generated publicly-available data repositories for nearly 200 million environmental gene sequences with functional and taxonomic annotations, facilitating collaborative research in marine microbiology

Graduate Research Assistant, University of Washington, School of Oceanography (Jun 2016 – Dec 2022)
- Led bioinformatics data pipeline development for a novel machine learning study of marine microbial eukaryote metabolism, processing and analyzing NGS data from over 300 marine samples
- Applied multi-variate statistics to analyze multi-dimensional transcriptomic datasets, uncovering new insights into microbial interactions and metabolic pathways in marine ecosystems
- Published 10 peer-reviewed papers and presented research at 5 international conferences, contributing significantly to the field of marine microbial ecology

EDUCATION

Ph.D. in Oceanography, University of Washington (Dec 2022)
Dissertation: "Resolving the molecular ecology of marine microbial eukaryotes with metatranscriptomes"
M.S. in Oceanography, University of Washington (Dec 2018)
B.S. in Molecular, Cellular, and Developmental Biology, University of Washington (Mar 2016)
Minor in Oceanography, Magna Cum Laude, GPA: 3.94/4.0