

Rachael Storo

Bioinformatician

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 rckarns8  Rachael-Storo  rckarns8

- Objective:** Experienced bioinformatician seeking to secure a fulfilling career that utilizes my unique skill set to its potential, allowing me to significantly contribute to a company or agency.
- Education:** **Computational Molecular Biology Certificate ; Master of Science, Marine Biology**
Nova Southeastern University, Dania Beach, FL, July 2017
Bachelor of Science, Biology ; Bachelor of Arts, Theatre
Roanoke College, Salem, VA, May 2015
- Experience:** **Research Program Specialist**, February 2023-Present
Mississippi State University, Northern Gulf Institute, NOAA Affiliate, Miami, FL
- Collaborated to standardize data storage and management on the lab and agency level.
 - Developed bioinformatics operations on multiple computing platforms.
 - Metagenomic and meta-barcoding data analysis.
 - Mentored graduate and high school level early career scientists.
- Head of Molecular Work- R&D Technician III**, September 2021-January 2022
RWDC Industries, Molecular Department, Athens, GA
- Initiated the Molecular Department and lab for sequencing and genetic modification.
 - Promoted from QA/QC technician to head of molecular work.
 - Developed assays for contamination monitoring on bioreactor samples.
 - Serviced and operated 6 liter bioreactors to optimize growth parameters.
- Graduate Research Assistant**, March 2018-December 2021
University of Georgia, Joye Lab, Athens, GA
- Sequenced with Oxford Nanopore MinION long-read technologies.
 - Created a metagenomic pipeline for temporal and spatial analysis of deep-sea sediment.
 - Performed gene mining of genomes associated with oil spills using machine learning.
 - Examined relevant biogeochemical data to inform analysis of metabolic potential.
 - Conducted pangenomic analyses of hydrocarbon degraders to examine ecotypes.
- Graduate Research Assistant**, September 2015- September 2017
Nova Southeastern University, Lopez Lab, Dania, FL
- Conducted sampling , extraction, and 16s rRNA sequencing of shark microbiomes.
 - Performed comparative analyses of shark microbiomes using QIIME and RStudio.
- Training:** *Strategies and Techniques for Analyzing Microbial Population Structures (STAMPS) Marine Biological Laboratory (Summer 2018)*
- Skills:**
- | | | |
|----------------------|---------------------------------|------------------------|
| Data Analysis | R, Bash, and Python Programming | GitHub/version control |
| Pipeline Development | High-Performance Computing | PCR, qPCR |
| Metagenomes | Cloud Computing | Sequencing |
| Grant Writing | Community Outreach | Pangenomes |
- Publications:**
- Storo R., Easson C., Shivji M., Lopez J.V., 2021. Microbiome Analyses Demonstrate Specific Communities Within Five Shark Species. *Frontiers in Microbiology*. 12:139.
 - Rowley M.J., Lyu X., Rana V., Ando-Kuri M., Karns R., Bosco G., Corces V., 2019. Condensin II Counteracts Cohesin and RNA Polymerase II in the Establishment of 3D Chromatin Organization. *Cell Reports*. 2890-2903.e3