Ryan Snow
Masters of Science

Personal Statement

Molecular biologist with special interest in the environment, as well as microbial ecology and nutrient cycling. Research focus geared towards the exploration of adaptations associated with (extremophilic) stress acclimation with special interest in energy metabolism mechanisms and application of concepts/research to astrobiological topics. Previous research experience explored long-term acclimation to environmental stressors in microbial systems. Determined to learn and apply new and learned skills, concepts, and techniques. Dependable, organized, capable of independent and collaborative work.

Personal Information

Personal email: snow4964@gmail.com   Pronouns: He/Him/His

Phone: 856-313-6653   Website: snow942.github.io

Professional History

Feb 2024 to Present: Associate Scientist II, NGS
                         Azenta Life Sciences
                         South Plainfield, NJ

Dec 2022 to Dec 2023: Lab Researcher
                       Rutgers University
                       New Brunswick, NJ

Dec 2022 to Oct 2023: Research Lab Technician
                       University California Santa Cruz
                       Remote

May 2022 to Oct 2022: Molecular Technologist I
                       American Red Cross, NML
                       Philadelphia, PA

Sep 2019 to Aug 2021: Masters Student (Biology)
                       Graduate Research/Teaching Assistant

Rutgers University
Camden, NJ

Nov 2018 to Aug 2019: Molecular Technician I
American Red Cross, NML
Philadelphia, PA

Aug 2017 to May 2018: Research Assistant (Computational Biology)
Rutgers University
Camden, NJ

Nov 2015 to Aug 2016: Research Assistant (Microbiology and Computational Biology)
Rutgers University
Camden, NJ

Research Projects

June 2024 to present: *Identification of fungal colonies on historic art*

Comparative analysis of Pseudomonas species metabolic strategies for acclimation to environmental stressors

Sep 2019 to Aug 2021: *Icelandic bdelloidea transcriptomic profiling through differential expression analysis*

Bioengineering E. coli F1F0 ATP Synthase subunit a to induce cold tolerance

Aug 2017 to May 2018: *Genomic comparative analysis of Ursus arctos and Ursus maritimus*

Education

2019 to 2021: Masters of Science in Biology
Rutgers University College of Arts and Sciences
Camden, NJ
Icelandic bdelloidea transcriptomic profiling through differential expression analysis
Thesis Advisor: Dr. Daniel Shain
Thesis Committee: Dr. Daniel Shain, Dr. Jennifer Oberle, Dr. Eric Klein, and Dr. Anthony Geneva

2014 − 2018: Bachelors of Science (Biology)
Rutgers University College of Arts and Sciences
Camden, NJ
Honors College
Phi Mu Delta - Mu Tau Chapter, Vice President of Membership Education

Continued Education & Professional Certifications

2023: R Boot Camp for Ecologists and Wildlife Biologists
    Center for Wildlife Studies

    Glacial Deposits of New Jersey
    The New Jersey Agricultural Experiment Station Office of Continuing Professional Education

Notable Skills & Experiences

Biological
- Educator
- Cell line maintenance
- Polymerase Chain Reaction
- Bacterial ligation

- Molecular protocol review
- DNA extraction
- Transformation assays
- Field sampling

Computational
- R and RStudio
  - Tidyverse
- Git and GitHub
- Bash

- Genomics
  - Next-Gen Sequencing
- Transciptomics
- Excel

Teaching Appointments

Spring 2021: General Microbiology Teaching Lab (Nursing)
    Rutgers University
Fall 2020: General Microbiology Teaching Lab (Biology)
    Rutgers University
Spring 2020: General Microbiology Teaching Lab (Nursing)
    Rutgers University-Camden
Fall 2019: General Microbiology Teaching Lab (Biology)
    Rutgers University-Camden

Grants

2018: Rutgers Camden School of Arts and Sciences Dean's Undergraduate Research Grant ($500)

References

Dr. Daniel Shain
    Chair for the Department of Biology at Rutgers University − Camden
    Professor: Department of Biology at Rutgers University − Camden
    dshain@camden.rutgers.edu

Dr. Jennifer Oberle

Assistant Teaching Professor: Department of Biology at Rutgers University −
Camden
joberle@camden.rutgers.edu
856-701-4589

Dr. Eric Klein

eric.a.klein@rutgers.edu
Head of Graduate Biology Program at Rutgers University − Camden
Professor: Department of Biology at Rutgers University − Camden

Publications

Patro, S., Ratna, S., Yamamoto, H.A., Ebenezer, A.T., Ferguson, D.S., Kaur, A., McIntyre, B.C., **Snow, R.** and Solesio, M.E., 2021. ATP Synthase and Mitochondrial Bioenergetics Dysfunction in Alzheimer's Disease. International journal of molecular sciences, 22(20), p.11185.

Conferences

Attendee

Evolution 2023 - Albuquerque, New Mexico
Presented by *Society of Systematics Biologists*, *Society for the Study of Evolution*, and *American Society of Naturalists*