

Arianna Simmering

PRODUCT ANALYST

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Florida 32514

EDUCATION

University of West Florida
2018 - 2020

Master of Science- Biology

Introduction to Bioinformatics, Bioinformatic Strategies and Techniques for Analyzing Microbial Population Structures, Geographic Information Systems (GIS) course with lab, Directed Study in Environmental Diagnostics and Bioremediation Laboratory, Contemporary Lab Skills course with lab, Professional Development in Biology, Experimental design in Biology, Antarctic Mixotrophic Ecology, Coastal Marine Ecology course with lab.

Thesis: Temporal Variability of the Microbial Ecology of the Coastal Waters of Pensacola Beach.

University of West Florida
Earned 2017

Bachelor of Science- Biology

Statistics, Biostatistics, Genetics with lab, Analytical Calculus with lab, Aquatic Botany with lab, Comparative Animal Physiology with lab, Biochemistry with lab, Microbiology with lab, General Chemistry I with lab, General Chemistry II with lab, Organic Chemistry I with lab, Physics I with lab, Physics II with lab, Principles of Evolution.

MEMBERSHIPS AND AWARDS

University of West Florida Biology Department Graduate Teaching Assistant of the Year 2020

February 7th, 2020- nominated by students and voted on by Biology Department Faculty

University of West Florida Hal Marcus College of Science and Engineering Graduate Teaching Assistant of the Year 2020

February 19th, 2020

University of West Florida Biology Graduate Student Association Membership

August 2018-Present

Vice President August 2018-July 2019

President August 2019-Present

Association for the Sciences of Limnology and Oceanography Membership

October 2017-Present

American Society of Microbiology Membership

September 2018-Present

Strategies and Techniques in Analyzing Microbial Population Structures (STAMPS)

- Informatics based course to promote extensive use of C++ and Python coding in understanding large genetic data sets.
- Marine Biological Laboratory, University of Chicago : July 2018

Python for Data Science: Fundamentals

- Data course to expand knowledge of Data Science using python.
- Data Quest : January 2020

Python for Data Science: Intermediate

- Data course to continue expanding knowledge of Data Science using python.
- Data Quest : February 2020

Data Analysis and Visualization

- Data course to expand knowledge of cleaning, analyzing, and visualizing real life data sets using python, utilizing pandas and NumPy.
- Data Quest : March 2020

The Command Line

- Data course to expanding knowledge of Data Science using the command line in python.
- Data Quest : March 2020

Working with Data Sources

- Continuing experience with commonly used data sources. This course includes SQL for Data Analysts, APIs and Web Scraping in Python, and Data Analysis in Business
- Data Quest : March 2020

University of West Florida Student Scholar Symposium 2017

Establishment of a Time Series Database for the Microbial Ecology at Pensacola Beach.

Arianna Simmering, Melissa Ederington-Hagy and Wade H. Jeffrey.

Poster Presentation

Association for the Sciences of Limnology and Oceanography (ASLO) 2018-Ocean Sciences Meeting

Disturbance and Recovery Period of Pensacola Beach Marine Microbial ecology due to Hurricane Nate.

Arianna Simmering, Erika Neat-Hedrick, Lisa M. Nigro, Melissa Ederington-Hagy, Wade H. Jeffrey.

Lightening Presentation- 5 minute oral presentation coupled with poster presentation

Association for the Sciences of Limnology and Oceanography (ASLO) 2018-Ocean Sciences Meeting

Comparison of Microbial Responses to Different Crude Oils with Varying Phototoxicity.

Erika Neat-Hedrick, Lisa M. Nigro, Melissa Ederington-Hagy, **Arianna Simmering**, Wade H. Jeffrey.

Poster Presentation

University of West Florida Student Scholar Symposium 2018

Disturbance and Recovery Period of Pensacola Beach Marine Microbial ecology due to Hurricane Nate.

Arianna Simmering, Erika Neat-Hedrick, Lisa M. Nigro, Melissa Ederington-Hagy, Wade H. Jeffrey.

Poster Presentation

University of West Florida Student Scholar Symposium 2018

Comparison of Microbial Responses to Different Crude Oils with Varying Phototoxicity.

Erika Neat-Hedrick, Lisa M. Nigro, Melissa Ederington-Hagy, **Arianna Simmering**, Wade H. Jeffrey.

Poster Presentation

American Society of Microbiology (ASM), Florida Chapter Annual Meeting 2018

Temporal Variability of the Microbial Ecology in the Coastal Waters of Pensacola Beach, Florida

Arianna Simmering, Erika Neat-Hedrick, Lisa M. Nigro, Melissa Ederington-Hagy, Wade H. Jeffrey.

Oral Presentation

American Society of Microbiology (ASM), Florida Chapter Annual Meeting 2018

Bacterial Responses to Different Crude Oils under Varying Solar Exposure

Erika Neat-Hedrick, Lisa M. Nigro, Melissa Ederington-Hagy, **Arianna Simmering**, Wade H. Jeffrey.

Oral Presentation

Gulf of Mexico Oil Spill & Ecosystem Science Conference (GoMOSES) 2019

Bacterial Responses to Different Crude Oils under Varying Solar Exposure

Erika Neat-Hedrick, Lisa M. Nigro, Melissa Ederington-Hagy, **Arianna Simmering**, Wade H. Jeffrey.

Oral Presentation

University of West Florida Student Scholar Symposium 2019

The Regulation of Bacterial Activity and Abundance by

Environmental Parameters within a Subtropical Coastal Estuary

Mark Prousalis, Matthew Schwartz, **Arianna Simmering**, Erika Neat-Hedrick, K. Hope, Leila Harris, B. Gore, Wade Jeffrey, Lisa Waidner.

Poster Presentation

University of West Florida Student Scholar Symposium 2019

Temporal Variability of the Microbial Ecology in the Coastal Waters of Pensacola Beach, Florida

Arianna Simmering, Erika Neat-Hedrick, Lisa M. Nigro, Melissa Ederington-Hagy, Wade H. Jeffrey.

Poster presentation

Federation of European Microbiological Societies (FEMS) 8th annual congress meeting 2019

Temporal Variability of the Microbial Ecology in the Coastal Waters of Pensacola Beach, Florida

Arianna Simmering, Erika Neat-Hedrick, Lisa M. Nigro, Melissa Ederington-Hagy, Wade H. Jeffrey.

Poster Presentation

Coastal and Estuarine Research Federation Biennial Conference 2019

Temporal Variability of the Microbial Ecology in the Coastal Waters of Pensacola Beach, Florida

Arianna Simmering, Erika Neat-Hedrick, Lisa M. Nigro, Melissa Ederington-Hagy, Wade H. Jeffrey.

Oral presentation

Association for the Sciences of Limnology and Oceanography (ASLO) 2020- Ocean Sciences Meeting

Comparison of Microbial Responses to Different Crude Oils with Varying Phototoxicity.

Wade H. Jeffrey, **Arianna Simmering**, Erika Neat-Hedrick, Lisa M. Nigro, Melissa Ederington-Hagy.

Poster Presentation

Center for Environmental Diagnostics and Bioremediation Research Assistant

- Conducting a temporal study on the marine microbial community in the Pensacola Beach area.
- Filtered collected seawater to perform 16 S DNA and RNA extractions.
- Developed python based pipeline using QIIME2 for analyzing over 150 sequences ranging from 50,000 to 70,000 basepairs in length.
- Current dataset for thesis work based on over 1728 individual data points.
- Analyzed data using statistical packages in RStudio, and Microsoft Office programs.
- Characterized seawater samples by chlorophyll, microscopy for direct cell counts, Total Nutrients, Dissolved Nutrients, Microbial Diversity, Absorbance, Transmittance, and Salinity, and Temperature.
- Conducted the Smith and Azam, 1992 protocol for measuring bacterial protein synthesis rates in seawater using 3H-leucine as a proxy for growth in the UWF radio-isotope laboratory.

RESEARCH EXPERIENCE

University of West Florida

2016 - Current

SCHOLARSHIPS AND GRANTS

University of West Florida Office of Undergraduate Research Grant 2016 and 2017, \$2,500

University of West Florida Graduate Research Grant 2018, \$1,500

NSF Antarctic Tuition Scholarship 2019, \$2,673

Center for Environmental Diagnostics and Bioremediation Graduate Tuition Grant 2018 and 2019, \$1,180

University of West Florida Hal Marcus College of Science and Engineering Graduate Student Research Grant 2018 and 2019, \$3,000

University of West Florida Graduate Tuition Grant 2018, 2019 and 2020, \$4,809

TEACHING EXPERIENCE

Biology Department Instructor of Record

University of West Florida ~ August 2019 - Present

Biochemistry Lab Instructor of Record

- Maintain laboratory using appropriate sterilization techniques and proper laboratory biohazardous waste management techniques.
- Lead students in performance of lab techniques common in the field of the field of Biochemistry.

Biology Department Graduate Teaching Assistant

University of West Florida ~ January 2018 - August 2019

Microbiology, Molecular Biology, and Biochemistry Teaching Assistant

- Assist students in use of laboratory equipment and media.
- Maintain laboratory using appropriate sterilization techniques and proper laboratory biohazardous waste management techniques.
- Assist students in performance of lab techniques common in the field of Microbiology and the field of Biochemistry.

Florida Audubon Society Shorebird Steward

May 2016 - September 2016

Shorebird Pubic Education Steward

- Assist in construction of fencing to ensure protected nesting sites for multiple species of shorebirds at Pensacola Beach.
- Survey nesting sites in my jurisdiction once weekly to count nesting mothers, chicks, and flight-able juveniles.
- Promote education on various shorebird species and the shorebird nesting protection program to the public.

R/V Hogarth

March 21, 2018.

- Effects of artificial reef structures on reestablishment of a productive ecosystem in the Gulf of Mexico.
- Chief Scientist: Dr. Wade H. Jeffrey, University of West Florida.

R/V Point Sur.

October 5-9, 2016.

- Ecosystem Impacts of Oil and Gas Inputs to the Gulf of Mexico.
- Chief Scientist: Dr. Vernon Asper, University of Southern Mississippi.

R/V Laurence M. Gould

April 13th-May 29th, 2019.

- Diversity and ecological impacts of Antarctic mixotrophic phytoplankton.
- Chief Scientist: Dr. Charles Amsler, University of Alabama at Birmingham.