

# BIOS



## Internship Projects 2021

Project Title:	<b>Assessing energy and carbon budgets of corals (and seagrass) using advanced <i>in-situ</i> incubation chambers</b>
Mentor:	Yvonne Sawall
Lab or Group name:	Marine Benthic Ecology and Ecophysiology (MABEE)
Preferred start date:	May/June 2021
Prerequisite courses:	Basics in (marine) ecology, botany (photosynthesis), (marine) invertebrate biology
Skills (required):	Good swimmer / snorkeler, good record keeper, work outdoors in a hot climate
Skills (beneficial):	AAUS-certified diver, first-aid and oxygen provider, programming skills

Project Title:	<b>Advancing our understanding of coral and algae photo-protective mechanisms</b>
Mentor:	Yvonne Sawall
Lab or Group name:	Marine Benthic Ecology and Ecophysiology (MABEE)
Preferred start date:	Summer/fall 2021
Prerequisite courses:	Basics in botany (photosynthesis), chemistry, (marine) invertebrate biology
Skills (required):	Able to handle delicate work, good record keeper, good swimmer/snorkeler, work outdoors in a hot climate
Skills (beneficial):	AAUS-certified diver, first-aid and oxygen provider, programming skills

Project Title:	<b>Advancing our understanding of coral heterotrophy (lab and in-situ experimentation)</b>
Mentor:	Yvonne Sawall
Lab or Group name:	Marine Benthic Ecology and Ecophysiology (MABEE)
Preferred start date:	Summer/fall 2021
Prerequisite courses:	Basics in (marine) ecology, (marine) invertebrate biology, biological oceanography
Skills (required):	Being reliable in following experimental schedules, good record keeper, work outdoors in a hot climate
Skills (beneficial):	AAUS-certified diver, first-aid and oxygen provider, programming skills

Project Title:	<b>The microbial response to marine microplastics</b>
Mentor:	Rachel Parsons
Lab or Group name:	Microbial Ecology
Preferred start date:	Summer or Fall 2021
Prerequisite courses (if any):	Biology, Chemistry, Microbiology; Marine Biology

Skills (required):	General Laboratory techniques
Skills (beneficial):	Microscopy; Molecular Biology; Field Experience

Project Title:	<b>The microbial colonization of marine aggregates</b>
Mentor:	Rachel Parsons
Lab or Group name:	Microbial Ecology
Preferred start date:	Summer or Fall 2021
Prerequisite courses (if any):	Oceanography, Microbiology; Marine Biology
Skills (required):	General Laboratory techniques
Skills (beneficial):	Microscopy; Molecular Biology; Cruise Experience

Project Title:	<b>The microbial response to oxygen limitation</b>
Mentor:	Rachel Parsons
Lab or Group name:	Microbial Ecology/ BIOS-SCOPE
Preferred start date:	Summer or Fall 2021
Prerequisite courses (if any):	Oceanography; Microbiology; Molecular Biology
Skills (required):	General laboratory techniques; Data analysis; Statistics
Skills (beneficial):	Microscopy; Image analysis; R coding

Project Title:	<b>Differential Gene Expression Analysis in Sea Urchin</b>
Mentor:	Julius Barsi
Lab or Group name:	
Preferred start date:	<b>Remote only</b>
Prerequisite courses (if any):	A keen interest in molecular biology as applied to a marine environment
Skills (required):	Ability to operate an Excel spreadsheet. Necessary computer and internet resources for a remote internship.
Skills (beneficial):	Courses in molecular/developmental biology, embryology or systems biology would be beneficial, though not required. The ability to program in R would be beneficial, but is not required.

Project Title:	<b>Marine nitrogen cycling, redox processes, and N<sub>2</sub>O production</b>
Mentor:	Damian Grundle
Lab or Group name:	
Preferred start date:	Summer or Fall 2021
Prerequisite courses (if any):	Oceanography
Skills (required):	
Skills (beneficial):	

Project Title:	<b>In-Water and Remote Sensing Study of Coral Reef Systems Ecology</b>
Mentor:	Eric Hochberg
Lab or Group name:	
Preferred start date:	Summer or Fall 2021
Prerequisite courses (if any):	Oceanography, marine biology
Skills (required):	
Skills (beneficial):	