In Loving Memory of

Korey Wong

The GES program and the Department of Oceanography are shocked and deeply saddened by the recent and untimely passing of GES alumnus Korey Wong (’20).

As a local boy, Korey’s passion for Hawai‘i and the ‘āina was readily apparent. In his GES academic studies, Korey gravitated towards the intersection between humans and the environment, especially with regards to environmentally-related policy and management. In 2019, Korey interned at the City and County of Honolulu’s Office of Climate Change and Sustainability and Resiliency where he researched policy on managing Hawai‘i’s coastlines. Specifically, he focused on the City and County of Honolulu's coastal setback policy, with the aim of protecting lives and property from disasters and sea level rise as well as to preserve Hawai‘i’s open spaces and public beaches. His work directly contributed to the suggested amendments for Chapter 23 (Shoreline Setbacks) of the Revised Ordinances of Honolulu and served as the foundation for his GES thesis with mentor Dr. Chip Fletcher.

Korey’s professional aspiration was to support conservation efforts in Hawai‘i. He had recently performed exceptionally well on the GRE and was applying to many top environmental law programs around the country. His easygoing nature, willingness to always help others, ability to share his vulnerabilities and difficulties, and kind, gentle soul were just a few of Korey’s outstanding traits. While he will be sorely missed by his GES, Oceanography, and SOEST ‘ohana, we also celebrate Korey, his memory, and the positive impact he made on all of us.

The University of Hawai‘i at Mānoa Department of Oceanography presents

FALL 2021

GLOBAL ENVIRONMENTAL SCIENCE

SYMPOSIUM

Friday, December 10, 2021
10:30am - 12:00pm HST
Via Zoom

About the Program

The Department of Oceanography launched the undergraduate Global Environmental Science (GES) program in 1998 with the generous support of the Pauley Foundation. The vision and brainchild of Oceanography Emeritus Professor Dr. Fred Mackenzie, the GES program is known for its rigorous math and science foundation, integrated study of environmental- and sustainability-related issues, and faculty-mentored research experience requirement. This research experience results in every GES graduate having completed a faculty-mentored research project, written a thesis, and presented their research results in a public forum. As a result of the challenging curriculum and research experience requirement, GES graduates are well-prepared to enter the workforce in environmental science-related fields and industries or continue on to graduate studies in many different subjects in the sciences, social sciences, law, medicine, and engineering.

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GES Symposium

GES students presenting at this symposium conducted faculty-mentored research, analyzed their results, and compiled their findings into a thesis format. Many theses are converted into peer-reviewed journal publications; a feat usually accomplished by students once in graduate school. The GES Symposium is a celebration and culmination of undergraduate research efforts and experiences, so join us in supporting, engaging, and applauding our presenters.

Agenda

10:30 Opening Remarks

10:35 Olivia Hughes | Margaret McManus (Oceanography)
Coastal Wave Patterns of the Hawaiian Islands in Relation to Significant Climate Events

10:55 Shannon Murphy | Ku'ulei Rodgers (Hawai'i Institute of Marine Biology)
Assessing Human-Induced Coral Reef Disturbances from Visitors at Hanauma Bay Nature Preserve

11:15 Henrik Weiberg | Craig Smith (Oceanography)
Abundance and Diversity of Benthic Megafauna at Abyssal Station Aloha

11:35 Eleanor Yuan | Michael J. Roberts (Economics)
Can Agricultural Intensification Explain Unexpected Cooling of Extreme Heat in the Midwestern United States?

11:55 Closing Remarks

Biographies

Olivia Hughes
Mentor: Margaret McManus

As a Navy kid, Olivia grew up all over the world before her family settled down in O‘ahu in 2009. Driven by her love for science, Olivia joined the GES program in 2017 after graduating from Mid-Pacific Institute. She was taken under the wing of Dr. Margaret McManus and brought on to the Pacific Islands Ocean Observing System (PacIOOS) team. It was through this team that Olivia was able to gain many valuable hours of hands-on experience in the field, working on both the PacIOOS and Coastal Data Information Program buoys and sensors throughout her undergraduate career. In her junior year, Olivia began writing her thesis on the data collected from the PacIOOS wave buoys around the Hawaiian Islands under the supervision of Dr. McManus. Through hard work and a lot of perseverance, Olivia is proud of her accomplishments and is forever grateful to her team for the experiences over the years. Olivia hopes to gain more experience working in environmental science before attending graduate school. Olivia was born in Virginia Beach, Virginia.

Shannon Murphy
Mentor: Ku‘ulei Rodgers

Shannon’s love for the ocean and involvement in environmental activism in high school brought her to the University of Hawai‘i at Mānoa to study GES in 2018. As a recipient of the NOAA Ernest F. Hollings scholarship, she participated in an internship at the Northwest Fisheries Science Center in Seattle, WA in Summer 2021. Research for NOAA included characterizing the role of the Columbia River for chinook salmon smolts and determining the potential impacts of restoration and climate change. She had a great experience working with salmon, but her passion lies in studying coral reef ecology. Back at home in Hawai‘i, she reconnected with one of her partnerships from high school, the Friends of Hanauma Bay, to monitor corals in Hanauma Bay during the COVID-19 closure. That is where she met Dr. Ku‘ulei Rodgers, the principal investigator of the Coral Reef Ecology Lab, who became her GES thesis advisor. Shannon plans on using her findings for future management actions for the nature preserve. She hopes to pursue a Ph.D. in marine biology to work with corals. Shannon was born and raised in Honolulu, Hawai‘i.

Henrik Weiberg
Mentor: Craig Smith

While growing up in and around the mountains and the sea, Henrik developed a deep love and respect for natural environments. When it was time to embark on his college career, he decided to focus his studies on his passion for the ocean. Henrik entered the University of Hawai‘i at Mānoa as a Marine Biology major in the fall of 2017 but quickly realized that his interests lay with the ocean as a whole and transferred to the GES program, where he built relationships with inspiring peers, astute professors, and enlightening mentors. One such mentor is Dr. Craig Smith, one of the most revered scientists in deep ocean ecosystem research, and a prominent voice on the environmental impacts of deep sea mining. Henrik chose to work with Dr. Smith to better understand a part of the ocean that is highly relevant today but which was completely alien to him. Henrik plans to pursue graduate school to find ways to improve the health of ecosystems around the Pacific Ocean and beyond. Henrik was born and raised in Seattle, Washington.

Eleanor Yuan
Mentor: Michael J. Roberts

Attracted by the wide breadth of learning and application GES courses offered, Eleanor joined the program in 2017 after graduating Kaiser High School. Throughout her time at GES, she has taken advantage of many opportunities that have enriched her personal and academic life. Her first internship shadowing GES alumna Natalie Kwa, a construction environmental monitor, gave her valuable insights into working in the private sector, while her first job as a technical research assistant with SMART Ala Wai, trained her in field sampling and lab work. She has also had the opportunity to study abroad in Australia and complete a second major in economics with a quantitative focus. In her Junior year, Dr. Michael Guidry introduced Eleanor to her thesis advisor Dr. Michael Roberts of the Department of Economics. She was then able to contribute to Dr. Roberts’ paper on temperature-sensitive energy demand and conduct her thesis research in agricultural impact on the climate using statistical analysis. Eleanor is interested in furthering her understanding of human impact on the environment using an analytical approach. Eleanor was born and raised in Honolulu, Hawai‘i.