



SPRING 2021 EDITION

UNIVERSITY OF HAWAII AT HILO
TROPICAL CONSERVATION BIOLOGY
& ENVIRONMENTAL SCIENCE



Spring Success!

TCBES Semesterly Newsletter



INSIDE THIS ISSUE:

- Student and Faculty Highlights
- Record Number of Applications for Fall 2021 Semester
- TCBES Symposium
- Graduating class of Spring 2021

TCBES receives a record number of applications!

The TCBES Graduate Program received 89 applications for Fall 2021, an all-time high for the program dating back to TCBES' first cohort in 2004!

DONATE TODAY!

[Click Here to Give](#)

...read more on page 3

STUDENT & FACULTY *Highlights*

Congratulations!



**Thomas Fezza:
Beginning a
PhD at Mānoa**

Thomas Fezza studied the chemical communication of native picture-winged flies as a TCBES graduate student. Now, Thomas is pursuing a doctoral degree in entomology at UH Mānoa with an emphasis on fruit fly pests. Congratulations!



**Dr. Rebecca
Ostertag,
2021 Fellow of
the ESA**

Dr. Rebecca Ostertag, professor of biology and associate chair of the TCBES program elected a 2021 Fellow of the Ecological Society of America for her "outstanding intellectual leadership in areas of tropical forest ecology and conservation and a deep commitment to mentoring and enhancing diversity in the next generation of ecologists".

UH Researchers are investigating the feasibility of growing substantial amounts of "energycane" biomass as a source for jet fuel—a win for farmers, the state's sustainability goals, and the economy.

Sugarcane Production for Jet Fuel!



TCBES student, Lauren Kapono investigates 'opihi as indicator of climate change

[Click here to read more](#)
[Click here for podcast listen](#)

UH Hilo professor, Adam Pack presents on humpback whale mating system on behalf Humpback Whale National Marine Sanctuary

[Click here to read more](#)



TCBES student, Sabena Siddiqui served as lead editor for *Whalewatcher*, a marine mammal publication through the American Cetacean Society

[Click here to read more](#)

Pacific-wide STEM community, including students from UH Hilo, partake in the inaugural DataCamp

[Click here to read more](#)

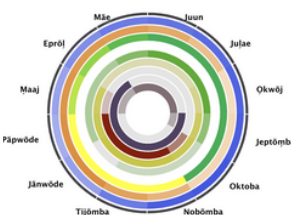


UH Hilo alumni, Jake Rodrique, thrives in the field of agriculture

[Click here to read more](#)

UH Hilo marine scientist sets up underwater live-stream in waters off Kona

[Click here to read more](#)



Maria Haws and Kathleen Friday compile traditional agriculture and environmental knowledge of Marshall Islanders with El Niño/La Niña data to create a living web resource called "Agroforestry in the Climate of the Marshall Islands."

[Click here to read more](#)

TCBES RECEIVES RECORD NUMBER OF APPLICATIONS FOR THE FALL 2021 SEMESTER:

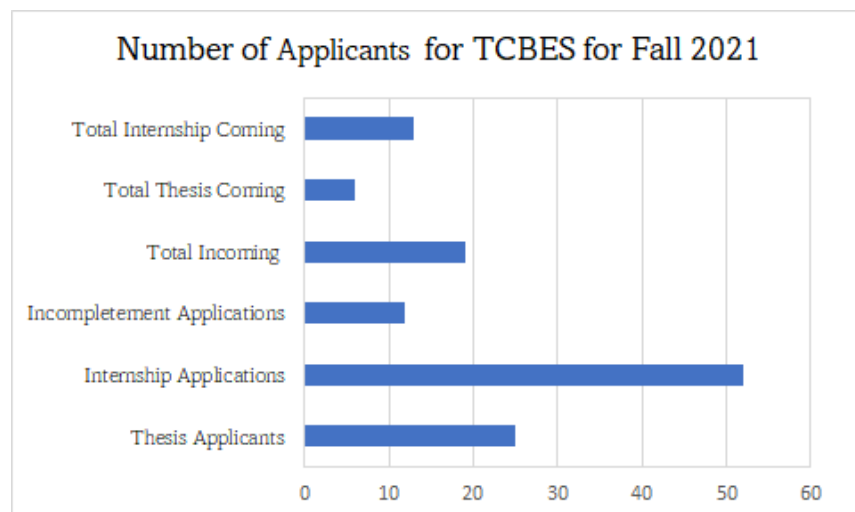
Written by Tracy Wiegner – Director, TCBES Graduate Program

A record number of applications applied for admission into the TCBES Graduate Programs for Fall 2021. In all, there were 89 applications. Twenty-five applied to the thesis track. Fifty-two applied to the Professional Internship track. And 12 applications were incomplete. At the time of the newsletter publication, we have 19 students who will be attending the program this Fall -- 6 Thesis track and 13 Professional Internship track. Currently, we cap our incoming cohort to ~24 students due to program limitations with faculty able to teach in the program and to accept students as thesis advisees. We hope in the future, when conditions improve, we will be able to increase the number of students we accept.



Since the revision of the Professional Internship track three years ago, we have seen a switch in the distribution of applications. The first two years, it was about a 50/50 split between the two tracks. This year, there are two times more student that applied to the Professional Internship track compared to thesis track. I don't know if there is a national trend of students now preferring Professional Internship tracks to thesis ones; my Google search couldn't find the answer. But, it appears to be this way for TCBES, and in the Marine Science Department with regards to undergraduate capstone course selection.

TCBES' Professional Internship track prepares graduates to become scientific professionals in environmental and conservation agencies and organizations through a 600-h immersive internship tailored to the students' interests and professional aspirations, and 36 credits of coursework. To date,



we have had 14 non-governmental organizations (NGO), 1 Hawai'i County department, 5 Hawai'i State agencies, 4 federal agencies, 1 inter-governmental agency, and 3 University centers/labs as hosts for TCBES students. Check out our [graduating students' internship projects](#), and [ones from our first-year cohort](#). Graduates have gone on for Ph.D. programs and are employed at National Parks and local conservation NGOs.

TCBES Symposium 2021

The TCBES Symposium showcases the fantastic work accomplished by UH Hilo graduate and undergraduate students, faculty, and other on-island scientists. This year's symposium was a huge success with 29 total participants presenting on topics ranging from global extinction risk in marine fishes to the natural history and biogeography of Hawaiian fungi. Mahalo kākou to all our participants, and many thanks to the event coordinators, Carmelita Villalobos, Lisa Mason, and Jordyn Anderson for organizing a successful event!

Missed the TCBES Symposium?

No worries! You can watch both days on the TCBES YouTube Page!



Watch them now!

To view the TCBES Symposium Program
[Click here](#)

Congratulations TCBES Symposium Winners

Graduate 15-min: Tie for 1st Place

- Amanda Navine
- Bobbie Suarez

Undergraduate 15-min:

- 1st Place: Danielle Wilde
- Honorable Mention: Alexandra Runyan

Graduate 5-min

- 1st Place - Alex Spengler
- Honorable Mention: Andre Van Nguyen

Undergraduate 5-min:

- 1st Place: Lily Gavagan
- Honorable Mention: Olivia Jarvis

Congratulations Graduating Students!

Jordyn Anderson

Assessing re-attachment potential and the large-scale aquaculture feasibility of native Hawaiian macroalgae
Agency: OceanEra

Geoffrey M. Grimmett

The Contribution of Lead Contamination Sites to Childhood Lead Poisoning in the Hawaiian Islands
Agency: The Hawaii State Department of Health's Hazard Evaluation and Emergency Response (HEER)

Laura Knight

Quantitative Analysis of the Mesophotic Coral Ecosystem Benthos in the Northwestern Hawaiian Islands
Advisor: Karla McDermid Smith

Kawehi Lopez

Shifting into the new normal: invasive species outreach in the age of COVID-19
Agency: Big Island Invasive Species Committee (BIISC)

Sebastian Ma'a

Expanding the Capacity for the Preservation and Restoration of Native Forest Habitats on the Island of Hawai'i
Agency: County of Hawai'i Real Property Tax Division

Bret Mossman

Kani a ka 'Akiapōlā'au: a look of the vocalizations and ecology of a rare Hawaiian Honeycreeper
Advisor: Pat Hart

Sarah Norrbom

Surveying the Oregon Coast: Work in conservation and preservation of estuarine systems
Agency: Tillamook Estuaries Partnership

Sabena Siddiqui

Humpback Whale (*Megaptera Novaeangliae*) non-song calls in the Hawaiian breeding grounds: acoustic characterization and examination of non-song call production as a function of pod composition and behavior
Advisor: Adam Pack

Hillary Street Scott

Characterizing genetic diversity of exon 2 of the MHC DQB genes in Hawaiian humpback whales (*Megaptera novaeangliae*)
Advisor: Adam Pack

Bryan Tonga

Establishing nearshore water quality conditions in Pohnpei, Federated States of Micronesia, for coral reef preservation in the face of altered land use and climate change
Advisor: Tracy Wiegner

Carmalita Villalobos

The effects of vermicomposting and pre-composting on fecal coliform bacteria occurrence in animal manures
Agency: Marine Mammal Center/Ke Kai Ola



Missed the TCBES Symposium?

No worries! All completed defenses are on the TCBES YouTube Page!



[Watch them now!](#)

Connect with us!



[Check out our Website!](#)



[Follow us on Facebook!](#)

TCBES's UH Foundation

DONATE TODAY!

[Click Here to Give](#)