Year End Newsletter

TCBES Semesterly Newsletter

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Appreciating our GA's

"It's a privilege being a part of the educational journey for UH Hilo's undergraduate students. This opportunity to learn, teach, and watch these students - and myself - grow over a semester has positioned me to succeed in the field of conservation" - Andre Nguyen

...read more on page 3
Congratulations to recent TCBES graduate, Jeff Stallman, on his new publication on a brand new fungi species endemic to Puna District.

Click here to read more

Maya Munstermann, recent TCBES graduate, co-authors paper describing the benefits undergraduate students receive from analyzing their own data

Click here to read more

Using art and design to explain a new coral reef monitoring tool.

Click here to read more

Analytical chemist and avid surfer Cliff Kapono takes to his board to study the health of coral reefs off the coast of Hawai‘i.

Click here to read more

Team of UH at Hilo students and faculty publish work on coral health and disease.

Click here to read more

Steve Colbert and recent grad Samantha DeVivo maintain the Pacific Islands Ocean Observing System (PacIOOS) in Hilo and Pelekane.

Click here to read more
While their contributions to undergraduate education and training at UH Hilo are often overlooked, Graduate Assistants (GA) in the TCBES program play an essential role. They independently instruct laboratory sections in Marine Science and Biology, assist with laboratory instruction for courses in Biology and College of Agriculture and Natural Resource Management, and provide technical assistance to students in the Spatial Data and Visual Lab with their

Geography coursework. Beyond coursework, these valuable members of the TCBES community help maintain the graduate program by updating the TCBES website and Facebook page, as well as managing program data, vehicle maintenance/rentals/payments, and the graduate workroom's resources.

Over the last three years (2017-2020, 6 semesters), 1485 undergraduate students were positively impacted by their interactions with TCBES GAs through instruction, advising, and mentoring. Often through these experiences, the undergraduates have epiphanies, realizing that they can and want to attend graduate school, and many often end up attending UH Hilo's TCBES program. Approximately, 40% of TCBES graduate students received their undergraduate degrees from UH Hilo

GA positions also provide meaningful professional experiences for the graduate students making them more competitive for GA positions in Ph.D. programs and other careers in environmental/conservation education. While the number of GA positions has declined since the establishment of the TCBES program (9 to 4), these positions still remain a vital recruitment tool for attracting and retaining top students from competitive undergraduate programs throughout the United States. Here is the testimony of some of the current GAs and what this position has meant to them:

"My GA position, quite literally, afforded me the opportunity to pursue my master's degree. On top of the financial security my position provided, I was able to gain more experience as a teacher and have experiences I wouldn't have had otherwise"

- Dawn McSwain

"It's a privilege being a part of the educational journey of UH Hilo's undergraduate students. This opportunity to learn, teach, and watch these students -- and myself -- grow over a semester has positioned me to succeed in the field of conservation"

- Andre Nguyen
**Manu Minute**
Featuring Dr. Patrick Hart

*Manu Minute* brings you the rich sounds from Hawai’i’s native forests and shorelines. Each week, Dr. Hart features a different Hawai’i bird and its unique song and talks about its environment and conservation.

*Manu Minute* is a collaboration between Hawai’i Public Radio and the LOHE Bioacoustics Lab at the University of Hawaii at Hilo.

[Read more about Manu Minute here](#)

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**TALLYING THE TREES:**

*TCBES students are playing an important role in envisioning a campus with fewer invasive plants*

Under the guidance of Administrative Affairs, next semester a pilot project will occur on campus, where a small area will be transformed by removing the highly invasive plant species and replanting them with native Hawaiian and canoe plants. This project is an outgrowth of work done by TCBES students. Thathmini Kularatna, a thesis-track student working on tropical agriculture, spearheaded this effort through a Directed Studies (CBES 699) and presented her research to UH administration in November. She created maps of two native and six invasive species on campus and did hotspot analysis, using her expertise in GIS. This analysis was facilitated through data collection by herself and student partners in CBES 601 during Fall 2018 (John Flint, Kimo Melcher, Emma Sinclair) and GEOG 385.

"When I first started this project, my aim was to bring awareness to the Director of Auxiliary Services and interim vice chancellor for administrative affairs about the distribution of invasive trees and how crucial it is to the survival of existing native trees within the campus. I was blown away by their immediate response after the presentation. They offered their help and their approval for the possible removal of these trees on selected areas of the campus premises. Looking forward to the future, my aim is to introduce more native and non-invasive indigenous trees into the campus grounds. My hope is to provide the experience of living in a native ecosystem for the campus community, build our community's connection with nature, inspire others to establish their own native ecosystems, and bring awareness about the invasive trees threatening the survival of the native trees." - Thathmini Kularatna

The project is still in the planning stages, so stay tuned for more details!
Congratulations Graduate Students!

Bret Mossman  
Kani a ka ʻĀkiapōlāʻau  
Advisor: Patrick Hart  

Keena Curbelo  
Characterizing the Acalolepta aesthetica invasion in Hawaiʻi  
Agency: USDA Agricultural Research Service  

Wilson Malone  
Sustainable management of Alaska’s Kenai River Chinook Salmon in its economic, cultural, and scientific contexts  
Agency: Alaska Department of Fish and Game  

Kelsey Meagher  
Monitoring of the critically endangered Hawksbill turtle on Hawaiʻi Island  
Agency: Hawaiʻi Island Hawksbill Project  

Jeremy Schrader  
In aid of the ʻalalā: a multifaceted internship in applied conservation  
Agency: Keauhou Bird Conservation Center  

Koa Matsuoka  
Dispersal & germination by native vs. exotic avian frugivores of Hawaiʻi Island  
Advisor: Rebecca Ostertag  

Martha Kawasaki  
The urbanization of the Hawaiian Stilt (Himantopus Mexicanus Knudseni)  
Advisor: Pat Hart  

Jake Rodrique  
The effects of vermicomposting and pre-composting on fecal coliform bacteria occurrence in animal manures  
Advisor: Norman Arancon  

Dominique Zarders  
Investigating mitochondrial DNA genes and bioassays of lantana lace bug to assess a possible host change  
Advisor: Jesse Eiben  

Missed a Defense?  
No worries! All completed defenses are on the TCBES YouTube Page!  

Connect with us!  
Follow us on Facebook!  
Check out our Website!  

COVID-19 Protocols for TCEBS Lab (W16)  
W16 is a student workspace and not to be used for meetings, gatherings, & socializing until further notice. Capacity is limited to 6 students at a time, with ≥ 6 ft between. Upon entry, you must sign into the Lab log book. Disinfect hands on arrival & departure from lab, and wipe down the surfaces where you work. Masks (cloth or other, covering nose/mouth) or face shield will be worn in the Lab at all times. No food or drink allowed until further notice. Students should seek medical advice if experiencing symptoms and immediately report illness to the TCBES Director, Associate Director, and their Advisor or Internship mentor.  

TCBES’s UH Foundation  
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