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## DID YOU KNOW?

**The College of the Coast & Environment** (CC&E) has one of the few undergraduate programs in the nation that integrates oceanography and environmental sciences.

CC&E's undergraduate degree, Coastal Environmental Sciences, is a fast-growing program at LSU. The most recent data shows, **it has a 90% retention rate.**

## SPECIAL ANNOUNCEMENT

CC&E has launched a new interactive world map featuring its current research projects.

Our college is dedicated to improving the understanding of today's most pressing coastal and environmental issues, and this global map provides snapshots of all our research projects as well as illustrating the

## From Dean D'Elia

*Alumni, students and friends,*

Final exams are swiftly approaching, and I know our students are working diligently toward that culmination of all that they have learned this semester.

This spring we will have the largest group of graduates in the short history of the CES program with 22 CES graduates, four of whom will be graduating with honors: Brandon Champagne, Rachel Croy, Amanda Fontenot, and Angus McClain Harper.

In addition, several of our talented students have been bestowed with honors, scholarships, and awards recognizing their hard work and contributions to LSU and the wider community including Brandon Champagne, CC&E's first member of the Office of the Dean of Student's Tiger Twelve; Jack Green, Udall Scholar; and Alli Benelli, President's Alumni Scholar. Please join me in congratulating their achievements.

Finally, I would like to extend an invitation for you to attend our CES 10th anniversary celebration on the morning of April 27. Join us as we reconnect with fellow classmates, celebrate how much this program has grown in such a short amount of time, and look toward the future of CC&E's coastal legacy.

Sincerely,




[CLICK HERE TO GIVE](#)

Thank you for your support!

## The Eyes and Ears of the Coast: A 360-Degree View of the Gulf of Mexico

By Christine Wendling

Having accurate, accessible, real-time

breadth of t  
he college's expertise.

[Check out CC&E's New  
Global Impact Map!](#)

## UPCOMING EVENTS



### Coastal Environmental Sciences 10th Anniversary Celebration

Friday, April 27, 2018

9:30-11:00 a.m.

#### Dalton J. Woods Auditorium

Join us in celebrating the 10th anniversary of the Coastal Environmental Science (CES) degree. CES is one of the few undergraduate degrees in the country that combines environmental sciences with oceanography and coastal sciences.

[Learn more about the speakers and interactive lab demonstrations!](#)

## At CC&E, Science Education Starts Early



Lab School students raising their hands during their field trip

CC&E believes scientific outreach and education is critical to budding scientists long before they begin studying at university. In keeping with this principle, John White, John and Catherine Day Professor of Oceanography & Coastal Science, hosted a kindergarten class from LSU Laboratory School who came to CC&E to



ESL members posing in front of the high-speed MODIS antenna above and below the Gulf of Mexico's surface.

oceanic and atmospheric information available prior to, during, and following catastrophic events has a significant impact on a community's ability to save lives, property, and ecosystem function. Two LSU College of the Coast and Environment labs are experts at acquiring this information: The Earth Scan Laboratory (ESL) and the Wave-Current Information System (WAVCIS) provide a wealth of critical environmental measurements both

ESL uses three antennas on the roof of LSU's Howe-Russell Building to capture satellite measurements and imagery of the Gulf Region. The lab uses polar orbiting and geostationary satellites that detect a variety of wavelengths (such as infrared radiation) to quantify water surface temperature, circulation changes, water quality, sediment distribution and transport. They can also identify areas of flooding and algal blooms that occur in Louisiana's lakes and bays and along the coast.

While ESL observes the Gulf from above, WAVCIS looks at what lies beneath the surface of the water. WAVCIS is a monitoring program that provides real-time data for meteorology (wind, air pressure, humidity, etc.), water level (tide and storm surge), water velocity profiles, and waves or sea state which include wave height and period (or duration) off the Louisiana coast.

[Read Full Article](#)

## Accolades

- [Brandon Champagne, 2018 Tiger Twelve Recipient](#)
- [Liu Wins Lifetime Achievement Award](#)
- [Alli Benelli, 2018 President's Alumni Scholar](#)
- [CC&E Sophomore Jack Green Awarded 2018 Udall Scholarship](#)
- [Two CC&E WABL Students Received Research Awards](#)

## Faculty Profile

Mike Polito

learn about wetlands and soils.

White and four of his graduate students, Katie Bowes, Jessica Vaccare, Alina Spera, and Yadav Sapkota engaged the kindergarteners in activities that identified all the parts of a wetland. The kindergarteners viewed different soil samples while White's students explained how marsh soil retains water and prevents flooding. In addition, Paige Zittrouer, the Lab School class' teacher, modeled the kinds of clothing and gear that scientists wear in the field when collecting samples.

[View a photo gallery of the activities.](#)

## CEGO around the World: International Potluck with Dean D'Elia



CEGO Around the World International Potluck Flyer

On March 21, the Coast and Environment Graduate Organization (CEGO) hosted their 4th annual international potluck in the Energy, Coast, and Environment Building to celebrate the diversity of cultures represented at CC&E and to give faculty, staff, and students the opportunity to taste cuisine from across the U.S. and around the world. CC&E graduate students were invited to cook and bring dishes that they felt represented their places of origin. Fourteen students and two professors provided cuisine that hailed from several regions in the U.S., Nepal, India, China, Ethiopia, Norway, and Thailand.

"The annual international potluck brings more to the table than just delicious food," said Wokil Bam, president of CEGO. "As an international student, I feel this event allows me to display my culture through its food. As CEGO president, I am proud that we continue to celebrate with

Mike Polito, assistant professor in the Department of Oceanography and Coastal Sciences, is a trophic ecologist, or a researcher who studies how organisms interact with each other and their environment through the lens of what they eat. His research illustrates how energy moves through food webs and how species respond to changes in their ecosystems.



Mike Polito

Polito conducts research in ecosystems from Louisiana to Antarctica and all across the globe. He identifies the diversity and abundance of species in each ecosystem and collects tissue samples. Then, he analyzes these tissue samples using stable isotope analysis to determine the diets of each species, which helps trace the flow of nutrients throughout the entire food web.

"For example, we can take a sample of a penguin's feathers and figure out how much krill or fish that penguin ate while it was growing its feathers," Polito said.

Because ecosystems are a complex network of interactions, understanding where a species fits into a food web allows scientists to better understand how changes to one part of the food web will affect the entire ecosystem. This is a critical component in understanding the ecological impact of climate change, oil spills, and other environmental stressors.

## Student Spotlight

### Christina Powell

Christina Powell, graduate student in CC&E's Department of Oceanography and Coastal Sciences (DOCS), is researching salt marsh and mangrove communities in coastal Louisiana to better understand how the expansion of black mangroves into salt marshes may alter the abundance or composition of aquatic animals found in these coastal habitats. She presented her master's thesis defense, "Influence of Black Mangrove Expansion on Salt Marsh Faunal Communities in Eastern Coastal Louisiana," on March 20, 2018. Powell's research was funded by Louisiana Sea Grant and partnered with the Water Institute of the Gulf.

Salt marshes are the dominate habitat found in coastal Louisiana. However, mangroves are a hot topic among those invested in coastal restoration. Black mangroves have a different root structure than marsh grasses, and that can help stabilize and prevent erosion. But recently, warmer winter temperatures have allowed mangroves to expand and take over salt marshes in parts of coastal Louisiana.

[Full Article Available Here](#)

more success each year. Personally, I would like to thank all the volunteers who cooked, participated, and helped us organize the event."

In addition to the general celebration, an informal contest for the best dish was judged by three CC&E employees. Alex McClellan won first place with his dish, Tom Kha Gai, from Thailand. The two runners-up, Wokil Bam and Katie Bowes, served Momo from Nepal and Crawfish Étouffée from Louisiana, respectively.

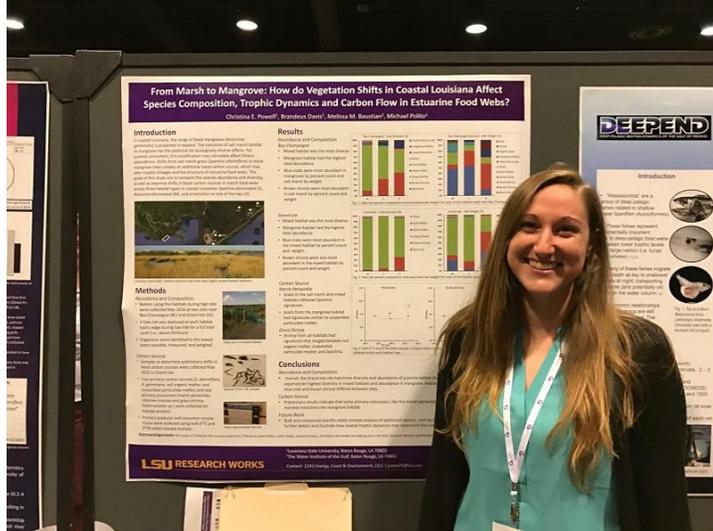
"These potlucks are a refreshing exposure to diverse flavors and culture from which I can get inspiration," said first-place winner McClellan. "The dish I made this year, Tom Kha Gai, is a Thai dish and one of my favorites. I wanted to make a dish from a country that was not already represented in the potluck-for a previous year I made a Cuban dish."

[Read the full list of participants and their dishes.](#)

## Want to learn more about CC&E?

Supporters and potential supporters of the College of the Coast & Environment are invited to a presentation and tour of the College.

Contact Kathe Falls for details at [kfalls1@lsu.edu](mailto:kfalls1@lsu.edu).



Christina Powell posing with her master's thesis poster

## Alumni Spotlight

### Integrating Public Health, Law, and Science, Alumna Lauren Kasperek Makes Her Mark

By Christine Wendling

Lauren Kasperek is a 2011 Coastal Environmental Sciences graduate and ORISE Research Fellow at the Oak Ridge Institute for Science and Education. ORISE fellowships are geared toward recent graduates interested in public service opportunities and working with the government. Kasperek has both a Master of Public Health from Harvard University and a Juris Doctor from Tulane University Law School; however, she attributes her time in the CES program with giving her the critical thinking and communication skills necessary to incorporate her three passions: public health, law, and science.



Lauren Kasperek

Prior to her current job at the EPA, she served as a student attorney on a Clean Water Act case in Mississippi that resulted in a 2014 settlement between the City of Hattiesburg and Gulf Restoration Network. Ultimately, the city agreed to build a wastewater treatment system by September 2018 that will prevent polluted waters from being discharged into the Leaf and Bouie rivers and determined penalties should the city miss the proposed construction deadlines.

"Having an environmental sciences background was crucial for successfully representing our clients and understanding the issues at hand," Kasperek said.

Part of the reason Kasperek decided to go to law school in the first place was because she did not see enough attorneys who are scientists.

"It's so important to have attorneys who understand the science and why laws and regulations are written a certain way. CC&E's CES program did a good job of ensuring that its students were comfortable speaking about science and really emphasized the communication aspect of it," Kasperek said.

Now, after returning to school for her public health degree, she works in the EPA's Office of Ground Water and Drinking Water, researching and communicating about harmful algal blooms, disinfectant by-products, and potable water reuse. Kasperek led the development of a document published in January 2018 on the current science and resources available on potable water reuse, which involves advanced treatment of wastewater so it can be used as a drinking water source. This information could be useful to areas of the U.S. experiencing water scarcity or that are interested in exploring ways to supplement their water portfolio.

"Of all the schools that I can claim, including Harvard or Tulane, I tell people first that I went to LSU. As a student, once I realized what I was interested in-coastal systems, wetlands, and the policy issues surrounding them, LSU's CES program was the only one that checked all those boxes. And, I'm glad I made the choice," Kasperek said.

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#### **CC&E ALUMNI:**

**New job? New location? We want to hear from you!**

Submit your Alumni Update

to <http://www.lsu.edu/cce/alumni/update.php>.

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