

#### **Upcoming Events**

FAU Harbor Branch's Ocean Discovery Visitor's Center will be closed July 1 through September 30 for renovations.

Mission Ocean
Discovery public
outreach
programming,
including Immersion
Tours, Lectures, the
Brown Bag Lunch
Series and Children's
Camps, will be on
hiatus over the
summer months and
will reconvene in the
fall. Stay tuned for
more info on
upcoming events!

If you enjoy our programs at FAU Harbor Branch, <u>please consider making a donation</u>.

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## July, 2016

FAU Harbor Branch Releases Findings from IRLON in the St. Lucie Estuary

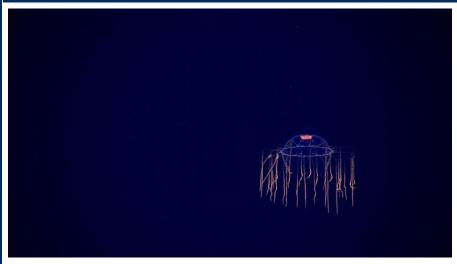


Scientists, legislators and agency representatives gathered at FAU Harbor Branch this week to take part in a seminar aimed at sharing important findings regarding the recent algae crisis in the St. Lucie Estuary from Harbor Branch's Indian River Lagoon Observatory Network of Environmental Sensors (IRLON).

FAU Harbor Branch's Dr. Dennis Hanisak and Dr. Ian Walsh of Sea-Bird Scientific and WET Labs Inc. presented data from land ocean biogeochemical observatories in the St. Lucie Estuary collected during the most recent freshwater discharges from Lake Okeechobee. The data showed that large, continuing discharges tend to remain in the estuary for long periods of time, providing a perfect environment for freshwater algae to thrive. Data also showed that nutrients (including nitrogen and phosphorus) from runoff not associated with Lake Okeechobee exacerbate blooms by serving as a sort of fertilizer for the algae. Scientists recommended timing releases with outgoing tides to help flush the freshwater discharges out to sea.

News agencies from around the region covered the event, including <u>WPEC</u>, <u>WPBF</u>, <u>WPTV</u> and <u>TCPalm</u>. (Click on the links to view each report.)

# Scientists Discover New Species in Mariana Trench



This hydromedusa was documented during midwater transects at 800 meters over a newly discovered petite-spot volcano - the first ever discovered in the U.S. Exclusive Economic Zone. \*Image courtesy of the NOAA Office of Ocean Exploration and Research, 2016 Deepwater Exploration of the Marianas.\*

Dr. Shirley Pomponi, Executive Director of the Cooperative Institute for Ocean Exploration, Research and Technology (CIOERT) - headquartered at FAU Harbor Branch - recently returned from a NOAA-funded expedition to the Pacific Ocean's Mariana Trench. Pomponi acted as science co-lead on leg three of the cruise, which concluded in mid-July. FAU Harbor Branch's 2016 summer interns had the opportunity to participate in the mission through the Exploration Command Center, a facility on the Harbor Branch campus that utilizes telepresence (pictured, below).

Over the course of the expedition, scientists discovered and documented never-before-seen species of deep sea animals and plants. The findings were the focus of a recent radio interview on BBC featuring Dr. Deborah Glickson, Associate Director of the CIOERT, who served as science co-lead on leg one of the mission. Click here to listen!



IRSC Interns Work with HBOI's OVOL on IRL Laser Project



IRSC Photonics/Robotics Institute student Cynthia Cintron

Hundreds of thousands of fish floated belly-up in the Indian River Lagoon in April, one of the worst fish kills ever on Florida's East Coast. The environmental blight was caused by pollutants increasing the growth of algae and blocking out light. With less light, there's less photosynthesis, causing oxygen depletion that harms corals, fish and other marine life.

Students in the Indian River State College Photonics/Robotics Institute are helping to shed some light on the issue through a NOAA-funded Department of Energy project being conducted by FAU Harbor Branch's Ocean Visibility and Optics Laboratory (OVOL). Under the guidance of Dr. Fraser Dalgleish and Brian Ramos, interns Cesar Rodriguez, Cynthia Cintron, and Viviana Kucharski are participating in a project which uses rapidly scanned short pulses of light to detect and classify fish, turtles and marine mammals. The students are building instruments, conducting test tank and at-sea tests, and will also be piloting oceanographic gliders that will be put out to sea for surveillance of marine life.

"There aren't many trained photonics technicians in the state of Florida and this program is a great head start for them," said Dalgleish. "The fact that the training is in Fort Pierce is an excellent geographic match for our research."

"I enjoy learning about new technologies," said Vivian Kucharski, who returned to college for a career change. "I know there are jobs in these emerging fields."

### Harbor Branch Hosts Young Summer Scientists



Students participating in the Science Institute of Discovery summer camp program, offered through the Gifford Youth Achievement Center, recently visited FAU Harbor Branch. Students learned about Harbor Branch's various research programs including aquaculture (pictured, left) as well as Marine Mammal Rescue and Ocean Visibility and Optics. Other camp activities include STEM-related projects and science-related field trips along the Treasure and Space Coast.

### Family Trip to Harbor Branch...



FAU Harbor Branch receives its fair share of summer visitors, including this manatee family who floated into the channel this week.