

eBulletin

A monthly update for the community

HARBOR BRANCH

FLORIDA ATLANTIC UNIVERSITY

August, 2017

Upcoming Events

Wednesday, Sept 6

Harbor Branch
Immersion Tour |
10:30 a.m. [\[More info\]](#)

Thursday, Oct 12

Three Minute Thesis
Competition | Harbor
Branch - Johnson
Education Center |
4:00 p.m. [\[More info\]](#)

Saturday, Oct 14

Indian River Lagoon
Science Festival |
Veteran's Memorial
Park - Fort Pierce |
10:00 a.m. [\[More info\]](#)

Research: Health and Environmental Risk Assessment Project for Bottlenose Dolphins with Georgia Aquarium

FAU Harbor Branch epidemiologist Adam Schaefer, MPH, is co-author on two papers that were recently published in *Diseases in Aquatic Organisms*. The collaborative research with Georgia Aquarium and a number of other contributing partners involved documentation and comparison of bottlenose dolphins inhabiting the Indian River Lagoon and those living in the waters near Charleston, South Carolina.

The study utilized twelve years of data collected during Health and Environmental Risk Assessments in both locations. Researchers documented dangerously high levels of both PCB's (industrial coolants and lubricants) and DDT (pesticides) from agricultural and industrial runoff in both dolphin populations. These results have implications to human health because people swim in the same waters and eat some of the same fish as the dolphins studied.

[Click here to read the full papers.](#)



Fig. 3. Bottlenose dolphin *Tursiops truncatus* with paracoccidiodiomycosis ceti from the Indian River Lagoon, FL

Lucie the Loggerhead Released after Rehabilitation

Lucie the loggerhead was released Wednesday afternoon following successful rehabilitation! She was transported by FAU Harbor Branch to the Brevard Zoo's Healing Center on June 30th after being found at Fort Pierce



Inlet State Park. Read the TCPalm article here: <http://bit.ly/2vN8lex>



She was released with the help of Indian River County Coastal Division Programs.

Grant to Study Shelf-edge Marine Protected Areas with NOAA Fisheries Completed

FAU Harbor Branch Research Professor John Reed and research assistant Stephanie Farrington recently completed a six year grant with NOAA Fisheries, NOAA Coral Reef Conservation Program (CRCP), and the South Atlantic Fishery Management Council (SAFMC), and are soon beginning another three year grant to study shelf-edge Marine Protected Areas (MPAs) off the southeastern U.S.

The SAFMC established eight deep-water Marine Protected Areas (MPAs) along the outer continental shelf from Florida to North Carolina in February 2009, and in addition, the Oculina Habitat Area of Particular Concern (OHPAC) in 1984. This NOAA CIOERT 2016 cruise report documents and characterizes the benthic habitats, benthic biota, and fish populations within and adjacent to the protected areas within the jurisdiction of the SAFMC. Of particular interest was the discovery of living Oculina coral thickets and coral mounds at the St. Lucie Hump MPA site off Jupiter, Florida, which was surveyed for the first time during this cruise. These are now the only know Oculina coral mounds in the world outside of the Oculina HAPC. These data establish baseline information to be referenced and compared to future research cruises to identify the long-term health and status of these important ecosystems. These data will be made available to the SAFMC, NOAA Fisheries, NOAA DSCRTP, NOAA CRCP, NOAA Mesophotic Reef Ecosystem Program, and NOAA Marine Sanctuaries to assist management on these habitats and key species.



Cast your Vote: 3 Minute Thesis Student Competition

3 MINUTES TO
BE *bold.* 

An 80,000 word thesis would take 9 hours to present. Their time limit...3 minutes. The 3MT® competition celebrates the exciting research conducted by graduate students. The competition supports their capacity to effectively explain their research in three minutes, in language appropriate to a non-specialist

audience. FAU Harbor Branch will host a preliminary heat on October 12th. [Click here for more info.](#)

FAU Harbor Branch in the News



FAU Harbor Branch Joins OCEARCH Expedition New York 2017

This month, FAU Harbor Branch's Matt Ajemian, Ph.D., Mike McCallister, and Grace Roskar joined a team of multi-institutional scientists on OCEARCH's "[Expedition New York](#)." After tagging nine juvenile white sharks and confirming the first known nursery in New York waters back in 2016, the crew has returned to Long Island, NY. The expedition goal is to increase the sample size needed to complete the North Atlantic White Shark Study that was started in 2012. The data will also contribute to a variety of studies performed by OCEARCH's science partners. [Read the Wall Street Journal Feature Article Here.](#)



FAU Harbor Branch Contributions to ROV in Sea Technology

The FAU Harbor Branch Engineering Department, led by William Baxley, SNMREC Chief Engineer, and William Laing, SNMREC Energy Systems Engineer, was recently noted in *Sea Technology Magazine* for their contributions to the Mohawk 18 Remotely Operated Vehicle (ROV).

The collection skid was built by the engineering department and specifically designed for the Mohawk 18 ROV system as a miniature version of the collection capabilities of the former Johnson Sea Link manned submersibles.

[Click here to read the article.](#)

Secrets of Cuba's reefs



Cuba Research Cruise

FAU Harbor Branch researchers were recently highlighted by multiple news organizations including *Sun Sentinel* and *TCPalm* in front page news articles featuring the research cruise, "Cuba's Twilight Zone Reefs and Their Regional Connectivity." Read the [TCPalm article here](#) and the [Sun Sentinel article here.](#)

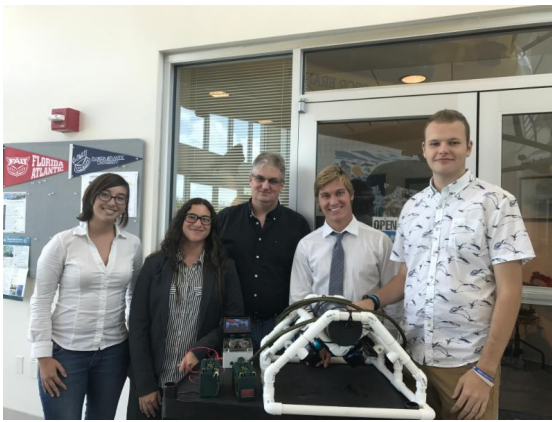
Student News



Goodbye Summer Interns

FAU Harbor Branch's 2017 summer interns officially completed their ten weeks of research this month. On August 3rd, each intern presented on their project developed with Harbor Branch scientists and engineers. This year there were nineteen summer interns from sixteen different colleges and universities.

Support for this year's program has been provided by the Link Foundation, the Gertrude E. Skelly Charitable Foundation, and the James Pomponi Memorial Internship.



Dodge Awarded NOAA Knauss Fellowship

FAU Harbor Branch graduate student Danielle Dodge has been awarded a prestigious NOAA Knauss Marine Policy Fellowship. She is one of five Florida graduate students among the 61 Knauss fellows selected for 2018, and only the second FAU student to receive this honor in the program's 30 year history.

During her year-long appointment at NOAA, Dodge aims to enhance science communication and to develop new ideas regarding the translation of research and management recommendations into national policy. [Read more.](#)

Interns Build Mock ROV

Before their summer internship was over, the engineering interns also completed another side project - a mock underwater remotely operated vehicle (ROV), led by Bill Baxley, Chief Engineer for the Southeast National Marine Renewable Energy Center.

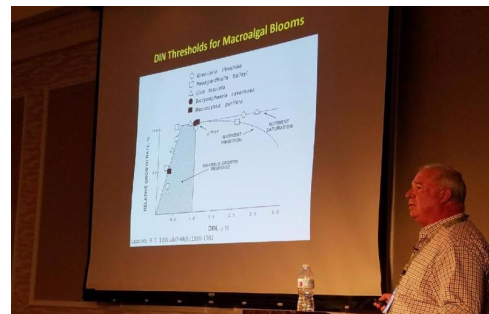
The afterhours ROV build provided students with a better understanding of how larger ROVs function. They learned electrical engineering skills and coding as well as the principals behind balancing a buoyancy system. The mock system includes two Arduinos, four Blue Robotics T100 motors and a waterproof camera. It is rated for 100 meters underwater. [Check out the ROV in action here.](#)

Events: Here and Near



American Fisheries Society Annual Meeting

Members of FAU Harbor Branch attended the 2017 Annual Meeting for [American Fisheries Society](#) (AFS) this week in Tampa Bay. Graduate student Cameron Luck (supervised by M.



2017 Waterfowl Summit

FAU Harbor Branch's Dr. Brian LaPointe was the Plenary Speaker at the 2017 Waterfowl Summit in Ocala, FL. LaPointe's presentation was titled "Everglades Restoration: Effects on Water Quality and Harmful Algal Blooms in Florida Bay and the Florida Keys." He discussed

Ajemian) shared a poster on bonefish wild spawning research. Graduate student William "Bob" Halstead (supervised by P. Wills) shared a poster on bonefish captive protocols. The event was additionally attended by FAU Harbor Branch's Dr. Aaron Adams, Dr. Matt Ajemian, Dr. Joshua Voss, Dr. Paul Wills, and Rachel Brewton and FAU's Beth Bowers and Lauren Kircher (supervised by J. Baldwin).

AFS is the world's oldest and largest organization dedicated to strengthening the fisheries profession, advancing fisheries science and conserving fisheries' resources. The annual meeting hosts approximately 2,000 fisheries professionals from around the world and provides dozens of presentations, posters and workshops.



FAU Harbor Branch Visits Florida Institute of Technology

FAU Harbor Branch and FAU Division of Research visited colleagues at Florida Institute of Technology College of Science and University Research and Development to explore collaborative research and education opportunities. As part of the visit, Dr. Post, Harbor Branch Executive Director, provided a presentation to FIT faculty about NSF - Perspectives of a Program Manager.

Pictured Left to Right: Dr. Tristan Fiedler, FIT Assoc VP for Research and Federal Government Relations and Partnerships; Dr. Jo Smith, FAU Director of Research Development; Dr. Karin Scarpinato, FAU Assoc VP of Research; Dr. Anton Post, FAU Harbor Branch Executive Director; Dr. Dwayne McCay, FIT President; Dr. Megan Davis, FAU Harbor Branch Associate Executive Director; and Dr. Ann Becker, FIT Sr. VP for Research.

the downstream effects of "sending water south" to Florida Bay and the Florida Keys that occurred in the 1990s when the Florida Keys National Marine Sanctuary thought that the water quality problems in the Keys region were simply due to a lack of freshwater flow. LaPointe detailed how the increased flows from 1991 to 1996 actually expanded the algae blooms, triggering more seagrass and coral reef die-off.



International Congress of Protistology

Dr. Peter McCarthy and Ph.D. student Hunter Hines, MSc. presented their research in Prague, Czech Republic, during the 15th International Congress of Protistology. The conference was attended by over 500 scientists from around the world. Their presentation included a species of freshwater ciliate which is new to science. The genus had been previously known only from the marine world, until this species was discovered thriving in several freshwater sites including a ditch on the Harbor Branch campus. The new species has an interesting symbiosis with prokaryotes, and research is being conducted to determine whether the cell represents a symbiosis of all three domains of life.

STAY CONNECTED



