



# September, 2017

## Upcoming Events

**Wednesday, Oct 4**  
Harbor Branch  
Immersion Tour |  
10:30 a.m. [\[More info\]](#)

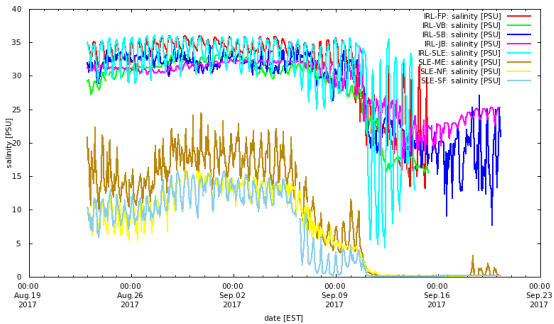
**Thursday, Oct 5**  
5th Annual Block Party  
for Higher Education |  
Downtown Fort  
Lauderdale | 4:00 p.m.  
[\[More info\]](#)

**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. [\[More info\]](#)

## IRMA's Impact on the Indian River Lagoon

Hurricane Irma was the most significant storm on the Treasure Coast since 2004. Due to the high rainfall and resulting run off throughout the Indian River Lagoon's (IRL) water shed, salinities plunged throughout the lagoon, with no recovery a week after the storm (upper plots are IRL sites, bottom ones are St. Lucie Estuary sites). You can follow the IRL's recovery at [fau.loboviz.com/loboviz](http://fau.loboviz.com/loboviz).



## Marine Mammal Rescue Update

FAU Harbor Branch's Marine Mammal Rescue Team resighted Reel and her calf this week [pictured right] near Grand Harbor. The team disentangled Reel's calf back in January this year just south of Harbor Branch. Photo



ID was able to confirm the dolphins were REEL and cREEL. The team also spotted Fizz [below] the same day by the St. Lucie power plant. They worked on disentangling Fizz back in November 2015. The bottom left image shows 2015's entanglement; the bottom right photo shows a notch on the dorsal fin from a previous injury.



## Research News



### FAU Harbor Branch Receives Grant to Study Survivin in Colon, Breast & Lung Cancers

Earlier this year, FAU Harbor Branch's [Marine Biomedical and Biotechnology Research Program](#) (MBBR) was awarded a \$622,683 grant to for the research project "Discovery of Marine Natural Product Antagonists of Survivin as Novel Cancer Therapeutics." The funding was part of \$16 million in research funding awarded to [16 different projects](#) through the Bankhead-Coley Cancer Research Program and the James and Esther King Biomedical Research Program.

The FAU Harbor Branch marine natural product chemical library represents a diverse library of genetically encoded small molecules that have actively co-evolved with cellular targets involved in both cell survival and death. The nodal protein survivin has been identified as an important target for intervention in a number of cancers including colon, lung and breast cancers. The MBBR team will use high content imaging (HCI) to rapidly screen chemically diverse materials from the library for their ability to reduce levels of survivin in cancer cell lines.



### Research Cruise Report: South Atlantic MPAs and Oculina HAPC

The report for a 16 day research cruise, conducted in June 2016, is now available. The cruise was conducted by NOAA National Marine Fisheries on the NOAA Ship Pisces with the UNCW Mohawk ROV. FAU Harbor Branch was among several collaborators who worked to complete the cruise mission.

The 2016 Cruise Report provides detailed quantitative characterization of the benthic habitat, benthic macro-biota, and fish populations for each of the 23 ROV (remotely operated vehicle) dives completed. Of particular interest was the discovery of living Oculina coral thickets and coral mounds at the St. Lucie Hump MPA (Marine Protected Area) site, 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 (habitat area of particular concern). The team also noted for the first time in a long time some schools of Red Snapper in the OHAPC which is good news. Read the paper [here](#).

## Student News

## DeGroot Receives Paul Dritenbas Memorial Scholarship



FAU Harbor Branch's Breanna DeGroot, part of Dr. Ajemian's lab, was recently selected as the awardee for the Paul Dritenbas Memorial Scholarship. This new scholarship opportunity was awarded by the Sunrise Vero Beach Rotary in Paul Dritenbas' name.

Paul was an environmental activist, specifically relating to our Indian River Lagoon. He founded RISSA (Rotary Initiative for Submerged Seagrass Awareness). He was instrumental in planning and organizing a team of volunteers to place buoys and oyster mats in the lagoon.

The scholarship was open to MS students at FAU conducting research on the restoration and conservation of the Indian River Lagoon. Breanna will receive her award on Wednesday, October 18th.

## Cheer on our Students at the 3 Minute Thesis Preliminary Heat!



An 80,000 word thesis would take 9 hours to present. Their time limit...3 minutes. The 3MT<sup>®</sup> 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.](#)

This year, the following students under FAU Harbor Branch advisors will compete:

**Ryan Eckert | Advisor: Dr. Joshua Voss**  
Assessing Genetic Connectivity and Algal Symbiont Communities in the Coral Species *Montastraea cavernosa* on the Belize Barrier Reef

**Richard Jones | Advisor: Dr. Jon Moore**  
Barracudina: The Forgotten Pelagic Lizardfishes

**Cameron Luck | Advisor: Dr. Matthew Ajemian**  
Bonefish, Sex, and Everything in Between

**Bob Halstead | Advisor: Dr. Paul Wills**  
Connecting the Dots in the Circle of Life: A Fish Story

**Aaron Duecaster | Advisor: Dr. Laurent Cherubin**  
Deriving Water Quality of the Indian River Lagoon from Drone Imagery

**David Bradshaw | Advisor: Dr. Peter J. McCarthy**

**Sebastian Velez | Advisor: Dr. Jon Moore**  
Lost and Confused: Juvenile Snappers and Groupers in the Northern Gulf of Mexico

**Kirstie Tandberg | Advisor: Dr. Amy Wright**  
Marine Natural Products as Cancer Therapies: Screening for Surviving Inhibitors

**Breanna Degroot | Advisor: Dr. Matthew Ajemian**  
Movement and Habitat use of Spotted Eagle Rays, *Aetobatus narinari*, Throughout Florida

**Brandon McHenry | Advisor: Dr. Peter J. McCarthy**  
Zombie Bacteria: Understanding the Viable but Nonculturable State of *Vibrio vulnificus*

## FAU Harbor Branch in Vero Beach Magazine



The September issue of *Vero Beach Magazine* highlights research being conducted by FAU Harbor Branch's Dr. Matt Ajemian and FAU's Dr. Stephen Kajiura in the article "The Great Fish Migration." [Read the article here.](#)

STAY CONNECTED

