

DEAN JACQUELINE E. DIXON ANNUAL REPORT FOR THE
COLLEGE OF MARINE SCIENCE
JANUARY 1 THROUGH DECEMBER 31, 2012

This has been an exciting year to be Dean of the College of Marine Science. Located in the C. W. Young Marine Science Complex on the Bayboro Peninsula in St. Petersburg, the college is focused on interdisciplinary marine science research and education at the graduate level. Our research foci are globally significant and regionally relevant and include:

- Oceans & Human Health
- Marine Ecosystem & Resource Assessment
- Climate Change – Past, Present & Future
- Ocean Observing & Modeling
- New Sensor Development
- Long-term Impacts of the Deepwater Horizon Oil Spill

New Hires

We are excited to tell you that we have hired a new website design and media relations specialist! His name is Jay Novitzke and he has made great progress on the FIO website and has already updated the CMS social media sites. Friend us on Facebook (www.facebook.com/USFMarineScience) and be ready for an updated CMS website soon!

Faculty

In 2012, our twenty-seven ranked or endowed faculty members include four Distinguished University/Research Professors, nine Professors, ten Associate Professors, and four Assistant Professors. Despite the challenging economic climate our faculty continues to grow. We started searches for three new positions in 2012 and plan to welcome three new faculty members to our college in 2013.

Several faculty received national recognition in 2012. Bob Byrne was elected as a Fellow of the American Geophysical Union for his contributions to the understanding of ocean acidification. He was also awarded the USF Innovation Award for his contributions to development of new sensors to measure ocean chemistry. Steve Murawski was awarded the Dwight A. Webster Memorial Award from the American Fisheries Society for “Meritorious/Prestigious Service to the Profession and Fisheries” in May 2012. Pam Hallock Muller, who was elected a Fellow of the Paleontological Society and was recognized for her excellence in Minority Mentoring by the Sloan Foundation.

Our faculty continue to lead the field at national and international levels via their service on high profile panels and committees. Just to name a few – Don Chambers was lead author on the Intergovernmental Panel on Climate Change (IPCC) Working Group 1 for the 5th Assessment Report (Chapter 3, Observations: Oceans). He is also a member of five

different NASA Science Teams that set the agenda for future research. Kendra Daly serves on the NSF Regional Class Research Vessel Science Oversight Committee, is Chair of the U.S. Ocean Carbon and Biogeochemistry Scientific Steering Committee, and is a member of seven other national advisory boards. Al Hine just stepped down from six years of service on the UNOLS-Fleet Improvement Committee. Frank Muller-Karger is Chair of the Interamerican Institute for Global Change Research Science Advisory Panel and is Director of the International Ocean Institute USA (IOI-USA). Steve Murawski has been appointed as a member of the National Academy of Sciences USA oversight board for the International Institute for Advanced Systems Analysis (IIASA) and also to the Ocean Studies Board of the National Research Council of the National Academy of Sciences. Bob Weisberg is on the Board of Directors for the Southeast Coastal Ocean Observing Regional Association (SECOORA) and is a member of the Southeastern Universities Research Association (SURA) Coastal and Environmental Research Program (CERP). Leadership matters and our faculty are at the forefront.



New AGU Fellow Bob Byrne at 2012 Fall AGU in San Francisco with Ted van Vleet, Gary Mitchum, and Dean Jackie Dixon

We suffered a great loss in July 2012 with the death of Benjamin Flower. He went peacefully surrounded by his family, friends, and colleagues. Ben began at USF as an Assistant Professor in 1997, was promoted to Associate Professor in 2004, and had been recently promoted to Full Professor in spring 2012. In addition to being promoted in 2012, he was also honored with a University Graduate Student Mentor Award, an award that brought him a great deal of joy. Dr. Flower's research focused on questions related to global climate change and took him around the globe including several ocean basins as part of his commitments with the International Ocean Drilling Program. His gentle leadership will be missed by us all. A memorial fund has been setup in his honor. If you would like to

give to this fund please visit the following link, [Link to the Benjamin Flower Memorial Fund](#) click on the checkbox beside "260027001 Benjamin Flower Memorial Fund".

Research

Our faculty secured more than \$15M in research funding in 2012. This number has increased steadily since 2010. Faculty and students published almost 100 peer-reviewed journal articles, with twenty-three articles having students as first-authors. Our faculty and friends have been active in book writing, too. Al Hine has published his book on the Geologic History of Florida. Gene Shin has published his memoirs in his book Bootstrap Geologist.

A full list of recent research accomplishments could go on for pages, so here are a few highlights. Mya Breitbart's group used genomics and microscopy to document the first evidence for viral infection in copepods. John Paul's group is using genomics techniques to develop hand-held fish species identification sensors (grouper forensics or "What's in your sandwich?"). Chris Stallings is testing removal techniques to help curb the population explosion of lionfish in Florida coastal waters. Both Amelia Shevenell and Don Chambers are studying the role of warming seas on melting glaciers with implications for global sea level change. Don Chambers is working in Greenland using GRACE satellite data, whereas Amelia Shevenell is working in Antarctica using paleoclimate data from sediments.

Many faculty and staff in CMS (Steve Murawski, David Hollander, Cam Ainsworth, Kendra Daly, Teresa Greely, Al Hine, Chuanmin Hu, Jason Lenos, Stan Locker, John Paul, John Walsh, Bob Weisberg) are involved in studying the long-term impacts of the Deepwater Horizon Oil Spill, either through the USF-lead Gulf of Mexico Research Initiative (GoMRI) funded C-IMAGE or FSU-lead GoMRI funded DEEP-C consortia.



To date, C-IMAGE scientists have spent more than 80 days onboard research vessels in the Gulf of Mexico collecting water, sediment, and biological samples. Even the Dean spent 10 days at sea learning to long-line fish, much to the amusement of her faculty. Some samples have been sent to partners in Hamburg for high pressure biodegradation experiments, and some to Calgary to see how the oil partitions as it ages and weathers. Many samples are being analyzed here at USF looking at oil concentrations in sediments, PAH concentrations in fish tissue, phytoplankton impacts, and toxicity impacts. Laboratory experiments are underway in the Netherlands at Wageningen University to determine the toxicity of oil with and without dispersants. Sediments are being analyzed to determine the impact of oil on

microbial assemblages and to find signs of recovery. These studies are closely integrated, with results from one feeding into parameterizations for another. By looking at the Gulf of Mexico holistically, we can better understand the impact of not only this oil spill, but also future breaches.

Center for Ocean Technology

The Center for Ocean Technology (COT) enables and supports cutting edge research by our faculty, staff and students. During 2012 the COT reinvented itself with the aim of facilitating interactions and collaborations with our college's researchers. These efforts are bearing fruit. Proposals totaling more than \$10M from CMS investigators are in the works. These proposals could not have gone forward without the COT and we expect even more proposals in the near future from CMS investigators in partnership with our COT engineers.

Several highlights for 2012 include an ongoing re-design of the highly successful SIPPER in collaboration with Kendra Daly, building the C-BASS towed camera system with Steve Murawski, and the first Arctic deployment of our Bottom Stationed Ocean Profiles (BSOPs) with Timothy Dixon in the Geology department at USF. We have already had one inquiry about building a SIPPER for the University of Delaware and will explore commercialization opportunities in the future. The Arctic BSOP deployment was described in an article in EOS published by the American Geophysical Union and is the basis for a major proposal we will submit in 2013.

Graduate Education

We are extremely proud of our 104 graduate students. One point of pride is our success recruiting and mentoring under-represented minority students. We have maintained a proportion of minority students from 14% to 19% over the last five years, significantly higher than the national range of 4% to 14%. Another point of pride is our Marine Resource Assessment Program, which continues to thrive and now has twenty-eight students, up from 15 in 2011.

We have an outstanding record of student success. Twenty-one students graduated in 2012. Our ten Ph.D.'s (Heather Broadbent, Gregory Ellis, Philip Thompson, Cheska, Burleson, Laura Lorenzoni, Melanie Parker, Digna Rueda De Romero, Carrie Wall, Daniel Otis, and Peter Simard) **all** found work within their field of study. Out of eleven M.S. graduates (Adam Brame, Claire Crowley, Chris Dufore, Darren Dunlap, Mark Hartman, Bridgit Mathers, Sheila O'Dea, Lindsey Flynn, Ryan Lloyd, Benjamin Ross, and Daniel Sensi), all but two found work in their field of study or continued for a Ph.D.

Our students have won numerous awards in 2012. A comprehensive list is provided at the end of this document. A few are highlighted below.

In December, Brittany Leigh, is a first year PhD student who is jointly advised by Mya Breitbart in the College of Marine Science and Larry Dishaw in the College of Medicine, was accepted to the highly competitive ASSEMBLE (Association of European Marine Biological

Laboratories) program. Brittany will travel to Berlin, Germany for 6 weeks this Spring to collaborate with a top microbial ecologist, then to the Stazione Zoologica Anton Dorn in Naples, Italy (the premier Ciona lab in the world!) for training and to perform her research "Seasonal and host dynamics of gut microbial colonization in *Ciona intestinalis*: effects on immunity".

Adrienne George, advised by Pam Hallock Muller, earned an NSF EAPSI Fellowship to conduct coral reef disease research in Taiwan in 2012. She is a McKnight Fellow & a Leadership Fellow in the USF Doctoral Student Leadership Institute. Natasha Mendez-Ferrer, also advised by Pam Hallock Muller, was selected for the 2012 Joseph A. Cushman Student Research Award to study photic stress in diatom symbionts of large benthic foraminifera.

Julia Galkiewicz, co-advised by Pam Hallock Muller and Christine Kellogg from the USGS, was selected as one of three winners of the USF 2012 Outstanding Dissertation Award. The selection process was extremely competitive and the committee was very impressed with not only the theme of her research, but also the extent of her professional development to date.

In June 2012, CMS Ph.D. student Erica Hudson Ombres, advised by Jose Torres, was selected as a 2013-2014 Knauss Marine Policy Fellow. The National Sea Grant College Program Dean John A. Knauss Marine Policy Fellowship, established in 1979, provides a unique educational experience to students who have an interest in ocean, coastal and Great Lakes resources and in the national policy decisions affecting those resources. The program matches highly qualified graduate students with "hosts" in the legislative and executive branch of government located in the Washington, D.C. area, for a one year paid fellowship.

Dinorah Chacin, advised by Chris Stallings, received a NSF Graduate Research Fellowship for her research to understand how species interactions and communities respond to natural variability in the ecosystem, as well as to anthropogenic effects. She is currently studying water clarity as a seascape factor and its effects on demography and behavior of visual organisms.

On October 12, 2012, we recognized fellowship award recipients and their generous supporters at the First Annual College of Marine Science Fellowship Luncheon. Through the leadership of former Dean Peter Betzer, our \$16M endowment provides ~\$300K/yr for endowed fellowships to CMS graduate students. Members of the faculty, donors, friends, alumni, and administrators convened at the Poynter Institute's Great Hall to honor this group. The luncheon introduced fellowship recipients to the individuals and families who have helped to make it possible for these students to pursue a degree at the College of Marine Science.



The 2012-2013 class of Endowed Fellowship recipients

The 2012-2013 Endowed Fellowships were provided to the following students:

- Mary Abercrombie** – Mahaffey Family Graduate Fellowship
- Brian Barnes** - William and Elsie Knight Endowed Fellowship for Marine Science
- Joshua Breithaupt** – Von Rosenstiel Endowed Fellowship
- Jenny Fenton** – Von Rosenstiel Endowed Fellowship
- Alisha Gray** - Southern Kingfish Association's Fellowship
- Danielle Rene Greenhow** - George Lorton Fellowship in Marine Science
- Jacquelin Hipes** – Von Rosenstiel Endowed Fellowship
- Sarah Kwon** – Von Rosenstiel Endowed Fellowship
- Rebekka Larson** - St. Petersburg Downtown Partnership Fellowship in Coastal Science
- Timothy Lee** – Peter R. Betzer Fellowship
- Christin Murphy** - The Jack and Katharine Ann Lake Fellowship in Marine Science
- Brendan O'Connor** - Tampa Bay Parrot Head Fellowship in Marine Science
- Erica Hudson Ombres** - William Hogarth Marine Mammal Fellowship
- Mark Patsavas** - Garrels Memorial Fellowship in Marine Science
- Holly Rolls** - Gulf Oceanographic Charitable Trust Endowed Fellowship in Marine Science
- Benjamin Ross** - Gulf Oceanographic Charitable Trust Endowed Fellowship in Marine Science
- Paul Suprenand** - Carl Riggs Fellowship in Marine Science
- Esa-Matti Tastula** - Paul Getting Endowed Memorial Fellowship
- Robert M. Ulrich** - Sanibel-Captiva Shell Club / Mary & Al Bridell Memorial Fellowship
- Carlie Williams** - William and Elsie Knight Endowed Fellowship for Marine Science
- Katie Wirt** - Linton Tibbetts Fellowship
- Dominika Ewa Wojcieszek** -The Wells Fargo Fellowship in Marine Science
- Bo Yang** - C. W. Bill Young Fellowship

In addition to our endowed fellowships, Lindsey Dornberger and Katie Douglas were awarded the USF University Graduate Fellowship and USF Presidential Doctoral Fellowship, respectively. Five students (Michael Drexler, Orian Tzadik, Joshua Kilborn, Marcy Cockrell, and Amy Wallace) were awarded Marine Resource Assessment Fellowships from NOAA and three of them were awarded international travel grants from the college to attend an international fisheries conference, ICES, in Norway. Kaitlyn Lizza and Ashley “Butch” Ringelspaugh were awarded USGS graduate student fellowships. We are fortunate to have such support from the community for our graduate students.

Undergraduate Education

The College of Marine Science was established as a graduate-only college. However, we are working to expand our undergraduate offerings. David Naar, Mark Luther, and Chris Stallings have taken the lead in developing and offering a two-semester course in Advanced Oceanography on the Tampa Campus. This course provides a rigorous introduction to marine science for the undergraduates in the Marine Biology Area of Concentration in the Integrative Biology Department. The first semester was taught in Fall 2012 and was very well received.

We have also worked with the USF St. Petersburg campus to develop a new Marine Biology Emphasis. CMS is now offering four classes at USFSP and more classes are being planned. CMS faculty supervised 38 undergraduate research experiences in 2012, 27 were paid interns and 11 were volunteer interns.

Education & Outreach

Teresa Greely leads our education and outreach efforts. Some highlights are:

1. (TEACHING from Sea) Initiated first USF courses with Skype from Sea segments (USF Honors College, 2 undergraduate courses and CMS Geological Oceanography course); media coverage via University Beat, Student newspaper and USF social media)
2. (NEW PROGRAM) Initiated GoMRI Teacher at Sea program as part of C-IMAGE E&O; Three teachers sailed with us as ship to shore communicators (30 blogs and 20 skype) and as part of science crew conducting sampling at sea
3. (International - PROF DEVELOP) Greely selected as Education Officer aboard R/V JOIDES Resolution, Expedition 340, Volcanoes and Landslides; USF global reach & social media
4. 2nd St. Petersburg Science Festival; 14 CMS exhibits, 10K visitors
5. (University Partnerships)- CMS E&O taught courses USFSP CoE STEM graduate program; CMS E&O led fieldtrips for U College STEM Academy; USFSP CAS course planning Mar Bio cognate

Metrics/Impacts:

Total Direct participation 2158; indirect participation 16,705

K-12 Teachers	340 direct
K-12 students	651 direct and 7075 indirect (teachers take back to students)
UG students	36 direct
Grad students	49 direct
Scientists	82 direct
Public at large	1000 direct (Sci Fest); 9000 indirect (attendees)

Facility Improvements

Before I arrived as Dean, Bob Jolley secured ARRA funds through the National Science Foundation to renovate 14 lab spaces on the second floor of MSF. This \$1.9M project to renovate ~8100 GSF of space was completed in 2012. The labs got quite a facelift, including **all new AC** with individual VAV controls for each lab space, **all new electrical** with separate distribution panels for each lab space and back-up generator for select circuits, **all new plumbing** with new DI service to each lab, **all new metal casework and fume hoods**, and all new room and hallway lighting on occupancy/motion sensors. Thanks to Bob Jolley and former Dean Hogarth for their vision and to Joe Donnelly for his expert oversight of the project.



Newly renovated labs in MSL

Fundraising

In addition to fellowship support, alumni and friends donated \$30,000 in support for our endowment funds and \$80,000 for current operations.

While the college currently has many of the basic components in place for achieving preeminence among oceanographic institutions, it seeks to create critical masses of intellectual capital in specific areas necessary to ensure advancement into the next level of national and international prominence. Funding from state government appropriations and student tuition are limited. Private financial support has become a major and growing source of revenue to fill critical faculty positions, provide state of the art technology and infrastructure, and enable us to attract and adequately support the best and brightest graduate students and postdoctoral associates. To reach its true potential, to become truly unstoppable, the college must seek private support.

Specifically, we seek support in the following areas:

Graduate Excellence: The College of Marine Science strives to attract and retain the best and brightest graduate students, while also ensuring that its educational programs are available to all qualified students without regard to financial circumstances. The market for highly qualified students is extremely competitive, with many top scholars making decisions based not simply upon the merits of the school, but upon a school's ability to support them. The college seeks to continue to grow our financial assistance opportunities to make CMS competitive among the nation's top universities.

Postdoctoral Fellowship Program: Postdoctoral research fellow programs are a long-standing tradition at the nation's best research universities and oceanographic institutions. Postdoctoral fellows bring cutting edge expertise to the college and serve as role models to graduate students. Implementation of a successful postdoctoral research program is pivotal to the success of the college. We hope to create four new postdoctoral positions in key research areas, each 24 months in duration.

Endowed Chairs and Professorships: To further enhance its ability to undertake fundamental research, CMS seeks to attract and retain key faculty operating on the frontiers of their respective fields. The college's plan is to fill new faculty positions with world-class scientists, through the use of endowed chairs and professorships. We are seeking support for three new endowed chairs.

Events

Events supported through donations to the USF Foundation include the following:

January 23, 2012

John Hofmeister, Founder and Chief Executive for Citizens for Affordable Energy and former CEO of Shell Oil presented "Why we Hate Oil Companies, Straight Talk From An Energy Insider" as part of the Eminent Scholars Lecture Series.

February 21, 2012

Post doctoral research associate Dr. Karyna Rosario was awarded the 2012 William M. Sackett Prize for innovative research. The Sackett Prize is designed to award the most meritorious research completed within the College of Marine Science at the University of

South Florida by one or more deserving students. All present and prior graduate students who have completed a MS or PhD within the past five years are eligible. The Prize is named in honor of Dr. William M. Sackett, who was Chairman of the Department of Marine Science from 1979 to 1983 and retired in 1997 as Distinguished Research Professor.

April 5 - 6, 2012

The USF College of Marine Science hosted the Eminent Scholars Lecture Series, Frontiers in Marine Science

Dr. Josh Willis, Jet Propulsion Laboratory, California Institute of Technology - "The Global Warming Yardstick: What warming oceans and rising seas tell us about anthropogenic climate change"

Dr. Eileen Hofmann, Center for Coastal Physical Oceanography, Old Dominion University - "Southern Ocean Food Webs: Current Understanding and Challenges"

Dr. Larry Mayer, Center for Coastal and Ocean Mapping, University of New Hampshire - "New Directions in Ocean Mapping: From D-Day to Deepwater Horizon"

Dr. Bill Landing, Department of Oceanography, Florida State University - "Fertilizing the photic zone: where do the bioactive trace elements in the Pacific Ocean come from?"

Captain's Log (notes from the Dean)

Leadership matters. In the uncertain world of science funding, it is important that USF/CMS be represented at the national level. In addition to the previously mentioned faculty that are in positions of scientific leadership, I am serving the college through my service as a member on the St. Petersburg Ocean Team, the Florida Institute of Oceanography Council, the Cooperative Institute for Marine Atmospheric Studies (CIMAS) Executive Advisory Board, and the Consortium for Ocean Leadership (COL/<http://www.oceanleadership.org/>). I have been elected a member of the Executive Board for COL starting in 2013. The Consortium for Ocean Leadership is a Washington, DC-based nonprofit organization that represents more than 100 of the leading public and private ocean research and education institutions, aquaria and industry with the mission to advance research, education and sound ocean policy. Their members and leadership are making a difference.

Over the next year, it is of critical importance that we stay on the forefront of the planning for the new ocean observing initiatives in the Gulf of Mexico as funded by the RESTORE Act. Coordination between the GoMRI consortia, FIO, the Gulf of Mexico University Research Collaborative (GoMURC), as well as state and federal agencies, will be critical for our future success.

2012 Student Accolades

External Fellowships



Erica Ombres, PhD Student

National Sea Grant College Program Dean John A. Knauss Marine Policy Fellowship (\$52,000)
(awarded in Fall 2012, distributed in Spring 2013)



Dinorah Chacin, MS Student

NSF Graduate Research Fellowship (\$30,000, 3 years)



Tasha Snow, PhD Student

Integrated Ocean Drilling Program (IODP) Schlanger Fellowship (\$30,000) and
Charles H. Bussmann Graduate Scholarship from the Marine Technology Society (\$2,500)



Maria Vega-Rodriguez, PhD Student

NASA Earth & Science Fellowship (\$30,000)



Ileana Freytes-Ortiz, PhD Student (shown left)

Michelle Guitard, PhD Student

USF College of Marine Science / Sloan Endowed Bridge Fellowship (\$33,495 each)



Michelle Guitard, PhD Student

Florida-Georgia Louis Stokes for Alliance Minority Participation (FGLSAMP) Bridge to the Doctorate Fellowship (\$30,000, 2 years)



Matthew McCarthy, PhD Student

The Hydrographic Society of America's National Scholarship (\$3,900)

Research / Travel Grants



Brittany Leigh, PhD Student

ASSEMBLE (Association of European Marine Biological Laboratories) program



Holly Rolls, PhD Candidate

The Cooperative Ecosystem Studies Units (CESU) Network Research Grant



Paul Suprenand, PhD Candidate

Woods Hole Oceanographic Institution Travel Grant, Ankara, Turkey, ClimECO3 workshop in ecosystem modeling at the Middle Eastern Technical University (July 2012) <http://www.imber.info/index.php/Early-Career/IMBER-Summer-Schools/ClimECO3-July-2012-Ankara-Turkey>



Erin Symonds, PhD Candidate

USF Challenge Grant recipient to execute interdisciplinary study entitled “The social stratification of health risks associated with wastewater irrigation: A rapid assessment in Punata, Bolivia” with graduate student collaborators: Matthew Verbyla, Maryann Cairns, and Ram C. Kafle. (\$5,000)
Sustainable Water Management Research Experience in Bolivia, Research Fellowship (\$2,000)

Awards from USF and other organizations



Mary Abercrombie, PhD Candidate

Outstanding Student Presentation Award, Ocean Sciences 2012, Salt Lake City UT



Julie Galkiewicz, PhD, USF CMS Fall 2011

2012 Outstanding Dissertation (OTD) Award, USF Graduate School



Matthew McCarthy, PhD Student

NOAA Walter B. Jones Memorial Award for Excellence in Coastal and Marine Graduate Study



Natasha Mendez-Ferrer, PhD Student

Joseph A. Cushman Student Research Award

Ben Ross, PhD Student

Outstanding Graduate Student Poster by the Atmospheric and Oceanographic Sciences Section at the 76th Florida Academy of Sciences Meeting

Leadership Roles / Presentations



Regina Easley, PhD Candidate

Student representative for the Ocean Sciences Meeting in February 2012, Salt Lake City, Utah



Sennai Habtes, PhD Candidate

Panel Chair - Marine Science Research Panel: 2012 Florida Education Fund, McKnight Doctoral Fellowship Mid-Year Research and Writing Conference; Research That Impacts Policy and Practice - 2/24-2/25, 2012. Tampa FL

Presentation - "The First 18 Months of Your Ph.D. Program" - 2012 Florida Education Fund, McKnight Doctoral Fellowship New Fellows Orientation Meeting - 6/29-6/30, 2012. Tampa FL

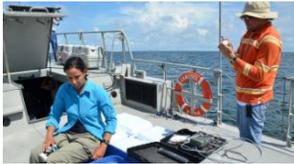
Luncheon Keynote Speaker - "The Significance of Net-Sampling for Larval Atlantic Bluefin Tuna", Luncheon Keynote Speech, 2013 Florida Education Fund, McKnight Doctoral Fellowship Mid-Year Research and Writing Conference; Research That Impacts Policy and Practice - 2/15-2/16, 2012. Tampa FL



Laura Lorenzoni, PhD, USF CMS Summer 2012

Presentation - Ocean Sciences Meeting, Feb20th -- Feb 24th, 2012, Salt Lake City, UT. Poster presentation: "Lithogenic sediment distribution and transport in the Cariaco Basin, Venezuela"

In the News



USF News highlights Inia Soto, PhD Candidate

A Joint Attack on Red Tide, USF College of Marine Science is working with scientists in Mexico to study the toxic algae, track its migration.

<http://news.usf.edu/article/templates/?a=4158&z=123>

Other student news items can be found at <http://www.marine.usf.edu/news/index.shtml>.