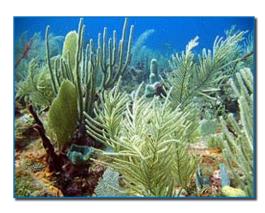
#### **NOVEMBER 2007**

Virginia Key, Florida

## STUDENT HELPS IDENTIFY TWO NEW SPECIES OF SOFT CORAL

Two new species of soft corals were discovered during an October expedition to Saba Bank, Netherlands Antilles, the largest atoll in the Caribbean. **Herman Wirshing**, a graduate student from the University of Miami Rosenstiel School of Marine and Atmospheric Science's Biology and Fisheries Division, joined leading coral reef experts from Texas A&M University-Corpus Christi (TAM-CC), and the Universidad de los Andes in Columbia, to help identify and quantify soft coral and crustacean species on the Bank.



The team collected 40 species of soft corals and nearly 100 different species of crustaceans in just ten days of SCUBA diving and exploration. One of the likely new species was found in deep water (70 m), and the other, surprisingly, was found to be common in shallow water (20 m).

"Since the gorgonians of the Caribbean are a well-known group of corals with only a limited number of species, the discovery of a new species in the shallowest parts of the Bank was quite unexpected," said Peter Etnoyer, a gorgonian expert from the Harte

(Continued on page 2)

## WORLD RENOWNED RESEARCHER BRINGS "SNOW" TO SOUTH FLORIDA



Dr. Alice Alldredge served as the inaugural speaker in the Harding B. Michel Biological Oceanography Lectureship at the Rosenstiel School. Alldredge, a noted professor of biological oceanography at the University of California - Santa Barbara, spoke about "marine snow," a reference to micro-aggregations of particles that play a major role in the ocean's dynamic biogeochemical cycles.

Marine snow is a generic term for large, unstructured aggregates of detritus, algae, bacteria and debris that form in the upper ocean and settle on the seafloor. Barely visible in the depths of the ocean, these particles are hotspots for biochemical activity; helping to remove carbon from surface waters as they settle in the deep sea. Over time, marine snow has been shown to impact

(Continued on page 2)

#### **SOUNDINGS IS FOR...**

Soundings is the monthly school newslet-



ter for faculty, students, alumni, and staff like **Rafael Gonzalez**, Security Guard at the Rosenstiel School who has worked here for 12 years.

# What attracted you to working at the Rosenstiel School?

I like making people

feel safe, and protecting people on this campus is a pleasure. Also, my twin sons, Christopher and Giovanni, are students at UM, so working here lets me be part of that same community.

#### Do you have any hobbies?

I am a singer, so I love music in general – except for rap music. Actually, I made a CD and gave it to my friends as gifts. Since I am a romantic man it was just a compilation of interpretations of classic Spanish love songs. Now I am working on my second album, with original songs for which I'm composing the music and lyrics. I play piano a little, so I use the keyboard to compose my melodies. I also love fishing in the Keys on my boat.

### Name something that you absolutely could not live without?

First, God. Second, music.

### If you became a millionaire, what would you do next?

I would dedicate myself to music and become a full-time musician.

## If we spend over 10 hours per day with you, what should we know about you?

I'm a Christian, so I pray a lot, and sometimes I sing while I work.

http://www.rsmas.miami.edu

#### STUDENT HELPS IDENTIFY TWO NEW SPECIES OF SOFT CORAL

(Continued from page 1)



Research Institute (HRI) at TAMU-CC, and the researcher who asked Wirshing to participate in this expedition. Wirshing concludes, "We will have to do more work to carefully verify and describe all of the diagnostic characteristics of this new shallow water gorgonian, but we can already conclude that it belongs to the genus Pterogorgia, in which so far only three species are known."

The expedition is part of an ongoing effort from the Department of the Environment of the Netherlands Antilles

(MINA) to develop a sound management plan for the Bank. With funding from USONA, the organization that distributes development funding from the Netherlands, a project was started in June of this year to collect as much knowledge as possible about the Bank. The effort is built upon previous work in the region, including the first rapid assessment expedition by Conservation International in 2006 (which also contributed a

representative to this expedition) surveys by the Dutch Hydrographic Service in 2006 and a yearlong fisheries survey conducted in 2000. Project leader Paul Hoetjes of MINA is hopeful that by the end of the year a well-structured draft of the proposed management plan and legislation to support it, as well as a finalized proposal to the International Maritime Organization (IMO) will be prepared. The goal is to have the Saba Bank designated as a Particularly Sensitive Sea Area (PSSA), which will help to regulate shipping over the parts of the Bank that lie outside the territorial waters of Saba, but



are still located within the Exclusive Economic Zone of the Netherlands Antilles.

Dr. Juan Sanchez of the Universidad de los Andes in Columbia, a leading expert on gorgonian corals and crustaceans, Dr. Thomas Shirley, Endowed Chair of Biodiversity and Conservation Science of HRI at TAMU-CC, also participated in the expedition. The data and samples collected from this cruise will provide an important baseline of present crustacean species on which future changes in the ecosystem can be measured.

"This expedition to the Saba Bank was not only an excellent opportunity to demonstrate both qualitatively and quantitatively the rich biodiversity of this relatively unexplored area, but also to work with some of the world's leading experts in gorgonian and crustacean biology, as well as government organizations to help build and maintain a more sustainable and thriving ecosystem in the area," said Wirshing.

Wirshing is currently a Ph.D. student studying molecular systematics of hard corals and gorgonian corals with Rosenstiel professor, **Dr. Andrew Baker**. His research will help scientists better understand the natural history and diversity of hard and soft coral ecosystems.

# WORLD RENOWNED RESEARCHER BRINGS "SNOW" TO SOUTH FLORIDA

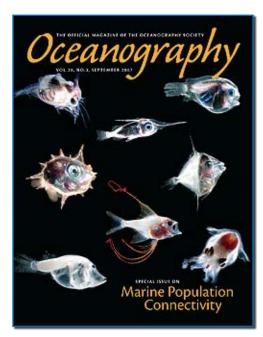
(Continued from page 1)

climate by absorbing CO2 dissolved into the ocean.

In 1993, Alldredge detected the existence of transparent exopolymer particles (TEP) essential in the aggregation and formation of marine snow. The "particle pool," essentially transparent gel-like particles formed from polysaccharide exudates of phytoplankton and other microbes, serve as bonding agents to hold aggregates together. Her studies further revealed that the microbes and other biologically active particles found in the snow had their own distinct microenvironments, and served as transport agents for some surface-derived matter.

Additionally, zooplankton; microscopic ocean animals, both consume and break snow apart through the force of their movements as they migrate vertically through the water column each day. One recent study assessing the impacts on abundance and size distribution of marine snow successfully used krill to show zooplankton's impact on the magnitude and patterns of ocean carbon sedimentation.

#### **MAKING A MARINE "CONNECTION"**



A special September issue of Oceanography, the official magazine of the Oceanography Society, features articles, photos, and front a cover designed by faculty, researchers and staff members from the Rosenstiel School. The special edition focuses on marine population connectivity, a concept described in detail in an article authored by Rosenstiel Marine Biology and Fisheries Division Chair and Maytag Professor of Ichthyology, **Bob Cowen**, and colleagues Glen Gawarkiewicz, Jesus Pineda and Simon Thorrold from Woods Hole, and Cisco Werner from UNC-Chapel Hill.

"Our goal in producing this series of papers was to set the stage for a groundswell of interdisciplinary scientific activity and interest in the important topic of marine connectivitv." said Cowen.

Larval transport and dispersal play a critical role in marine connectivity, as highlighted in an article by Jesus Pineda (WHOI), Jonathan Hare (NOAA) and Su Sponaugle (Rosenstiel School). Recognizing that these terms are often used interchangeably, the authors define larval transport as the "horizontal translocation of larva' from one point to another, where only spatial dimensions matter." In contrast, larval dispersal is described as the "spread of larvae from a spawning source to a settlement site." Both of these, as well as planktonic processes, are considered in the piece, which focuses on the consequences of connectivity in coastal and nearshore marine populations.

Modern modeling and computational skills also play a critical role in studying marine connectivity. Both biological and physical models are needed to truly uncover the dynamics at work in our oceans. An article by Cisco Werner (UNC-Chapel Hill), Bob Cowen (Rosenstiel School) and **Claire Paris** (Rosenstiel School) details some of the modeling currently in place, and describes the direction that needs to be taken in terms of improving the representation of physical dynamics and the development of new algorithms. The team of authors also proposes the use of more integrated models that can help to inform how field experiments may be designed for greater effectiveness.

The stunning cover montage and all of the larval photos of fish and invertebrates used throughout this issue of Oceanography are credited to **Cedric Guigand**, a senior research associate at the Rosenstiel School. All shots were collected in the Straits of Florida.



## 🕏 Facilities Update

From time to time, the Tritium Laboratory staff needs to bring heavy objects to and from the second floor labs. But since the building was designed originally as a dormitory and does not have an elevator, the team was in dire need of a lifting system.

At the request of Rosenstiel researcher Rick Oleson, the Facilities staff renovated an existing hoist and provided a lifting platform that will not only make lifting jobs easier, it will also help prevent accidents and injuries.



Facilities technicians. Yuri Leon and Issa Ragabi, did an outstanding job in renovating the hoist, and building a concrete pad at the ground level.

"We are very pleased with the newly re-

furbished hoist system. It replaces a malfunctioning hoist that was probably twenty years old. We had to manually move equipment and carry heavy coolers full of water samples up and down the stairs," said Oleson, "None of us, especially Dr. Jim Happell, will miss the thrill of hefting gas cylinders up and down those stairs!'

#### **COME CELEBRATE** THE HOLIDAYS

Come join in the holiday spirit with all your friends from the Rosenstiel School on December 7 at this year's MSGSO Holiday Party. The merriment kicks off at 5pm next to the volleyball court with free beer at 5 pm and food at 7 pm. A craft fair, with creations by the Craft Mafia, is scheduled as well. Admission is free.



#### HARDING B. MICHEL LECTURE SERIES LAUNCHED



An oceanographic pioneer, an educator, an entrepreneur, a caring mother and mentor ... these are just a few ways to describe the late **Harding B. Michel**, Ph.D.

Born in Louisville, Kentucky in the early 1940's, Michel was never a typical child. By age four she was a fluent reader and had typewritten her first letter; by age six, under her father's tutelage, she was an experienced boat handler. At age ten she was inflicted with polio and spent the next five years in physical therapy. Upon her recovery she enrolled in boarding school, where she was influenced by female teachers in the sciences, and began to consider science as a career option.

It wasn't until she began attending Duke University that Michel began to feel that, perhaps, she was doing something outside the norm: joining a field in which women had never fully participated. Initially, she chose to major in mathematics, but the coursework seemed too dry for the dynamic Michel, so she switched to chemistry, and later to psychology. After taking a year off to mourn the loss of a fiancé in World War II. she

obtained her Bachelor's degree in Zoology, intending to go to medical school in the future.

With her Bachelor's in hand she went to an interview for a chemist position. She was offered the job, until the owner noticed that she was limping, and quickly rescinded the offer. This was her initial brush with discrimination, something against which she became a steadfast advocate.

At the advice of her college mentor Dr. Humm, Michel got in touch with **F.G. Walton Smith** at the University of Miami's Marine Laboratory, and began working on her Master's degree in the relatively new discipline of marine science. At the time marine sciences were overseen by UM's Department of Zoology, and except for a boathouse off Miami Beach, the marine program was landlocked.

Michel began working on projects involving boat paints that resisted barnacle growth, lobster census reports and reproduction studies. After completing her Master's she spent a brief time at the University of Michigan, and then she and her husband, an ornithologist, moved back down to the tropics. She picked up where she had left off, and began writing her dissertation and teaching invertebrate zoology at the University of Miami.

During her career Michel served as chief scientist on more than a dozen major cruises, including two very memorable cruises, one to Kuwait to study the zooplankton of the Persian Gulf, and the other to Vietnam to study the possible effects of Agent Orange on local fisheries. She was the first woman to serve as chief scientist on a major research vessel. Michel published three books, dozens of scientific papers, and mentored many young scientists entering the field including one young oceanographer completing her post-doctoral work in Canada named Sharon Smith.

"When I was a post doctoral fellow I encountered the then-common situation where I was invited for many job interviews in academia, but never given the position. Eventually, I went to discuss this with the career counseling center, to figure out what strategic errors I might be making," said Rosenstiel School Marine Biology and Fisheries Professor, **Dr. Sharon Smith**. "The counselor asked me what my career goal was, to which I responded: 'a tenured full professor at a university.' The counselor asked me to name one woman I knew who held such a position...my answer, Harding B. Michel at the University of Miami. At the time I had never met her, but she was already a role model to me, and a star within the field of biological oceanography."

"It is ironic, and somewhat bittersweet, that I finally came to realize my lifelong career goal by occupying the position created by Harding Michel," Smith added.

In 1970 Michel became the first female to be appointed a tenured full professor at the Rosenstiel School. Because of her status as the only female faculty member at the school she participated on several administrative committees that helped to shape anti-discrimina-

(Continued on page 5)



**NOVEMBER 2007** 

#### HARDING B. MICHEL LECTURE SERIES LAUNCHED

(Continued from page 4)

tion and other policies that guide the Rosenstiel School today.

After her retirement in August 1984, she continued to work as a conservationist and to support the Rosenstiel School. She was especially dedicated to the Marine Biology and Fisheries division, where she had spent her entire professional career. Through the years, Michel collected many books, reprints and other valuable items. In her will she left many of those possessions to the library at the Rosenstiel School.

An old friend of Michel's at the Rosenstiel School, **Jean Yehle**, remembers her fondly, "When I first met Harding, we were both students in the Psychology Department at Duke. At that time, Dr. J.B. Rhine, a noted parapsychologist, was conducting an experiment to test the validity of extra sensory perception (ESP). We volunteered to be subjects. Harding proved exceptionally adept at all the tasks we were given, showing the unusual, intuitive and insightful abilities that served her so well as a researcher in the opening field of biological oceanography."

In a fitting tribute to this pioneer of the marine sciences, Michel's ashes were deposited in the ocean she loved, off the deck of the R/V Walton Smith. Michel, a dedicated wife and mother, is survived by a daughter, Caroline Owre, and six stepchildren.

"She could be tougher than tough," said Owre, Harding B. Michel's daughter, "My mother was a hard scientist who did not think of herself as a woman making headway for women in science, but simply as a person doing her best to advance the field – which she definitely did through her extensive plankton research and other groundbreaking efforts."

Harding B. Michel's daughter has chosen to honor her mother's career as a biological oceanographer with a donation to support students and guest lecturers at the Rosenstiel School. Annually, the Harding B. Michel Biological Oceanography Lectureship will feature three eminent biological oceanographers, each of whom will present a lecture, and meet with Rosenstiel School students and faculty members. These events are envisioned to be an opportunity for the entire campus to gather and learn from a distinguished member of the oceanographic community, a legacy to the pioneering efforts of Harding B. Michel.

# YAMAHA CONTENDER MIAMI BILLFISH TOURNAMENT

#### MARINE CONSERVATION NIGHT

Teaming up with the Rosenstiel School, the Miami Billfish Tournament hosted its annual Marine Conservation Night on Tuesday, November 6 in the Commons, drawing roughly 100 eager attendees. Marine Conservation Night is part of ongoing efforts by the MBT to educate the public on marine conservation issues and to promote conservation awareness.

This year, Captain **Frank "Skip" Smith**, Chairman of The Billfish Foundation's Captains' Advisory Board and President/ Owner of Smith-Merritt Insurance, Inc., discussed his work with The Billfish Foundation to assist in refining and clarifying circle hook regulations and definitions. Numerous marine-related organizations including the Rosenstiel School, IGFA, the National Park Service, and the Officer Snook Water Pollution Prevention Program exhibited at the event to share valuable information about their causes and dedication to preserving marine wildlife in South Florida.

#### **AEL TAPS ROSENSTIEL STUDENT KARNAUSKAS**

The Beta Chapter of Alpha Epsilon Lambda has tapped MBF student **Mandy Karnauskas**. The Beta Chapter of Alpha Epsilon Lambda has tapped MBF student Mandy Karnauskas. The overall mission of AEL is to confer distinction for high achievement; promote leadership development; promote scholarship and encourage intellectual development; enrich the intellectual environment of graduate educational institutions; and encourage high standards of ethical behavior.

The Beta Chapter at the University of Miami was the second chapter of AEL nationwide, chartered on April 27, 1992. Each semester, the Beta Chapter selects members from a pool of nominees who meet the following criteria: 1) is a graduate, law, or medical student, or an alumnus, administrator, faculty or staff member, 2) is in the top 35 percent academically in his/her class, 3) has completed a minimum of nine credits towards a graduate degree, and 4) has shown exemplary leadership and character, including service to the University of Miami graduate student body and service to the public interest at large.

#### MAKING AN IMPACT ON SOUTH FLORIDA'S YOUTH



The Integrated Marine Program and College Training (IMPACT) Project, established in 1999 by the Miami Science Museum, in cooperation with the Rosenstiel School of Marine & Atmospheric Science, was recently awarded a four-year continuation grant by the US Department of Education. The goal of the program, which has mentored 252 students since its inception, is to help local students prepare for postsecondary study, with an emphasis on math, science, and technology.

"The IMPACT project has worked to send 95 percent of participating students on to postsecondary education in the past eight years, compared to only about 25 percent of their peers at local target high schools," said Gillian Thomas, President and CEO of the Miami Science Museum. "We are honored to be the first science museum in the nation to become an Upward Bound Math & Science Center. Since then, the program's success is still growing and continues to show in the successes of our students."

The overall goal of the program is to prepare low income, first-generation students for 2- or 4-year higher education opportunities.



The Miami Science Museum, in partnership with the Rosenstiel School and Miami-Dade County Public Schools annually hosts the six-week summer marine program, allowing high school students to study diverse marine, atmospheric science and technology curricula. Also integrated in the program are elective courses, such as: literature, composition and integrated foreign language. Hands-on activities take place at the Miami Science Museum, Crandon Park and other field study locations. In addition, classroom lectures, visits to professional seminars, and computer-based training are held on Rosenstiel's Virginia Key campus. Each week, a marine science professional or graduate student shares their research with the group. Some of the topics covered include: shark and sea turtle conservation, harmful algal blooms, use of *Aplysia* (sea slugs) in medical research and living underwater for six months. The speaker series provides students the opportunity to understand the wealth and diversity of career options available to them in thesciences and technology arenas. Students typically enter the program as freshmen, stay involved for all four years of their high school career and are followed for six years after their high school graduation.

"Our vision, as a research institution, is to help communities better understand the planet, and improve society and the quality of life," said **Dr. Otis Brown**, dean of the Rosenstiel School. "Graduates of the IMPACT program are a clear example of what can be achieved when youth is instilled with an interest and respect for science, math and technology."

To-date, 100 percent of the students remaining active throughout the 4-year program have graduated high school, with more than 90 percent of those students going on to enroll in some form of postsecondary education. In 2005 and 2006, Alex Petit-Homme, Rubens Cadet, Adrianna Smith and Renee Johnson - all students in the program - were awarded highly selective Dell Scholarships for their postsecondary education.

#### JUDGE HELMUT TUERK PRESENTS MARITIME LAW SEMINAR

On November 8, Judge Helmut Tuerk, member of the International Tribunal for the Law of the Sea and former Austrian ambassador to



the USA, spoke to a Rosenstiel School audience about the contributions the tribunal has made to international maritime law in little more than a decade. Founded in 1996, and composed of twenty-one judges representing the principal legal systems of the world, the Tribunal oversees disputes relating to maritime laws and provides for compulsory procedures through their binding decisions.

"In it's eleven years of existence the Tribunal has established a reputation for the expeditious and efficient management of cases, and has already made a substantial contribution to the development of international law, including international environmental law," said Judge Tuerk.

This court hears cases brought under the United Nations Convention on the Law of the Sea (UNCLOS). By laying down a clear and universal framework for coastal state maritime jurisdiction, UNCLOS has undoubtedly played a major role in governing commerce,

environment and sovereignty throughout the world's oceans. Though the U.S. has not yet ratified the UNCLOS, the issue is likely to be considered by the U.S. Senate this term.

"This is not something the United States can continue to shy away from," said Rosenstiel School professor of marine affairs and policy **Dr. Fernando Moreno**. "As non signatory of the Convention, the United States is not only excluded from the Law of the Sea Tribunal in Germany, but also from other important decision making organs of the treaty, including the International Seabed Authority (ISA) in Jamaica, and the Commission on the Limits of the Continental Shelf. Our involvement is crucial not only to international maritime disputes, but to our contribution in the continued protection of marine resources worldwide."



WEDNESDAY, JANUARY 16, 2008

### THE BLUE REVOLUTION: THE RISE OF AQUACULTURE

**Dr. Daniel Benetti** 

Director, Aquaculture Program Rosenstiel School, University of Miami

The emergence of farming in food production was known as the green revolution. Today, there is a new revolution afoot. As fisheries around the world have declined dramatically over the last decade, aquaculture has grown steadily at almost 10 percent per year and currently contributes almost half the seafood people eat. Our own Dr. Dan Benetti, a world leader in aquaculture, will discuss its future, cutting edge technologies used for growing species such as cobia, tuna, snappers, and yellowtail jacks, and how scientists are working hard to develop methods that are environmentally safe and sustainable. Come join us and learn about this important topic and where most of our seafood may come from in the near future.



#### HALLOWEEN RECAP



Rosenstiel version of Alice in Wonderland meets Fantasy Fest



The [Don] Olson Triplets





(Above) Red Tide

(Left) Tropical Storm Noel

## MAKING A DIFFERENCE

Professor of Meteorology and Physical Oceanography, **Dr. Chidong Zhang**, recently participated in the LIVESTRONG Challenge, a cycling race, in Austin, TX. Organized by the Lance Armstrong Foundation, the weekend event (Oct 12-14) raised \$3.8 million for cancer research. There were more than 3,000 walkers and runners, 2,500 cyclists and over 800 volunteers who participated.

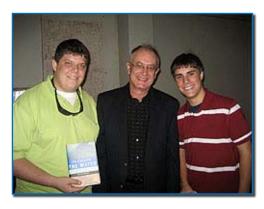
Zhang raised \$365 for the Foundation,



surpassing his fundraising goal by more than \$150. He dedicated his ride to the memory of his dear friend, **June Donelan**, the wife of **Dr. Mark Donelan**, professor of Applied Marine Physics.

#### **AUTHOR MURPHY MEETS WITH STUDENTS**

Author Dallas Murphy presented a lecture at the Rosenstiel School on November 13 about the past, present and future of oceanographic research. His new book, *TO FOLLOW THE WATER*, narrates the history of mankind's relationship with the ocean, beginning with the Great Age of Exploration, through efforts by Benjamin Franklin to understand the Gulf Stream, to today's efforts by scientists to understand the ocean's role in determining climate. Here, Murphy poses with students Ryan Adams and Johnny Wiborg from Saint Thomas Aquinas High School in Ft. Lauderdale. Their marine biology teacher, **Aimee Lowe** is a Rosenstiel School alum.



#### DR. WILLIAM W. DOLAN LECTURESHIP



In memory of the late Dr. William W. Dolan's affinity for the Rosenstiel School and his love for the sea, his wife, Jean Dolan, and son, Trey Martin (left), have partnered with the Rosenstiel School to create the Dr. William W. Dolan Lectureship, an ocean and atmospheric science lecture series.

Born in Syracuse, N.Y., Dr. Dolan enjoyed an all-American childhood, spending many summers on Skaneateles Lake, where he became a champion laser sailor by age eight. After high school, he served in World War II, then completed his

studies at Columbia University and earned his doctorate of medical dentistry. During his career, he skillfully pioneered the use of electrosurgery in dentistry and became a renowned international lecturer.

A founding member of the Pankey Institute for Advanced Dental Education on Key Biscayne, Dr. Dolan helped form the College of Dentistry at the University of Florida. He also served as an adjunct professor in the University of Miami's department of biomedical engineering. An avid scuba diver, he occasionally dove with Rosenstiel School scientists who were also his dental patients.

Mrs. Dolan invited family and friends, many of who knew Rosenstiel School founder Walton Smith, for the first lecture com-

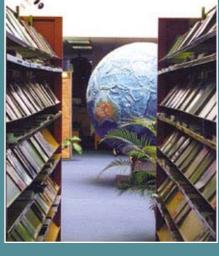
memorating in May at the new Las Olas River House Condominium in Fort Lauderdale, Fla. The event featured award-winning MPO faculty member, **Dr. Amy Clement** (above with



Robert Jensen). She discussed the changing climate and its impacts on the oceans and atmosphere. The buzz in Fort Lauderdale from her talk led to the second lecture in the series on October 10. This time, **Dr. Jerry Ault**, professor of marine biology and fisheries and director of the Bonefish and Tarpon Research Center, discussed the future of South Florida's sport fisheries with those in attendance.

The Dr. William W. Dolan Lectureship Honorary Committee includes: Kenneth Atherton, Dr. Mervyn Dixon, Dr. Richard Forum, E.H. "Skipper" Hill, Sally and Robert Lambert,

Taylor Larimore, Farris J. "Trey" Martin III, John Moynahan, Commodore Fred E. Welker III, Mark Yonge, and Ann and William Zan.



#### **LIBRARY LINES**

**New Staff** 

Stop by the library and meet our new Circulation Assistant **Cina Quezada**.

Upcoming schedule changes

13 is the number to remember! Intersession hours begin on Thursday, December 13 and continue thru Sunday January 13.

Intersession hours are Monday thru Friday 8:30 am until 5:00 pm.

The Library will be closed on December 24, 25 & 26, December 31 and January 1.



#### **GETTING A FISH EYE VIEW**

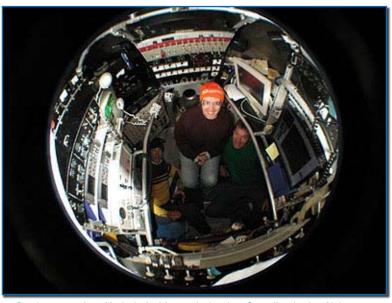
This September, **Dr. Keir Becker** led a research cruise aboard the R/V Atlantis to download pressure data from CORKs (Circulation Obviation Retrofit Kit) installed in the wellsedimented eastern flank of the Juan de Fuca Ridge; the area off the coast of the state of Washington in the United States, and the province of British Columbia in Canada. Accompanying Becker were co-Pls Dr. Earl Davis and Dr. Geoff Wheat, representatives from NSF and JOI (Joint Oceanographic Institutions), and assorted graduate students, including Katie **Inderbitzen** from the Rosenstiel School. Using the research submersible Alvin, the team successfully downloaded pressure data from a number of CORKs, in addition to replacing data collectors and retrieving water chemistry samples from the ocean floor. Data collected during the cruise will be used in the continued effort to understand the hydrology of the porous upper oceanic crust and how crustal fluid pressures respond to local seismic events.

For more information about this cruise, please visit: http://joiscience.org/learning/atlantis

Photo credit for all: Mark Spear, Woods Hole Oceanographic Institution



A pressure data logger installed on a CORK at ODP Site 1026B.



Graduate student Katie Inderbitzen during her first dive in the Alvin.



The research submersible Alvin onboard its support ship, the R/V Atlantis

#### **CSL ANNUAL REVIEW MEETING AND RECEPTION**



Kimberly Psencik (MGG), Brooke Carson, and Mitch Harris

The Comparative Sedimentology Laboratory (CSL) hosted 31 industrial associates for their annual review meeting October 15-16. Associates representing Anadarko, Aramco Services Company, BP, BPC Limited, Chevron, ConocoPhillips, ExxonMobil, Petrobras, Repsol YPF, Shell, Schlumberger, Statoil-Hydro, Total and Woodside Energy Limited attended the event. Several Rosenstiel School alumni were among the group of attendees, including: Paul Crevello, P. Mitch Harris, Stacy Reeder, Kelley Steffen, Brigitte Vlaswinkel, and former postdocs **Guillermina Sagasti Crippa** and **Guido Bracco Gartner**.

The meeting consisted of formal research presentations by students and Principal

Investigators reporting on their ongoing carbonate research. Presentations covered the processes of ooid shoal formation, the influence of tidal forces on shoal morphology, whitings in the Bahamas, and the use of stable isotopes for stratigraphy. A report on the deep-water coral reefs caught the attention of many participants. Not surprisingly, industrial associates were also interested in the imaging and quantification of the water flow through the Miami oolites by ground penetrating radar.

Monday evening there was a networking reception in The Commons hosted by the CSL. Tuesday morning, after presentations on petrophysics of carbonates, the research plan for the upcoming year was unveiled and discussed. Support of the CSL research plan by industrial associates is what helps leverage funds from national funding agencies, and helps develop projects that then can be submitted to these agencies for funding.



IN REMEMBERANCE

**Jackie Johnson**, a long-time employee at the Rosenstiel School, passed away on Saturday, 20 October. Jackie first started working at the School in 1981 on the secretarial staff in MGG. She later moved to CIMAS where she served as Administrative Assistant until she retired in 1999. Jackie played an important role in CIMAS, which grew rapidly during her years there. Upon retirement, she and her husband, long-time residents of Key Biscayne, moved to Moore Haven in central Florida where she lived until her death. She is survived by her husband, David Johnson.



(L to R) Marcelo Fagundes de Rezende (Petrobras), Rosely Marcal (MGG), José Souto Oliveira Filho (Petrobras), Thiago Correa (MGG), Maria Dolores de Carvalho (Petro-

Following the annual meeting, the group was invited to a field seminar in the Dominican Republic's bras), Gustavo Carvalho (MPO) Cibao Valley. Drs. Don McNeill and

coral successions in this area and served as trip leaders. Drs. Gregor Eberli and Peter Swart, MGG student Kelly Jackson and 16 associates participated in the fieldtrip. Over the course of three days, those on the trip had the opportunity to visit reefs and examine the stratigraphy and depositional facies of mixed carbonate-siliciclastic deposits.

Jim Klaus are cur-

## MGG FIELD OPPORTUNITIES ABOUND YEAR-ROUND

Every year Marine Geology and Geophysics (MGG) division hosts several field trips to provide students with hands-on education. This year one of them was to Death Valley, Calif., and was co-sponsored by UM's undergraduate Geology department and the graduate MGG division at the Rosenstiel School. **Drs. Tim Dixon**, **Jackie Dixon**, and **Karrie-Ann Kubatko**, along with teaching assistant **Kim Psencik** led the trip which included MGG students **Batuhan Osmanoglu**, **Noel Gourmelen** and **Gina Schmalzle**, as well as five undergraduate students. The six-day spring trip was designed to expose students to field applications of structural geology, petrology and evolutionary geology.

Students saw faulting, tilted and overturned blocks, stacked alluvial fans, as well as hydrothermal alteration and cinder cones as they visited several sites, including: Amargosa Chaos, Artists Drive, Dante's view, Golden Canyon, Titus Canyon, the Natural Bridge and Zabriske Point. At one such stop, the group was able to see a cinder cone that had been crosscut by a fault after it had ceased activity.

The field trip even included a day trip to the Yucca Mountain proposed and controversial nuclear repository. They toured tunnels and learned about the overall plan for transport and storage of the nuclear waste at the facility and its impact from a geological perspective.

Undergraduate and graduate students from the UM's Marine Geology program also spent their spring break wading through streams to explore beautiful Oligocene-Miocene reefs in mixed carbonate-siliciclastic systems in the Dominican Republic. Guiding these young minds were **Drs. Don McNeill**, **Jim Klaus** and **Gregor Eberli**. After familiarizing themselves with local plate tectonic and sea-level changes in the Caribbean, students were able to map stratigraphic sections exposed in river and stream cuts of the Cibao Valley. One of the many highlights of the trip was a stand of massive pocillopora coral that students were able to explore.

Throughout the year MGG also offered joint trips with industrial associates. **Thiago Correa, Emily Bowlin, Kelly Gibson, Kelly Jackson, Rosely Marcal, Maaike Petrie**, and **Amanda Waite** joined employees from Chevron, including MGG alumni Kelly Bergman and Mitch Harris, on their Carbonate Field Seminar this year. Participants examined the Miami Oolite in Ingraham Park, Pleistocene reefs in Windley Key, modern mudbanks in Florida Bay, and modern reefs offshore from Key Largo. This annual trip provided a unique opportunity for students to interact with associates from Chevron, as well as learn more about local carbonate environments.

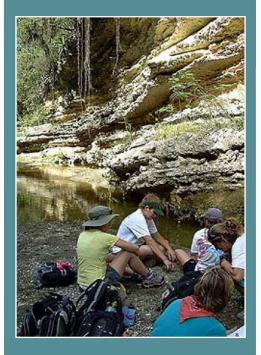
This summer, the Comparative Sedimentology Lab (CSL) and ExxonMobil collaborated to host a fieldtrip to Shroud Cay, Exumas. From August 27 to September 7, a group of CSL professors, graduate students, and ExxonMobil representatives traveled to the Bahamas on the Coral Reef II to visit the Ocean Cay ooid shoal, the Andros Three Creeks tidal flat, and several islands in the Exumas. The purpose of the trip was to look at differences in facies distribution between mud dominated systems like the Three Creeks tidal flat and grain-dominated systems such as the Shroud Key tidal flat in the Exumas.

(Continued on page 13)

#### **PHOTO DIARY**



Kelly Gibson examining massive pocillopora coral outcrop.



Students contemplate Miocene outcrop. Photo Credit: Noelle Van Ee (MGG)

(Continued on page 12)



# SOUNDINGS ROSENSTIEL SCHOOL OF MARINE AND ATMOSPHERIC SCIENCE

#### MGG FIELD OPPORTUNITIES ABOUND YEAR-ROUND

(Continued from page 12)

Armed with cameras, notebooks, and sampling equipment, the group characterized and mapped the Pleistocene and Holocene cemented facies, the sediments on the Shroud Cay tidal flat complex, and the sediments and structures in the northern and southern tidal inlets. Sampling and mapping teams collected over 200 sediment and rock samples, eight box cores, nine vibracores, photographs and observations to construct a detailed facies map of the island.

Preliminary results were presented at the CSL sponsor meeting held at the Rosenstiel School in October 2007.



Paul Mitch Harris discussing the Miami Ooilite with students and Chevron participants. Photo Credit: Kelly L. Jackson



From Left to Right: Thiago Correa, Nancy Brady, Gregor Eberli, Noelle Van Ee, Eduardo Cruz, Laura Gillespie, Christina Piela, Jessica Jacobs, Kelly Gibson (not in view) Maaike Petrie, Jim Klaus, Don McNeill, Melany McFadden and Thomas Knox relax with over a nice meal. Photo Credit: Noelle Van Ee.



Group photo, Key Largo. Photo by Kelly Gibson.



Vibracoring in the southern tidal inlet. Photo Credit: Christian Strohmenger (ExxonMobil)



Coring at Pigeon Key. Photo Credit: Kelly L. Jackson.



Melissa Hicks (ExxonMobil) on the tidal flat at Shroud Cay. Photo Credit: Gregor Eberli

#### **NOVEMBER 2007**

## STUDENTS SHINE AT 2007 AWARDS CEREMONY

On November 16, the Rosenstiel community gathered to honor recipients at the 2007 Student Awards Ceremony held in the Rosenstiel Auditorium. Earlier that day student winners presented short seminars detailing their current research. And the winners are:

#### **Koczy Fellowship**

Ilya Udovydchenkov, AMP

F.G. Walton Smith Prize: Best dissertation

Jeremy Mathis, MAC

**Dean's Prize: Best thesis** 

Kathryn Sellwood, MPO

Frank J. Millero Prize: Best student published paper

Irina Rypina, AMP

**Alumni Fellowship** 

Lyanne Yurco, MGG

**Mary Roche Fellowship** 

Virendra Ghate, MPO

**Don deSylva Memorial Award** 

Martha Hauff, MBF

**Edwin Iversen Student Award for Aquaculture** 

Aaron Welch, MAF Bruno Sardenberg, MAF

#### **Rosenstiel School Fellows**

Jennifer Wylie, AMP Robert Letscher, MAC Constance Karras, MAF Kristine Stump, MBF Noelle Van Ee, MGG

WeiWei Zhang, MPO

#### **University of Miami Fellows**

Rachel Silverstein, MBF Brittany Huntington, MBF Benjamin Shaw, MPO

#### **Royal Caribbean Cruise Line Fellowships**

Dwight Ebanks, MBF Jason Waters, MAC

For a full photo recap visit: http://www.rsmas.miami.edu/grad-studies/student-awards-



Irina Rypina with Frank Millero



Virendra Ghate and Dean Larry Peterson



Rosenstiel School Fellows



#### **ALUMNI NEWS**

Thanks to the Rosenstiel School alumni below for their news and updated contact information. Keep the news coming!

#### **1980S**

Victor Restrepo, Ph.D. '89 MBF, is now Chief of the Sustainable Fisheries Division at the Southeast Fisheries Science Center. Restrepo served as CUFER Coordinator with CIMAS for many years, and most recently served as Deputy Executive Secretary of the International Commission for the Conservation of Atlantic Tunas (ICCAT), the international body that manages highly migratory pelagic fisheries species in the Atlantic.

#### 1990s

**John Parks**, MA '95 MAF, has moved to Honolulu, HI where he is a Pacific Islands Coastal Specialist at the NOAA Pacific Services Center.

#### **ALUMNI WEEKEND ROSENSTIEL STYLE**

Prior to the kick-off of UM's Alumni Weekend festivities, the Rosenstiel School Alumni Association welcomed back grads in style with a waterfront mixer on the Commons patio. Seasoned alums and recent grads reconnected mingled and mingled with current faculty, staff and students. Photo gallery available at: http://www.theRosenstielSchool.miami.edu/alumni/HomecomingHappyHour2007/

To receive email announcements for alumni gatherings, send your contact information to: alumni@rsmas.miami.edu



**Tyler Smith**, PHD '05 (MBF) and **Andrew Baker**. PHD '99 (MBF)

**John Lamkin**, PHD '95 (MBF), **Villy Kourafalou**, MS '83, PHD '93 (MPO) and MPO Professor **Chidong Zhang** 

Alumni News continued on page 16

#### TRANSMIT YOUR DATA

Continue to enjoy reading about your former classmates and letting them and us here at RSMAS know where you are and what you've been doing by sharing news about yourself in a future issue of *Soundings*. Your contact data will update your listing in our RSMAS Alumni Directory. Simply complete this form and e-mail it to: alumni@rsmas.miami.edu -or-telephone: 305-421-4061.

Name	Degree, Year Graduated, Division
Address	
City/State/Zip Code	
E-mail Address	
Place of Employment	Title
Work Address	City/State/Zip Code
Latest News (career changes; recent accomplishme	nts, promotions, honors, etc

#### **ALUMNI RENDEVOUS IN THE CARIBBEAN**

Rosenstiel School Alumni, Faculty, Students and Friends gathered at the 60th annual Gulf and Caribbean Fisheries Institute (GCFI) meeting held in Punta Cana, Dominican Republic on November 5, for a fun evening of bowling and socializing. The event, hosted by Rosenstiel School Alumni Association VP **Jennifer Schull**, coincided with the 60th anniversary of the GCFI. The Rosenstiel School has been an integral part of GCFI's history. For 37 years, GCFI operated under the sponsorship of the University of Miami, and **F.G. Walton Smith** was, in fact, the first Chair of GCFI. A list of participants and photos will be posted in the next edition of *Soundings* and on the Alumni website shortly (www.rsmas. miami.edu/alumni/).



Gabriel Delgado, Kathleen Sullivan-Seeley, and Nicolle Cushion



Jennifer Schull and Robert Ginsburg

#### THE LAST WORD

"People can visit sacred shrines and imagine the spirits and the murmur of the voices of past generations. Likewise, we should go into natural places and imagine the spirits and murmurs of future generations hoping to experience the diversity of nature."

Paul Dayton, Marine Ecologist, Professor of Oceanography, Scripps Institution of Oceanography, La Jolla, California; Pew Fellow in Marine Conservation; and member, U.S. Marine Mammal Commission



This issue of *Soundings* brought to you by...

**Managing Editor**Barbra Gonzalez

**Editor** Christian Howard

**Production**Hunter Augustus

#### **Contributors**

Ray Alfonso
Gregor Eberli
Lisa Fish
Katherine
Inderbitzen
Kelly Jackson
Susan MacMahon
Fernando Moreno
Joe Prospero
Nancy Voss

Karen Wilkening Herman Wirshing Chidong Zhang-Kim Psencik Nancy Voss Karen Wilkening Joe Prospero Angel Li Marlen Sotolongo Ray Turner