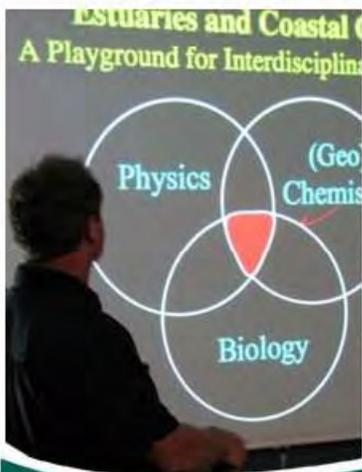




# Annual Report

2007-2008

July 16, 2008



College of Marine Science



# Where We Are

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	<u>2006</u>	<u>2007</u>	<u>2008</u>
Tenured Faculty - down	28	26	25 (+2 incl)
Refereed Pubs by Ranked Fac - up	77	70	103
Federal C & G Awards - down	\$14.6M	\$8.6M	\$5.9M
State & Local Gov't Awards - down	\$1.4 M	\$10.6M	\$1.6M
Private Funding - down	\$3.9M	\$1.6 M	\$1.1M

Faculty Scholarly Productivity Index is above the National mean and compares favorably with other USF programs.

# Where We Are

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	<u>2006</u>	<u>2007</u>	<u>2008</u>
Post Doc Fellows - up	24	28	32
Support Staff - down	294	293	203
Student ethnic diversity- increasing	24%	25.4%	25.8%
Student gender diversity- steady			
Male	32%	34%	36%
Female	68%	66%	64%

# Where We Are

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	<u>2006</u>	<u>2007</u>	<u>2008</u>
Student Headcount - down	122	123	111
Student Credit Hours - down	2,341	2,187	2,116
Students Accepted - down	35	32	11*
Degrees Awarded - down	20	26	14*
Masters	15	13	9
PhD	5	13	5

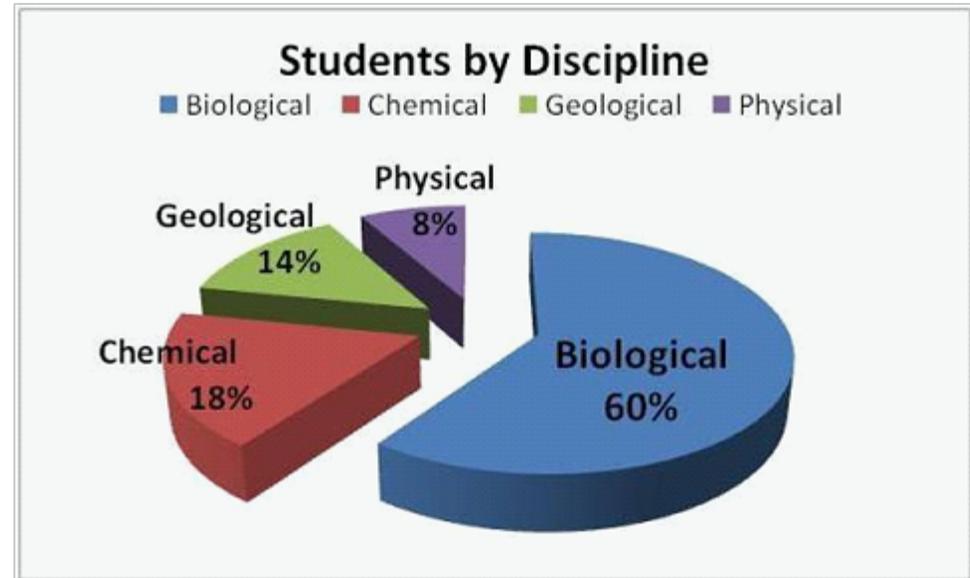
\* *June 2008*

# Current Student Summary

## 111 Graduate Students

58% Doctoral, 42% Master's

- 65% Female, 35% Male
- 9% International
- 21% US Minority
  - 12% Hispanic
  - 8% African American
  - 1% Asian



22 Fellowships Ranging From \$10,000 – \$22,000 per year (2008-2009)

# Student Awards

## Two “Best Student Presentations”, Ocean Sciences Category, Fall AGU (American Geophysical Union)

- Digna Rueda-Roa,  
Characterization of a Secondary Upwelling in the Southeastern Caribbean
- Enrique Montes-Herrera,  
Coupling of Sinking Biogenic Particulate Fluxes and Primary Production in the Euphotic Zone of the Cariaco Basin, Venezuela



## Three “Outstanding Student Poster Awards”, 2008 Ocean Sciences Meeting

- Digna Rueda-Roa, What Drives Unusual Upwelling Patterns in the Southeastern Caribbean Sea? Analysis of Local and Remote Sensing Data
- Jen Flannery, A 1400 Year Multi-Proxy Record of Hydrologic Variability in the Gulf of Mexico : Exploring Ocean-Continent Linkages During the Late Holocene
- Marianne Dietz, A Multiproxy Approach to Investigating Ecosystem Change in Response to the Development of Modern and Historic Low-Oxygen Conditions on the Louisiana Continental Shelf

## Three “Distinguished Graduate Achievement Award”, USF GPSO

- Jennifer Dupont, Biological Oceanography, PhD Student
- "Terry" Fei Fan Ng, Biological Oceanography, PhD student
- Christine Cass, Biological Oceanography, PhD Student



# Student Awards

## Fifteen - Fall 2007 Endowed Fellowships Awarded

- Jennifer Dupont - Knight Fellowship
- Camille Daniels - Bridge to the Doctorate Fellowship
- Karyna Rosario - St. Petersburg Progress Fellowship
- Elon Malkin - Lake Fellowship
- Kristine DeLong - Gulf Oceanographic Trust Fellowships
- Fei Fan Ng - Gulf Oceanographic Trust Fellowships
- Peter Simard - Getting Fellowship
- Elizabeth Tyner - C. W. Bill Young Fellowship
- Cheska Burleson - Garrels Fellowship
- Alexa Ramirez - Sanibel Captiva Shell Club Fellowship
- Dawn Goldsmith - Von Rosenstiel Fellowships
- Anthony Nitti - Von Rosenstiel Fellowships
- Regina Easley - Wachovia Bank Fellowship
- Sarine Manoukian - Riggs Fellowship
- James Patten - Parrot Head Fellowship



# Student Awards

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## Three - Successful Latino-Latina Student Awards

These three outstanding CMS graduate students were among 10 students honored at the USF Hispanic Heritage Celebration in Tampa.

- Warner Ithier-Guzman,  
*Chemical Oceanography PhD Student*
- Michael Martinez,  
*Geological Oceanography PhD Student*
- Karyna Rosario,  
*Biological Oceanography PhD Student*

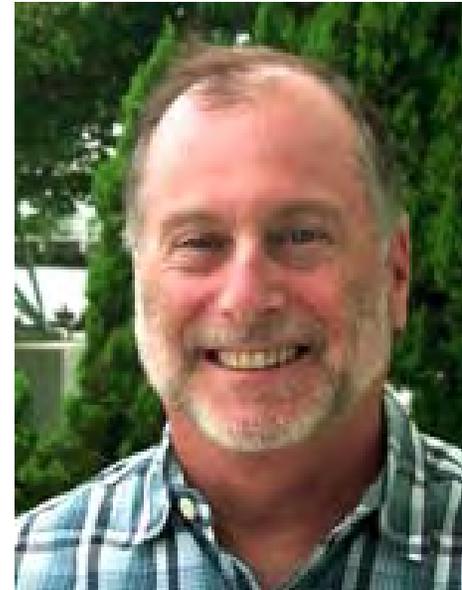


# Faculty Recognition

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Mya Breitbart- SLOAN



Robert Weisberg -  
Distinguished  
University Professor

# Faculty/Student News

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CMS Faculty member Dr. David Mann, and CMS doctoral student, James Locasio, featured in *The New York Times* - Science news article and National TV for research involving black drum mating calls.



# Research Highlights

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Hurricane / Storm Surge / Sea Level Rise

Acoustics/ Marine Mammals / Fisheries

Climate Change

- Ocean Acidification
- Sea Ice

Red Tide (CPR)

Virus Hunting: Discovery of Important Emerging Pathogens

Pulley Ridge Project & Gulf of Mexico Sediment Coring



# Technology

## Acoustics

Bottom Stationed Ocean Profiler (BSOP)

Coastal Ocean Monitoring System (COMPS)

Electron Microscope

High Frequency Radar

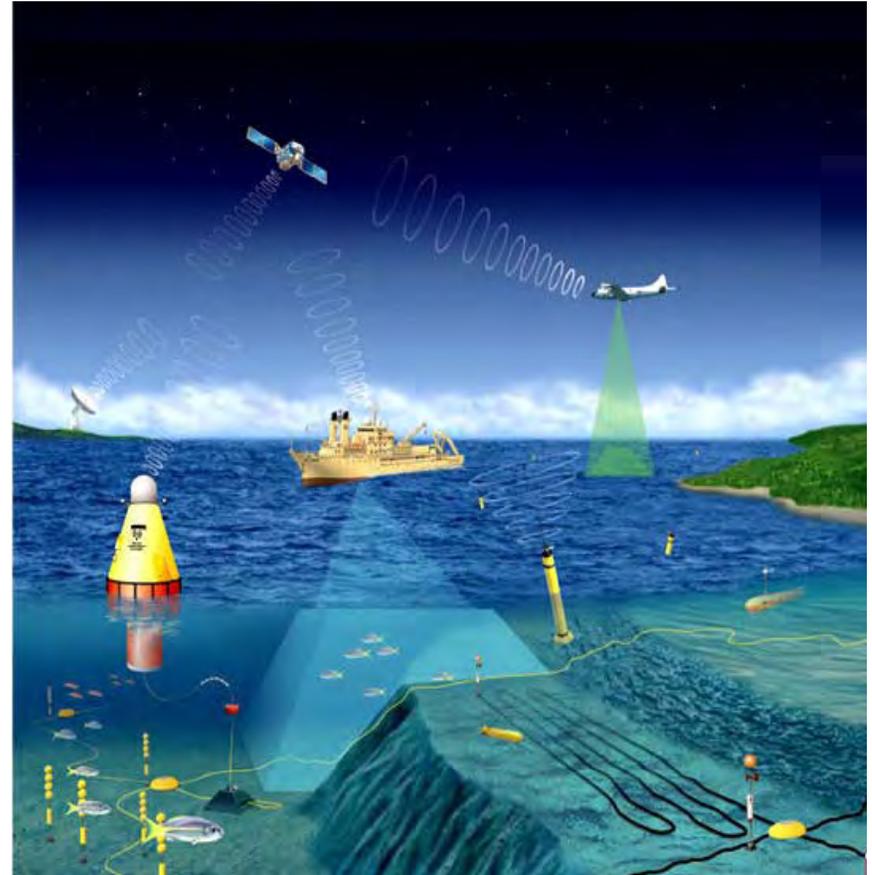
Multi-Parameter Inorganic Carbon Analyzer (MICA)

Physical Oceanographic Real Time System (PORTS)

Spectrophotometric Elemental Analysis System (SEAS)

Shadowed Image Particle Profiling Evaluation Recorder (SIPPER)

Unmanned Surface Vehicles (USV)



# Outreach Efforts



## **Oceanography Camp for Girls (OCG)**

The Oceanography Camp for Girls was developed to inspire and motivate young women entering high school to consider career opportunities in the sciences.

## **In-service Teacher Oceanography Workshops (In-TOW)**

In TOW provides teachers with marine science learning experiences that engage participants in current and emerging ocean research and technologies.



The **Minorities Striving and Pursuing Higher Degrees** of Success in Earth System Science (MS PHD'S®) initiative was developed by and for underrepresented minorities with the overall purpose of facilitating our increased participation in Earth system science.

The **NOSB** provides an educational forum for students to excel in math and science and receive national recognition for their diligence and talents.



# Staff Recognition

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Barbara Daugherty – Outstanding Staff



Denelta Adderley- Henry  
Elected Staff Senator

# Recent Activities

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- **Workshop on Collaboration** held in late May with approximately 70 participants representing local, state, federal, and regional agencies/organizations interested in partnering with USF/CMS. Much energy generated. Action items are being pursued.
- **Establishment of a New Area of Concentration in Fisheries Assessment** is being explored by a joint CMS, NOAA/NMFS, FWRI, USGS steering committee. I have received their initial recommendations and will be discussing with CMS Curriculum Committee and CMS faculty. A proposal will be submitted late August to USF.
- **Inclusion of CMS in “Guardians of the Gulf”** has been successfully negotiated. Scientific review of USF/CMS red tide related research will be integrated into the film – a high-definition video project sponsored by National Geographic and the Discovery Channel.
- Dedication of **Joint Science Lab and Classroom Bldg** with USF/St Petersburg in June 2008.

# Challenges/Opportunities

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- **Federal Funding** – Need to increase efforts to identify and apply for Federal funds, especially from nontraditional sources. Dedicated grantsmanship skills are the challenge.
- **Reliable Funding for COT** – The ongoing value of COT to CMS must be incorporated into funding plans. A new identity and innovation are the challenges.
- **Vessel** - SUNCOASTER (4.1K/day) is 47years old with safety issues and engine is near unusable. To bring the SUNCOASTER up to speed (rebuilt engines and all peripherals) would take another 300-400K (maybe more?). RV BELLOWS (3.1K/day), similar condition with many "band-aides" applied. The next vessel, RV Pelican in the GoM has a day rate of near 10K/day (+ fuel surcharges now) and is usually out working constantly. CMS programs in jeopardy without Vessel.

# SUNCOASTER

# BELLOWS



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# Challenges/Opportunities

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- **Scope/Funding for Community Education/Outreach** – Existing activities are popular and provide a service that reflects well on CMS. Again, the scope of the program and the value of the efforts to the community and CMS must be assessed. Innovation, funding, and community support are the challenges.
- **Fundraising** – Most alumni work for government or academic institutions and have little accumulated wealth. Focus has been on moderate donations from civic leaders. Challenge is to engage successful leadership level (\$1M or more) givers with an interest in marine science research/education.
- **Faculty productivity review** - A 5-year review of individual faculty's research/teaching/student enrollment productivity, including quality metrics related to scholarly pursuits and community engagement activities is underway. A reliable system for capturing qualitative information is the challenge.

# 2008-2009 Objectives

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	<u>Target Date</u>
Complete Strategic Plan	Fall 2008
Involve all of CMS – Faculty, Students, Staff	
Establish AAU Goals and Next Steps	
Integrate Quality Metrics for Research	
Offer New Area of Concentration in Fisheries Assessment	Fall 2009
Collaboration with FWRI, NOAA/NMFS and USGS	Ongoing
Collaboration between Mote/USF Center of Excellence in Marine Science	Ongoing
Conduct USGS/NOAA/CMS Storm Surge Workshop	Fall 2008

# 2008-2009 Objectives

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Develop Recruitment Plan (Dean, Faculty and Other)

Continue Diversity Initiatives

Rationalize Organizational Structure

Improve Alumni Relations

Obtain Significant Endowment(s)

Enhance Website

Create External Affairs Office (PR, Fundraising, Grants, Education/Outreach)

# USF/COLLEGE OF MARINE SCIENCE (CMS) GOALS FOR 2006-2011

## Selected Eligibility Measures for the Association of American Universities (AAU)

<u>2005/2006 Results</u>		College of Marine Science	<u>2006/2007</u>		<u>2007/2008</u>		<u>2008/2009</u>		<u>2009/2010</u>		<u>2010/2011</u>	
<u>USF</u>	<u>CMS</u>		<u>Goal</u>	<u>Result</u>								
2	0	National Academy Members (NAS, NAE, IOM, NRC)		0		0						
10		Faculty Awards		1								
151	14.6	Federal Research (\$ in M)		8.6		4.2						
179	24	Postdoctoral Appointees		28		32						
184	5	Doctorates Awarded		13		5						

*See below for definitions.*

**Membership in the National Academies (NAS, NAE, IOM):** The National Academies membership database maintains the current institutional affiliation of its members.

**Faculty Awards:** For its last research doctorate assessment, NRC compiled a list of awards, fellowships, and memberships signifying faculty achievement.

**Federal Research Support:** These data are collected by the National Science Foundation for expenditures rather than obligations.

**Postdoctoral Appointees:** The committee will use NSF-compiled data from institutions on postdoctoral appointees, most of whom are in the health sciences, physical sciences, and engineering. Post doctoral education is an increasingly important component of research and education activities that the Committee believes should be tracked in AAU membership indicators. However, because postdoctoral activity is highly correlated with university research and because self-reported postdoctoral data are less uniform than data on federally-funded research, postdoctoral appointees will be treated as a Phase II Indicator.

**Doctorates Awarded:** The committee will use number of Ph.D.s granted annually as well as tabulate the distribution of Ph.D.s across broad disciplinary categories (e.g., engineering but not aerospace engineering), using Department of Education IPEDS (Integrated Postsecondary Education Data System) data.

*Data Source: The Top American Research Universities 2007 Annual Report*

# Questions / Comments

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