

**DEAN WILLIAM T. HOGARTH ANNUAL REPORT FOR THE
COLLEGE OF MARINE SCIENCE
CALENDAR YEAR - JANUARY 1 THROUGH DECEMBER 31, 2008**

It is my pleasure to be serving as Dean of the USF College of Marine Science (CMS). The College is focused on interdisciplinary research in marine science at the graduate level. In 2008, our 22 ranked faculty members recorded more than \$21 million in research funding. We have four distinguished university/research professors, eight professors, eight associate professors and two assistant professors. In 2007, our faculty published in 103 peer reviewed publications and served on many national and international committees. We have 111 enrolled graduate students and 32 Post Doctoral Fellows. Our endowments of \$16 million promote 22 fellowships averaging from \$10,000 to \$22,000. The College is well positioned to contribute to USF's quest for AAU status.

With the vision of a unified global, natural system in mind, the College seeks to build new interdisciplinary research teams in collaboration with our local partners. As stewards of the oceans, it is our mission to fully engage the national and international scientific communities, through the reporting of research results in the most respected oral and written venues, and by professional service. We strive to define and realize a bright future with the emerging issues that affect the economic conditions of the Florida West Coast Shelf and we seek to address a myriad of relevant societal issues such as overfishing, coastal erosion, red tides, ocean noise, dying coral reefs, hurricane predictions, sea level rise, floods, ocean acidification, and drought to build better, more environmentally-sustainable and safe communities.

At the College of Marine Science, we are enthusiastic about our capabilities, students and research opportunities, and believe we can move forward with you on our team. Collaborations are the key.

ANNUAL FELLOWSHIP AWARDS, SEPTEMBER 5TH

Heather Broadbent	C.W. Bill Young Fellowship
Matthias Elliott	Peter R. Betzer Fellowship
Monica Mion	Von Rosenstiel Fellowship
Monica Mion	University Graduate Fellowship
Brienne Engel	Von Rosenstiel Fellowship
Brienne Engel	USF Presidential Fellow
Luis Miranda	Barnes Fellowship
Heather Havens	Tampa Bay Parrot Head Fellowship
Digna t. Rueda-Roa	Carl Riggs Fellowship
Marietta Mayo	Wachovia Fellowship
Michael Martinez-Colon	Sanibel-Captiva Shell Fellowship
Sarine Manoukian	Garrels Fellowship
Brian Lee Zielinski	Getting Memorial Fellowship
Cheska Burleson	Gulf Oceanographic Fellowship
Jennifer Delaney	Gulf Oceanographic Fellowship
Anthony Nitti	Gulf Oceanographic Fellowship
Elon Malkin	Lake Fellowship
Camille Daniels	Bridge to Doctorate Fellowship
Peter Simard	St. Pete Downtown Partnership Fellowship
Terry Fei Fan Ng	Knight Fellowship

COLLEGE OF MARINE SCIENCE RESEARCH PRIORITIES AND COLLABORATION WORKSHOP, MAY 29TH

Invited representatives to meet with the USF/CMS faculty, and other Federal, State, and local community partners on Thursday, May 29th. The purpose was to discuss the USF/College of Marine Science's research plans and priorities for the future. The input was used to develop a strategic plan that reflects a shared vision with partners to help shape CMS's future efforts to become one of the top oceanographic institutions in the world. At the same time share plans and as to how we can work together to achieve mutual goals that may strengthen oceanographic research, student education, and community engagement in the Florida West Coast.

COMPACT PLANNING

The University has determined that the Compact Planning Process is due by May 1, 2009. The following areas have been identified as areas for development of a 1-page action plan.

Strategic Plan Goal I and Strategies – Expand opportunities for interdisciplinary research

Action Plans (Research):

1. Identify areas for new faculty hires. 8 identified in Goal Area Actions document;
2. Set a target increase in Federal and Other funds;
3. Establish a methodology to assess faculty research productivity;
4. Implement new area of concentration in Marine Resource Assessment;
5. Develop Plan for new area of concentration in Ocean Observing Technology/Engineering.

Strategic Plan Goal II and Strategies – Establish CMS as innovation leader among oceanography graduate programs

Action Plans (Quality of Education):

6. Identify what/how to track AAU Certification Objectives
7. Assess Teaching Emphasis and Attention to Graduate Education.

Strategic Plan Goal III and Strategies – Emphasize collaborative relationships....

Action Plans (Collaboration, Engagement):

8. Develop Annual Plan for Collaboration (Internal and External), e.g., Science and Technology Center Proposal, Storm Surge Workshop, Annual Stakeholders Meeting (Piazze, Ballew).

Strategic Plan Goal IV and Strategies – Grow the program, increase stability community relevance

Action Plans (Stability):

9. Student Recruitment Plan;
10. Dean Recruitment Plan;
11. Private Support Plan – including Alumni Relations and Development;
12. Vessel Support Plan;
13. Green Campus Plan and Construction/Rehab Plan;
14. Community Education/Outreach Plan;
15. HR Initiatives Plan, e.g., faculty hires and reclassification, awards;
16. Improve Communication Effectiveness Plan, e.g., website, seminars, workshops, USF Committees.

Each Action Plan lists the major steps to be taken to achieve the objective in USF's Planning and Performance Matrix. Initiatives will be prioritized for inclusion in the Compact Plan submission to the Provost by May 1, 2009. Our success in the allocation of budgets for the next academic year will be based on how well our planning priorities align with the strategic goals of the University.

EMINENT SCHOLARS LECTURE SERIES, FEBRUARY 27TH AND 28TH
THE INTERNATIONAL POLAR YEAR (IPY 2008)

Dr. Robert Bindshadler, NASA Goddard Space Flight Center, "Some Like it Hot - But Not Ice Sheets". Chief Scientist of the Hydrospheric and Biospheric Sciences Laboratory of the National Aeronautics and Space Administration (NASA) Goddard Space Flight Center in Maryland.

Dr. Kate Moran, University of Rhode Island, "The Cenozoic Arctic Ocean revealed through drilling at the North Pole". Professor of Oceanography and Ocean Engineering at the University of Rhode Island.

Dr. John Farrell, Arctic Research Commission, "A dramatic year in the Arctic". Executive Director of the U.S. Arctic Research Commission (ARC) in Washington, D.C. The main goals of the ARC are (1) Environmental Change of the Arctic Ocean and Bering Sea, (b) Arctic Human Health, (c) Civil Infrastructure, (d) Natural Resource Assessment and Earth Science, and (e) Indigenous Language, Identity, and Culture. In particular, the ARC a key player in the debate about what countries own the Arctic Ocean and its sea-floor.

Dr. Dan Costa, University of California Santa Cruz, "Animals as polar oceanographers: Using animals to define and describe their habitat". Professor of Ecology and Evolutionary Biology at the University of California Santa Cruz.

Dr. Greg Holloway, Institute of Ocean Sciences in British Columbia, "What's new in physics for this IPY? 1) observing, 2) computing, 3) ideas". Senior Scientist at the Institute of Ocean Sciences in British Columbia.

HURRICANE STORM SURGE WORKSHOP PLANNING

CMS in collaboration with federal partners, held a workshop on hurricane storm surge modeling in St. Pete Beach, FL, on February 11-12, 2009. The workshop will be directed toward a limited number of topics aimed at: 1) advancing the state of the art and 2) discussing concept of operations. As such it will be both technically and managerially oriented, with invitees chosen to provide insight across these topic areas.

EXXON MOBILE

John Young, Management Team Coordinator for the Marine Sound Issue of ExxonMobil visited CMS on December 18th and 19th to discuss what ExxonMobil is doing in research and discuss opportunities for the University to get involved. Mr. Young met with faculty from CMS and College of Engineering and made a presentation at a faculty meeting.

GUARDIANS OF THE GULF

Guardians of the Gulf is a full length high definition documentary that provides a comprehensive overview of the impacts of the Florida red tide and the research that is being conducted to mitigate and predict it. It was produced by the Essential Image Source Foundation, a film foundation that specializes in marine related documentaries for museums, aquariums, theaters and broadcast. Ms Susan Sember is President of the Foundation and the Executive Producer and Director of all of the high definition products in the film. Last summer, the college participated in a week long production shoot related to our school, faculty, students, and research projects. Over 50 hours of HD footage, including underwater research were captured and the footage was used, and also is being archived in a media library for future educational, outreach and scientific use. Financial support for the "Guardians of the Gulf" came from a citizens organization, START (Solutions to Avoid Red Tides), along with the USF College of Marine Science,

FWC, and private donors. National interest in the Guardians of the Gulf has lent itself to be submitted to PBS and on-air schedules are presently being planned.

MARINE RESOURCE ASSESSMENT PROGRAM

Starting in fall 2009, CMS will be offering a new, interdisciplinary concentration in Marine Resource Assessment (MRA) as part of its Ph.D. and M.S. programs in marine science. This new program will provide training in the emerging field of ecosystem-based management. Its mission will be to train a new generation of scientists that can effectively address issues concerning the sustainability of the world's living natural resources.

A recent report to Congress documented a national shortage of graduates possessing the skills required to effectively manage living marine resources. At CMS, we are uniquely positioned to help the nation overcome this shortfall. Our faculty members, staff, and students have a comprehensive skill set that allows the broadest approach toward oceanographic discovery, while maintaining the interdisciplinary flexibility and discipline that allow important issues to be addressed in detail. As part of the MRA program, we will apply these capabilities toward development of novel solutions to problems involving resource sustainability. The MRA program is designed to produce resource scientists that can introduce relevant ecosystem-level variables into the traditional, single-species assessment process, complementing and enhancing the development of science-based management policies.

CMS shares a larger campus with the Fish and Wildlife Research Institute of the Florida Fish and Wildlife Conservation Commission, NOAA's National Marine Fisheries Service Southeast Regional Office, and the Florida Integrated Science Center of the US Geological Survey. These agencies represent a collective wealth of knowledge, expertise, and practical experience that will serve as vital assets to the new program and its students. Our physical proximity to these agencies will promote success in the new program. Students will learn both novel and traditional approaches to resource management in a setting that merges the academic environment of a tier-one research university with exposure to the day-to-day activities of resource management agencies.

Students will learn to create theoretical and field investigations that provide new methods, data, principles, models, technologies, and assessment criteria for use in advancing the field of ecosystem-based management. Students will be expected to engage in thesis or dissertation topics that deal directly with interactions between living resources and anthropogenic- or climate-driven factors, including subjects such as overfishing and identification of essential relationships that influence habitat quality.

The MRA curriculum will prepare students for employment in academia, the environmental consulting industry, and government. In the United States, government employment opportunities exist in six National Marine Fisheries Service Science Centers, on five regional Fishery Management Councils, on two interstate Marine Fisheries Commissions, and at a large number of state marine fisheries management agencies.

The core requirements for the new concentration will be the same as those for the existing M.S. and Ph.D. programs, which presently allow concentrations in Marine Biology, Marine Chemistry, Marine Geology, or Physical Oceanography. In addition, students will take courses related to Marine Resource Assessment, as directed by their committees. Total hours for the M.S. and Ph.D. programs will remain unchanged at 32 and 90 semester hours beyond the baccalaureate degree. Students in this concentration will be expected to have theses or dissertations that involve the quantitative, interdisciplinary study of interactions between

living resources and anthropogenic- or climate-driven ecosystem dynamics. It is expected that students with this concentration will interact strongly with one or more of the State and Federal resource-management agencies that are co-located with CMS in St. Petersburg.

NEW FACULTY POSITIONS

In 2008 four new faculty positions were established for the College of Marine Science as a result of excellent candidates five new faculty positions were hired.

Position Number 3215 Global-scale, Ocean-Atmosphere Interaction Modeler - global climate-related, ocean-atmosphere interaction modeler with a strong foundation in the Geophysical Fluid Dynamics and Thermodynamics of the coupled ocean-atmosphere system, and experience with large-scale, coupled ocean-atmosphere circulation models.

Candidates interviewed:

Dr. Susan Bates, November 11th

Dr. Marcus Jochum, November 20th

Dr. Sang-ik Shin, December 11th Accepted position, start date August 7, 2009

Dr Rong-hua Zhang, December 4th and 5th

Position Number 4431 Mesoscale, Ocean-Atmosphere Interaction Modeler - a mesoscale, ocean-atmosphere interaction modeler with a strong foundation in the Geophysical Fluid Dynamics and Thermodynamics of the coupled ocean-atmosphere system, and experience with mesoscale, coupled ocean-atmosphere numerical circulation models.

Candidates interviewed:

Dr. Qingnon Xiao, September 22nd Accepted position, start date August 7, 2009

Dr. Hyodae Seo, September 24th

Position Number 4061 Fish Ecologist Position - experience in establishing quantitative relationships between fish populations and ecosystem dynamics linked to natural and anthropogenic factors, ecosystem interactions with all life stages and trophodynamics, broad taxonomic expertise, strong data analysis skills, and an immediate capacity to establish an interdisciplinary research program that focuses on developing theoretical and field-based tools for ecosystem-based management.

Candidates interviewed (2009):

Aaron Adams, February 2nd – 4th

Thomas Grothues, January 28th – 30th

Francis Juanes, February 9th – 11th

Ernst Peebles, January 21st – 23rd Accepted position, start date March 6, 2009

Position Number 2909 Oceanographer Specializing in Satellite-Remote Sensing - applying satellite remote sensing to problems of Earth systems science.

Candidates interviewed (2009):

Don Chambers, January 26th – 28th Accepted position, start date August 7, 2009

Chuanmin Hu, February 4th – 6th Accepted position, start date August 7, 2009

Robert Scott, January 19th – 21st

Andrew Thomas, February 11th – 13th

PURCHASE OF RV WEATHERBIRD II

RV Weatherbird II, a 115 ft research vessel, will provide the University, as well as our 11 State Universities and private researchers supported by the Florida Institute of Oceanography, with a significantly upgraded oceanographic capability for conducting research in Florida's coastal ocean, the Gulf of Mexico, the Caribbean, and the western Atlantic Ocean off the southeast US coast. This vessel will be extremely beneficial to the University in our efforts to join the AAU. It will allow us to attract the best and brightest marine science and related faculty, to recruit the best graduate students, to continue our partnerships with federal and state agencies and to forge new and stronger relationships with other Florida colleges and universities. The *RV Weatherbird II* provides new sea-keeping as well as other at-sea capabilities which will increase our research efforts into real-time sensor development, ocean observing, and prediction of societally-relevant natural phenomena such as red-tide occurrence, coral reef demise, and hurricane storm-surge prediction. This ability will allow us to continue to attract high-tech industry to the area. Additionally, the *RV Weatherbird II* will provide the platform for us to work with federal and private companies on research for determining potential energy sources off the Florida coast.