

Strategic Plan

2008 – 2013

Understanding the Oceans to Create Global Solutions

Background

Within the next 50-100 years, Earth's human population will expand from 6 billion to 11 billion people.

Most of these additional people will live in developing countries; most will live near the ocean; and all will require resources from the ocean. All will certainly impact the ocean. This human population growth will occur at the same time that the scientific community is now convinced we will be entering a period of climate change perhaps greater than any previously experienced by human civilization. Hence, the challenges are enormous.

More than ever, the scientific community realizes that the physical world and all life contained therein are intimately interlinked to land, the sea, and the atmosphere.

No longer can marine scientists and oceanographers study just the brackish and saltwater. We recognize that we are now global, earth systems scientists who must forge new paths of inquiry into how the land, sea, and atmosphere interact with each other and how all life responds to these interactions.

With this vision of a unified global system in mind, the USF College of Marine Science is poised to build new interdisciplinary research teams to provide answers to a myriad of societally-relevant issues...

such as marine resource assessment, overfishing, coastal erosion, red tides, dying coral reefs, ocean acidification, hurricane prediction, sea level rise, floods, droughts, and building better, more environmentally-sustainable and secure communities in the U.S. and around the world.

A Message from the Dean



- The College of Marine Science has developed a Strategic Plan that recognizes a record of success resulting in a reputation for excellence in the study of the world's oceans and the development of cutting-edge technology. We take this opportunity to re-evaluate our long-term goals for the quality of education afforded our students, the direction and relevance of our research on society and how best to enhance marine science education within our community and beyond. To realize our vision, we believe our studies must become even more societally relevant and lead to quantitative predictions about critical issues and questions.
- The outcome desired can best be achieved by embracing a wide range of climate studies (natural and anthropogenic) and the concepts of ecosystem-based management. Synergistic research teams will focus on understanding how natural systems work to provide answers to issues such as overfishing, coastal erosion, red tides, habitat degradation, dying coral reefs, ocean acidification, and hurricane prediction. Our goals in research, education, community engagement, and resource stability are supported by actions that will result in the building of better, more environmentally sustainable and secure communities here and throughout the world.
- Our Strategic Plan fully supports and contributes to the goals of the University of South Florida.
- I invite your collaboration with us on this quest for understanding and impact.

Peer Institutions...

Florida State University

University of Hawaii

University of Delaware

Texas A & M

Rutgers University

University of Rhode Island

Aspirational Institutions...

University of Washington

Scripps Institute of Oceanography (UC San Diego)

Woods Hole Oceanographic Institute

Strengths and Opportunities

- Strengths:

Excellent faculty and postdoctoral researchers

Well-qualified and eager graduate students

Important research and technology development

- Opportunities:

Expansion of research and ocean sensor technology program

Enhanced collaboration & community engagement

Diversification and increase in funding for faculty
and student support

Mission

Our mission is to

- conduct interdisciplinary basic and applied research in ocean science to discover solutions to local, regional, state, national, and global problems of climate change, marine resource depletion, environmental degradation, water contamination, disease, and ecosystem management;
- graduate outstanding marine scientists who are well prepared for positions in academe, industry, government agencies, and non-governmental organizations at local to international levels;
- generate, disseminate and translate new knowledge across the marine science disciplines of biology, chemistry, geology, and physics; and
- develop new technologies and tools for exploring the coupled ocean-atmosphere-land system.

VISION

- The USF College of Marine Science envisions itself as one of the top oceanographic institutions in the world and one that is recognized as a leader in applying science to societal needs through research, service, and training of future scientists.

What We Value

- Attracting and retaining faculty and staff whose excellence and diversity contribute to outstanding interdisciplinary research and teaching;
- Leading edge technology development;
- Attracting a diverse body of outstanding students and post-doctoral researchers;
- Partnerships among faculty, staff, post-doctoral researchers and students;
- Graduates who are prepared and eager to solve societal problems;
- Collaboration with internal USF colleagues and external partners;
- Participation and recognition of faculty at national and international levels;
- Engagement and education of the larger community; and
- Stability in funding; innovation in fundraising.

Goals

The USF College of Marine Science will foster and expand national and international recognition of the excellence of its faculty, students, research programs, and contributions to solving global problems.

- I. Expand opportunities for highest quality interdisciplinary research;
- II. Establish USF College of Marine Science as an innovation leader among oceanography graduate programs in the world;
- III. Define new, collaborative relationships that maximize USF/CMS intellectual and technological capabilities to address societal problems both globally and regionally on the West Coast of Florida;
- IV. Grow the program to increase sources of revenue for research, support and infrastructure, while demonstrating community relevance.

Goals and Strategies

- I. Expand opportunities for highest quality interdisciplinary research and scholarly endeavors to advance our understanding of marine science.

Strategies:

- a) Broaden range of climate studies (natural and anthropogenic);
- b) Emphasize ecosystem-based management concepts in the expansion of our ability to assess and predict changes in living marine resources that will affect management;
- c) Maximize use of interdisciplinary research teams (both internal and external);
- d) Quantify the effects of human development on the coastal oceans;
- e) Focus on understanding the interaction of the Earth's oceans, atmospheres, and land;
- f) Expand the pre-eminence in ocean technology development.

Goals and Strategies

- II. Establish USF College of Marine Science as an innovation leader among oceanography graduate programs in the world.

Strategies:

- a) Recruit a permanent Dean of prominence and vision;
- b) Contribute to USF's successful quest for membership in the Association of American Universities and to elevation of USF's TARU ranking by increasing funding through research and private donations aimed at increasing output of doctorates and training of post-doctoral researchers;
- c) Nominate outstanding CMS faculty for national awards;
- d) Document quality and quantity using a variety of metrics;
- e) Produce and graduate the highest quality scientists;
- f) Increase recruitment efforts nationally and internationally for faculty, postdoctoral researchers and graduate students.

Goals and Strategies

- III. Define new collaborative relationships that maximize USF/CMS intellectual and technological capabilities addressing societal problems, both globally and regionally on the West Coast of Florida.

Strategies:

- a) Engage the community by outreach, public seminars, stakeholder workshops, etc.;
- b) Invite corporate participation;
- c) Implement new areas of concentration in line with societal needs, national priorities, and regional interests such as marine resource assessment and ocean sensor technology;
- d) Broaden collaborations with appropriate agencies, organizations, and governments: local, regional, State, Federal, and international.

Goals and Strategies

IV. Grow the program to increase stability and sources of revenue for research, support and infrastructure, while demonstrating community relevance.

Strategies:

- a) Seek private donations;
- b) Implement construction, renovation, and upgrade plans;
- c) Align fleet support with program needs;
- d) Establish meaningful involvement with alumni;
- e) Aggressively pursue all funding opportunities; maintain program and financial integrity; identify sources of multi-year funding for students;
- f) Expand community access and increase awareness;
- g) Promote flexibility that can anticipate, adapt to, and thrive under changing academic and funding environments;
- h) Create and maintain a “green” campus.

How We Measure Ourselves

- **Association of American Universities (AAU) Eligibility Criteria**
 - Federal Research \$\$; Doctorates Awarded; Postdoctoral Appointees; National Academy Members (NAS, NAE, IOM, NRC); Faculty Awards.
- **Top American Research Universities (TARU) Criteria**
 - Same as above, plus Total Research Expenditures, Endowment Assets, Annual Giving.
- **USF Planning & Performance Matrix**
 - Planned Increases in Recurring and Non-Recurring Funding from Federal, State, Private sources; Number of Papers, Faculty Quality Rating, Years to Completion (Master's), Years to Completion (Doctoral), Technology Transfer and Licensing Revenues, Patents Issued.
- **Other “Quality” Metrics**
 - Faculty Research Accepted for Publication, Forthcoming & In Progress; Citations; Faculty Grant Success; Faculty Presentations, Recognition, Awards; Community Partnership Activity; Student Awards and Honors; Student Publications; Student Volunteer Hours in Community; Number of Nationally Prestigious Scholarships, Fellowships Received; Percentage of International Students, Student Placement.

SUPPORTING DOCUMENTS/SYSTEMS

Action Plans: For each Goal/Strategies area, an Action Plan is developed that identifies what/who/how objectives will be reached over the 5 years.

- **Planning and Performance Matrix**: performance measures, indicators, dates, etc., related to Action Plans.
- **AAU Goals Tracking**: CMS objectives contributing to USF's goal of AAU membership.
- **Compact Plan**: agreement between Dean and Provost on priorities, investments, and actions.