Message from Director

The Marine Science Program at the University of South Carolina had yet another fabulous year in 2011-2012. Our students and faculty continued to receive university, national and international recognition for their outstanding research and teaching. With over 300 undergraduate majors and 25 graduate students, we continue to be among the outstanding Marine Science programs across the country. Given all of the wonderful events of this past year, we wanted to share with you some of this year’s highlights.

A picture of a few of our outstanding Marine Science graduates from this past year. Approximately 31 students received their undergraduate degrees and 8 graduate students received either their Master’s or Doctoral Degrees in 2011-2012 (back row, l-r) Mike Andrews, Stephen Timko, Ed Simmons, Chris Hughes, Kate Grotenhuis, Dominique Maldonado, Stephanie Kedzuf, Erin Fedewa (front row, l-r) Dr. Claudia Benitez-Nelson (Director), Patrick Boylan, Bree Bess, Holly Harz, Joan Hurley.

Student Corner

L to R: Gwen Geidel, Undergraduate Director of the School of the Earth, Ocean and Environment with Marine Science Undergraduate Award winners: Drew Delorenzo, Hali Kerr and Stephen Timko.
MARINE SCIENCE UNDERGRADUATE AWARDS

Undergraduate Awards Day

At Undergraduate Awards Day on April 19, 2012, the Marine Science Program proudly recognized three of its most accomplished majors. Drew Delorenzo, Hali Kerr and Stephen Timko, all members of the S.C. Honors College with perfect 4.0 GPAs, each took home an award for their academic excellence, research skills, and service to the department.

Traci Heincelman Memorial Scholarship

The Traci Heincelman Memorial Scholarship was established in memory of Traci Jeanne Heincelman, an outstanding Marine Science major who died in 2002 due to injuries sustained in an automobile accident. The $1000 gift is awarded to a junior majoring in Marine Science who exemplifies academic excellence, research and volunteerism.

This year sophomore Drew Delorenzo received this award. Drew, who was also named a national Hollings Scholar this year, is a Biochemistry double major and business minor, edits the undergraduate journal MarSci, and helps maintain the Baruch Institute’s on-campus saltwater aquaria. He spent last summer stying in Bermuda and is currently in Florida helping to replenish coral reefs. When not underwater, Drew lives in Cincinnati, Ohio.

Rising Senior in Marine Science Award

The Rising Senior Award is given by the College of Arts and Sciences to a rising senior major who has demonstrated excellence in Marine Science. Criteria for selection include GPA, research activities, volunteerism, overall academic performance, and nomination by a faculty member. The award is a $500 scholarship for the student’s senior year ($250 per semester).

This year’s recipient, Hali Collins Kerr, spent last spring as an intern for the NOAA Chief of Staff in Washington, D.C. In addition to her minors in political science and music, she presides over the campus environmental group SAGE, has organized community charity concerts for the past three years, and is currently working on a documentary about climate change for her senior thesis. Hali, from Cockeysville, Maryland, was named a Hollings and Udall Scholar in 2011.

Outstanding Marine Science Major Award

Stephen Timko was named this year’s Outstanding Marine Science Major. This $500 cash award is given annually to one or more senior majors in recognition of their outstanding academic performance, research participation, and support of the Marine Science Program through volunteer efforts. Stephen, also a Hollings Scholar, graduated in May with a double degree in MSCI and Chemistry (meaning he completed all general education requirements twice!) and earned numerous accolades in both departments. He spent part of his junior year at sea, embarking on faculty-led research cruises off Bermuda and in the North Sea, and his oral presentation of his research won him a prize at the University’s 2012 Discovery Day. Originally from Vicksburg, Michigan, Stephen is off to UC Irvine to study environmental engineering on a prestigious National Science Foundation Graduate Research Fellowship.
Hollings Scholars

USC tied for fourth nationally in Hollings Scholarship winners! Four rising juniors in Marine Science were named 2012 Ernest F. Hollings Scholars. They are Drew Delorenzo, Jackie Fisher, Parker Barfield and Craig Raffenberg. This competitive scholarship was awarded to just 118 undergraduates studying oceanic and atmospheric sciences nationwide. The Hollings Scholarship Program exposes rising juniors and seniors to the mission of the National Oceanic and Atmospheric Administration (NOAA) and our nation's history of ocean and atmospheric stewardship, which are both reflected in the dedication and service of Senator Ernest F. Hollings. Hollings Scholars are expected to become scientists, policy-makers or educators in the U.S. oceanic and atmospheric workforce. The scholarship provides up to $8,000 of academic assistance per school year for full-time study during their junior and senior years. Students must complete a 10-week paid summer internship. Their travel and living expenses are paid and they receive a stipend of $650 per week. For more information on our 2011-2012 Hollings Scholars, go to: http://www.sc.edu/news/newsarticle.php?nid=3761. The Marine Science Program has had 12 winners over the past three years.

USC Hollings Scholar Luncheon with Dr. Jane Lubchenco, Head of NOAA and the Under Secretary of Commerce for the Oceans and Atmosphere.


2012 Hollings Scholars:
Drew Delorenzo, Parker Barfield, Jackie Fisher and Craig Raffenberg
**Vernberg Awards**

The Vernberg Awards were founded in 2004 to honor Dr. F. John Vernberg, former director of the Baruch Institute who was instrumental in making the Marine Science Program a reality. Each year two awards are given in his honor. One is a publication award awarded to a graduate student who has the best published journal article or book chapter, and the second is given to the best graduate instructional assistant.

**Ebenezer S. Nyadjro** is the recipient of the **2012 Vernberg Publication Award** for his publication entitled “Seasonal Variability of Salt Transport during the Indian Ocean Monsoons” that appeared in the *Journal of Geophysical Research* (2011). He is also the recipient of the **2012 Vernberg Teaching Award** and received USC’s **2012 Outstanding Dissertation Award**, the university’s highest graduate student honor. Ebenezer received his Ph.D. in Physical Oceanography in May, 2012, under the supervision of Dr. Subra Bulusu. He recently received a **National Research Council (NRC) Research Associate Fellowship** for a post-doc position at the NOAA Pacific Environmental Lab in Seattle where he will work with Dr. Michael McPhaden.

**USC Graduate Student Day**

Graduate Student Day provides graduate students with an opportunity to present their scholarly and creative work with cash prizes awarded to the winners of each category as judged by USC Faculty. The Marine Science Program had two award winning presentations:

- Oral Presentation, 1st Prize, Geology/Marine Sciences: **Cedric Fichot** (Dr. Ron Benner)
- Oral Presentation, 2nd Prize, Geology/Marine Sciences: **Ebenezer Nyadjro** (Dr. Subra Bulusu)

**Graduate Students Awards**

**Dr. Kate Wejnert**, recent recipient of a Ph.D. from the Marine Science Program, was named a **NOAA Climate and Global Change Postdoctoral Fellow** as well as one of USC’s **Distinguished Graduate Scholars**! She is currently a Postdoctoral Fellow at Georgia Tech.

**Matt Nienhaus** received a 2012 **SC Space Grant Graduate Research Award**.

**Cedric Fichot** received a **College of Arts & Sciences Dean’s Grant Fellowship** for $25,000 for the 2012-2013 academic year.

**Josie Iacarella** received the **USC Graduate School’s Outstanding Thesis Award** in the ETD Master’s Thesis Category (award is given to a thesis with an innovative application of technology to scholarship).
The Marine Science Program welcomes Dr. Ryan Rykaczewski, Assistant Professor in Biological Oceanography. Dr. Rykaczewski’s research focuses on biological responses to past and future changes in marine ecosystems with an emphasis on pelagic ecology and fisheries oceanography. He will be arriving on our campus in August 2012.

Dr. Blaine Griffin was named one of USC’s 2012 Rising Stars, one of only 13 faculty members whose scholarly pursuits, scientific inquiry, and passion for learning earned this distinction. His research focuses primarily in two areas: extinction theories and invasive species. His goal is to improve the understanding of the extinction process so that it can be more effectively prevented. For more information USC’s 2012 Rising Stars, go to: http://sc.edu/rising_stars/.

Dr. Joseph Quattro received a 2012 Mungo Undergraduate Teaching Award. This award is given to four Faculty throughout the University each year in recognition for their outstanding undergraduate teaching.

Dr. Subra Bulusu was a featured “Scholar of the Month” at USC! Dr. Bulusu was also recently funded by the Office of Naval Research for $405,000 to study Indian Ocean Salt Transport: Estimation of Fresh and Salt Water Transports in the Indian Ocean Using Remote Sensing Hydrographic Observations and HYCOM simulations.

Marine Science (SEOE) Undergraduate Director, Dr. Gwen Geidel, received the Richard and Lela Barnhisel Researcher of the Year Award from the American Society of Mining and Reclamation for her work on mined land reclamation.
**Briefs**

- Spring 2012 Honor Roll: 30 Marine Science majors placed on the President's List (4.0 GPA) and another 85 placed on the Dean's List (>3.5 semester GPA; >3.25 for freshmen)!
- Drs. Erik Smith and Tammi Richardson are funded by the SC Sea Grant Consortium/NOAA for $74,945 for Assessing Aeration as a Means of Improving Stormwater Pond Performance and Reducing Organic Loading to the Coastal Zone.
- 10 Marine Science Majors receive Magellan Grants: Erin Adams, Taylor Armstrong, Meryssa Downer, Lauren Hehman, Kadie Hicks, Catherine Hodierne, Kimmy McCormack, Burns Newsome, Emily Stewart and Laura Thomas.
- Dr. Blaine Griffen receives a supplemental grant from the NSF for “Exploring the effects of trematode infection on the behavior and physiology of the globally invasive green crab Carcinus maenas.”
- Dr. Dianne Greenfield’s research project entitled, “Development of a Novel Genetic Approach to Rapidly Detect and Quantify Fish Eggs of Commercially Important Species: a New Tool for Fisheries Management,” is funded by SC Sea Grant Consortium/NOAA for $52,536.
- Recent Marine Science graduate and Magellan Scholar Kailen Gilde and Dr. Jay Pinckney have Estuaries and Coasts article, “Sublethal effects of crude oil on the community structure of estuarine phytoplankton,” featured in Coastal and Estuarine Science News.
- Dr. Karl Castillo, recipient of a MS degree in Marine Science from USC, wins prestigious Postdoctoral Scholar Award for Research Excellence at UNC.
- Dr. Benitez-Nelson is named a 2012 National Academies of Science/Humboldt Foundation Kavli Fellow.
- Twenty-six Marine Science majors earned a perfect 4.0 GPA in Fall 2011 and a spot on the President’s Honor Roll (perfect 4.0), while another 79 earned a spot on the Dean’s List (>3.5 GPA)!
- Dr. Tammi Richardson receives NSF grant ($358,074) for a new undergraduate summer research program entitled “Marine Biogeochemistry at the University of South Carolina.” The program will support 10 undergraduate students in summer research for three years.
- Dr. Dianne Greenfield’s research project entitled “Utilizing HABISS to Document, Analyze, and Interpret the Impacts of Harmful Algal Blooms and their Associated Marine Toxins on Ecosystems and Humans in South Carolina” is funded by SC Sea Grant Consortium for $28,071.
- Dr. Joseph Quattro is funded by National Marine Fisheries/NOAA for $23,940, "Using Massively Parallel DNA Sequencing to Characterize Complex Mixtures of Fish Eggs."
- Dr. Virginia Shervette’s project entitled "MARFIN: Gray Triggerfish (Balistes capriscus) Life History in the South Atlantic Bight: The Extensive Collection and Analysis of New Data for Age, Growth, and Reproduction and the Comparison with Data from 1992-1997" is funded by National Marine Fisheries/NOAA for $146,890.
- Recent Marine Science undergraduate, Michele Repetto, publishes first authored paper in Marine and Freshwater Research with Dr. Griffen!
- Tori Barker receives Honor's College Undergraduate Research Fellowship (SURF) of $3000 to work with Dr. Shervette.
- Dr. Joanie Kleypas (MS degree in Marine Science from USC) wins prestigious Heinz Award.

https://giving.sc.edu/makeapledge.aspx