

2013

Aboard GSO: A Newsletter for Alumni and Friends of the University of Rhode Island's Graduate School of Oceanography for Summer 2013

URI Graduate School of Oceanography

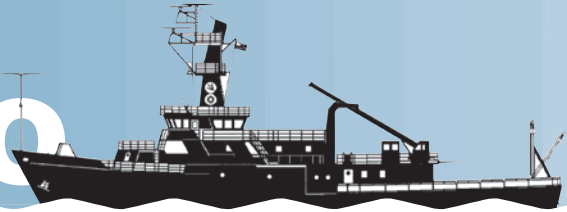
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ABOARD GSO



A Newsletter for Alumni and Friends of the University of Rhode Island's Graduate School of Oceanography



“Science is a social enterprise, we communicate through the scientific literature, and we must do nothing to undermine the integrity of that communication. Both in sending and in receiving information, we must remain skeptical.”

—Scott W. Nixon, Ph.D.

THE
UNIVERSITY
OF RHODE ISLAND
GRADUATE SCHOOL
OF OCEANOGRAPHY

April 17, 2013—

The First Annual Scott W. Nixon Lecture

Robinson “Wally” Fulweiler, Ph.D. 2007

Scott Nixon gave a fantastic talk. With a jacket slightly too big and a brightly colored tie (usually the one with tropical fish) he would walk to the podium, command his audience, and unfold a brilliant story, a story that showed us how to look at the world in a new way. In non-talk mode, Scott was fond of re-telling the legend of the blind men trying to describe the elephant—

how each of them, the one who touched the foot, the one who felt the ear, the tail, etc. described a different beast and each was confident of their description. But of course, they missed the elephant. Scott never missed the elephant. He gave holistic talks that weaved history and science and ecology together. It must have been an intimidating moment for Dr. Carlos Duarte of The University of Western Australia Oceans Institute and Spanish National Research Council to stand before the packed audience this spring and deliver the First Annual Scott W. Nixon Lecture. But if it was, this world renowned scientist never let it show. He too commanded the podium and in true Nixon style he delivered a seminar that shook the foundation of things we ‘know’ to be true. It was inspiring.

In his seminar entitled, “Auditing the Seven Plagues of the Coastal Ocean” Duarte drew parallels to the plagues described in the Bible (e.g., the Nile running with blood could be a harmful algal bloom, the dead and stinking fish an intense anoxic event and fish kill). He then carefully dissected some of the hottest issues in coastal ecology: Are jellyfish really taking over the ocean? Have low oxygen conditions increased

globally? How urgent a problem is ocean acidification? Duarte showed us that in fact some of these things have not (yet) occurred at the rate and magnitude we think. He urged us to take a closer look at the data at hand and to critically examine that which is reported in the literature. He opened our eyes to some of our inherent biases and painted, remarkably, a more hopeful future for our

coastal systems. His lecture was one Scott Nixon would have thoroughly enjoyed. In fact, we easily imagined him there—pastel short-sleeve shirt, front row, whispering loudly, and the first one with his hand up to ask a question. ■

Scott never missed the elephant.

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The Annual Scott W. Nixon Lecture will be held every spring. The intent is to concentrate on distinguished speakers who focus on some aspect of estuarine science and have a penchant for questioning established positions by “tilling the soil” at regular intervals. The lecture is sponsored by the Coastal Institute at the University of Rhode Island in honor of Dr. Scott W. Nixon, a beloved and respected colleague, mentor, teacher, friend and esteemed scientist among the legions of URI’s Graduate School of Oceanography researchers.



Professor Carlos M. Duarte is Director of the Oceans Institute at The University of Western Australia and Research Professor with the Spanish National Research Council (CSIC) at the Mediterranean Institute for Advanced Studies (IMEDEA) in Mallorca, Spain. He has published more than 400 scientific papers and two books, and was editor-in-chief of *Estuaries and Coasts*, as well as associate editor for a number of journals.

chief of *Estuaries and Coasts*, as well as associate editor for a number of journals.

He has received many honours for his work including the G. Evelyn Hutchinson Award from the American Society of Limnology and Oceanography in 2001, the National Science Award of Spain (2007) and the King James I Award for Research on Environmental Protection (2009). In 2009, he received the Silver Medal Cross of Merit from the Guardia Civil, Spain, for his service to environmental protection. In 2011, he also received the *Prix d’Excellence*, the highest honour awarded by the International Council for the Exploration of the Seas (ICES). He received honorary doctorates from the Université de Québec à Montréal (Canada) in 2010 and Utrecht University (The Netherlands) in 2012.

Greetings from GSO

Since arriving at GSO last September, I have enjoyed hearing from and meeting many alumni. At this time, we have over 800 alumni located all over the world.

It has been a busy year at GSO, and I thought it would be interesting to highlight some events and progress:

■ Senator Sheldon Whitehouse received the Admiral James D. Watkins Award in October at a ceremony hosted by GSO. The Consortium for Ocean Leadership (COL) presented the Watkins award to Senator Whitehouse in recognition of his efforts for the oceans, including the creation of the Ocean Caucus in the Senate. Dr. Robert Gagosian, president of COL, made the presentation and highlighted the many accomplishments of Senator Whitehouse.

■ The faculty and marine research scientists carried out a six-month strategic planning exercise to provide guidance in faculty development. As the first step in faculty development, we will be searching for three new faculty positions in the fall: a physical oceanographer, a biogeochemist, and a faculty member to lead the Coastal Resources Center.

■ Maintenance and landscape issues have been deferred in recent years due to funding constraints, but the Kingston Campus agreed to help us this spring on a number of projects that are the first steps to rejuvenate the Bay Campus. They include interior painting, replacement of doors, refinishing the floor, and repaving the parking area at the Mosby Center, painting the exterior of Fish and Maintenance Buildings, repair of Horn and Watkins roofs, and removal of dead or invasive trees and other vegetation in the coastal zone and around campus. More work is planned in the coming year.

■ A Director of Facilities search was carried out and Commander David Palazzetti, U.S. Coast Guard (Ret.), was hired and began working at GSO this spring. We have also conducted an internal search for a Sea Grant Director to replace Professor Barry Costa-Pierce who left for a position at the University of New England, and that search should be concluded sometime in July.

■ A search was just completed for a new Associate Dean of Development for GSO and Myrna Bizer was hired and will start August 1. During June, we hosted two development events with the support of the URI Foundation from Katharine Flynn and Sharon Pavignano (Corporation and Foundation Relations). One event reached out to Rhode Island foundations and the second



Photo courtesy of Alex DeCiccio

was focused on the Inner Space Center and some new developments in telepresence being pioneered by GSO alum and faculty member Bob Ballard.

■ The GSO dock was damaged this fall during Hurricane Sandy, and we are anticipating funding of ~\$1.2 million from FEMA, insurance, and URI to repair and upgrade the dock. This upgrade will be particularly important as we compete in 2–3 years to replace the R/V *Endeavor* with a new regional class vessel.

■ The Annual Fund has been an important source of funding for a variety of projects, including graduate student travel and research support. This year we will be expanding the annual fund to include not only alums, but also friends and others interested in GSO. And we will be bringing back the Friends of Oceanography and all of the related activities over the next year.

These are some of the developments at the Bay Campus over the last year, and we hope to build on this progress in the coming year. I appreciate all of the support that the alumni provide to GSO and hope that you will continue to stay in contact with us. If you are in the area, please stop by to say hello and catch up. And keep your articles and updates coming in. I have enjoyed reading *Aboard GSO* and looked forward over the years to hearing the news about the campus and fellow alumni.

Best wishes,

ABOARD GSO newsletter is funded by the GSO Alumni Association, Friends of Oceanography, and the Dean of GSO to keep friends, alumni, and the community informed of what is happening at GSO.

For more information about the Alumni Association, contact Walter Berry, Chair (berry.walter@epamail.epa.gov). To learn more about Friends of Oceanography, contact Deb Coty (deb.coty@mail.uri.edu).

ABOARD GSO is published twice a year by the University of Rhode Island's Graduate School of Oceanography.

Send news and correspondence to: Deb Coty, URI Graduate School of Oceanography, South Ferry Road, Narragansett, RI 02882-1197

Graduation 2013

This year's graduation ceremony was held on May 17, 2013 in Corless Auditorium. We had 25 graduates, 8 in the Blue MBA Program, 11 in the MS program and 6 earning PhDs. President Dooley and Provost DeHayes were on hand to offer words of wisdom and, more importantly, witness the "shirting" of the 8 graduates who attended the ceremony. As usual, the majority of our grads were unable to attend the ceremony because they already left to begin the next stage of their careers in academia, industry, and NGOs. The ceremony was followed by a reception in the Nautilus Cafe. ■

—David Smith



Reception in the Nautilus Cafe



Jeremy Collie and Nicole Lengyel



Melissa Kaufman and Isaac Ginis



GSO Dean Bruce Corless and URI Provost Don DeHayes

MO/MBA (Blue MBA)

Dan Albani	Anupa Asokan	Tony Leone
Brian Ameral	Correna Blewett	Gabe Matthias
Zac Anglin	Josh Haggarty	

MS Theses

Cristin Ashmankas, *A History of Sea Ice in the Cenozoic Arctic Ocean*

Jenn Bailey, *Pseudocalanus Copepods in the Bering Sea: Species Identification, Intraspecific Diversity and Biogeography*

Josh Kelly, *1891 AD Submarine Eruptive Processes and Geochemical Studies of Floating Scoria at Foerstner Volcano, Pantelleria, Italy*

Melissa Kaufman, *Evaluating Ocean Model Resolution and Initialization under Hurricane Conditions*

Nicole Lengyel, *Characterizing the Spread and Impacts of the Invasive Colonial Tunicate Didemnum vexillum on Georges Bank*

Conor McManus, *Coastal Current Effects on Primary Production Rates and Implications for Ecosystem Dynamics in Massachusetts Bay*

Justine Sauvage, *Determination of in-situ Dissolved Inorganic Carbon Concentration and Alkalinity in Marine Sedimentary Interstitial Water*

Hyewon Kim, *Future-pCO₂ Conditions Alter the Movement Be-*

haviors of the Toxic Raphidophyte Heterosigma Akashiwo: Implications for Harmful Algal Bloom Formation in an Acidifying Ocean

Kelly Knorr, *Distribution, Variability, and Trends in Wind Characteristics in New England Coastal Areas*

Dane Sheldon, *Stratigraphy of a Proposed Wind Farm Site Southeast of Block Island: Utilization of Borehole Samples, Downhole Logging, and Seismic Profiles*

Shifra Yonis, *Vertical Profiles of PAH Concentrations in Narragansett Bay using Passive Samplers*

PhD Dissertations

Stu Bishop, *The Role of Eddy Fluxes in the Kuroshio Extension at 143–149°E*

Christian Buckingham, *Ubiquitous Zonal Bands in Subtropical Oceans Observed from Space*

Lindsey Fields, *Benthic-Pelagic Coupling as a Function of Changing Organic Inputs in Coastal Ecosystems*

Liz Harvey, *The Impact of Predator-Prey Relationships on the Formation of Harmful Algal Blooms in Heterosigma Akashiwo*

Anna Pfeiffer-Herbert, *Larval Transport in an Estuarine-Shelf System: Interaction of Circulation Patterns and Larval Behavior*

Lin Zhang, *Transport and Fate of Organochlorine Pollutants among Air, Water, Sediments, and Biota in Remote Oceans?*

On The Job

On getting a PhD and becoming a businesswoman

Leslie M. Smith, Ph.D., 2011

Every fall GSO students gather on the beach for the ceremony we affectionately call “the boat burning.” The smell of hamburgers fills the air, mingling with the sounds of chatter. Seasoned grad students, squinting against the natural light, reunite with old friends occupying the office down the hall, who they somehow haven’t managed to see in several months. New students full of energy and vigor make friends with everyone they see and remind us that we once had that spark—it must be lost under that pile of papers on the desk somewhere.

The sacrificial boat is lit. Speeches are made from atop the burning boat. Merriment is had. And then, toward the end of the night, as the boat burns into embers, those about to defend or take their comprehensive exams leap over the flames.

It is ironic that we make the leap then, when the biggest leap is really after you defend, as you leave graduate school and finally have to answer the question “what are you going to do next?” without saying, “more school.”

For some of us the answer is academia, for others a federal job, but what about the rest of us? Sometimes it seems that we are not trained for anything else. But in fact, I would argue that we are.

I am not an academic, I am not a federal employee, nor do I work for a state or local agency. I am a businesswoman and I own my own company.

I graduated from GSO in 2011 and within a few months formed my own consulting company—Your Ocean Consulting, LLC. I currently have clients from universities, non-profits, and the private sector. All of my work focuses on oceanographic research and how we can communicate it to non-scientific audiences.

Recently I budded off the educational portion of my consulting company into its own non-profit—Dive into the Ocean, Inc. Through this program I teach elementary school children about the oceans, do hands-on learning activities, and hopefully instill in these students how important the ocean is and how they are connected to it.

I will be the first to admit that this is a very non-traditional and risky path. But it is also a very exciting and enriching one. My objective in this article is to share some insight into what I have learned (and am still learning!) for others seeking to deviate from traditional career paths and to encourage them to take that leap.

Swim along the rip tide

With a rip tide there’s always a pull, a not-so-subtle tug, threatening to sweep you out to sea. We all know, though,



Sharing ocean science with elementary school children during a “Dive into the Ocean” presentation.

that the best way to avoid a rip current is not to fight it, but to swim alongside it.

For me, the tug has always been to pursue a career in academia. Even though I love academia, I started feeling that I wanted to do things a little differently. I wanted to further the cause of the oceans through different means, and in a variety of ways.

My current clients are all connected with academics in some way; they are universities, non-profits with federally funded projects, and for-profit companies selling products to academics. Thus my business swims in parallel to academia, assisting with research and providing communication materials. Additionally, while I am still submitting papers to journals, I am also creating materials to communicate ocean science to the public.

Yes this career path is a departure from the norm, a risk, and at times has left me feeling that my head is just above water. But it was passion that brought me to grad school and it will be passion that brings me through my career.

It starts with a good idea

Starting a business first begins with a good idea. You need to answer the question—what can you do that no one has done before? You need to figure out the steps needed to reach your goal, gain advice from experts and your peers, and figure out if you have the time and money to do the project right. These are all similar steps to carrying out a thesis project.

The mission of my business is to promote stewardship of the ocean through increased awareness and education. The niche I am looking to fill is assisting with the extension and the broader impacts of research. There is a lot of amazing ocean science going on in the world, but not enough is being done to communicate it to the public.

Just as every scientist is not destined to be an academic researcher, not every academic researcher needs to be a great public speaker, or needs to be able to spend time communicating with the public. And this is exactly why I believe it is important to have scientists with communication skills who are actively working to facilitate the extension of research, with each of us working toward our strengths.

It finishes with persistence

To succeed in business, you need to be OK with failing a little at first.

This outlook is no different from life in academia where we are accustomed to occasional rejection, whether in proposals, fellowships, or publications. Those rejections just come with the territory, and do not mean any one of us is a bad scientist or unsuccessful.

Likewise, in business, every lead and every contact will not turn into a client. I spend a lot of energy making connections, speaking with potential clients, and researching their projects. Many of these interactions, however, do not turn into anything more than a great conversation. But I know that I just have to keep trying, because eventually one of them will become a client. This is also why I order business cards by the thousand.

GSO is a special place

We often say that in graduate school we are not trained for careers outside academia but I would argue that we are; we just have to know where to look. We are more prepared than we think.

I believe that I learned much of what I needed to know to start a business while getting an advanced degree at GSO—critical thinking skills, how to ask the right questions and hunt down answers, and how to complete a goal that seems insurmountable.

Oceanographers necessarily must be interdisciplinary. We cannot look at chemical effects without considering biological outcomes. We cannot look at physical phenomena without seeing how geology may have shaped them. Every year, I had to present a student seminar, forcing me to think about how to explain concepts from my tiny sliver of the ocean so that everyone could understand. It is this way of thinking and communicating that sets oceanographers up to tackle many complex problems effectively and efficiently.

GSO is a special place. There are so many resources at our fingertips to enhance the graduate school experience with non-traditional learning—IGERT, Blue MBA, Office of Marine Programs, Metcalf Institute, COSEE, Coastal Resources Center, Sea Grant, and EPSCoR, just to name a few. Not to mention the accessibility of federal laboratories to collaborate with—NOAA and EPA. It is nearly impossible to leave GSO without a well-rounded perspective of ocean science and a network of connections that can be used in the future to expand your professional reach.

We GSO alumni have all been gifted with learning beyond our coursework or theses. Many of us have or will become top researchers, sought-after faculty members, or heads of agencies. But there are so many other ways that we can broaden the impact of science on public understanding.

I have set my own course along my career, not being constrained by tradition. And I know there are other alumni that feel the same. We have been prepared to follow our passion, whatever it may be, so let's take that leap over the flames. ■



The author hopped aboard R/V *Endeavor*'s milestone 500th cruise as communicator, taking photographs, writing a blog, and issuing press releases.

Alumni News

Rick Edel, Ph.D. 1975

I retired from Boeing in 2010. I now am a volunteer with the United States Power Squadrons® and became the District Education Officer in 2012. I teach boating related courses with subjects involving navigation, weather, electrical systems, basic powerboat handling, smart phone and tablet applications, and certify those that want to improve their boat-driving skills. It also involves improving educational materials (books, videos, presentations) and keeping the instructors current. As I've always enjoyed boating, this has been a great way for me to stay current and involved. Academically, I read and review whatever I get my hands on.

Carol Fairfield, M.S. 1987

I have transferred to the Environmental Sciences Management Section (Environmental Studies) of the Department of Interior's Bureau of Energy Management (BOEM) in Anchorage, Alaska. It certainly was a pleasure working at NOAA, as I am sure it will be at BOEM!

Fran Goloway, M.S. 1981

Fran says she retired from Schlumberger Oil Field Services and is looking forward to the next chapter!

Don Gordon, M.S. 1964

I recently came across this old photo (above) of the dedication of the *Trident* in November 1962 down at Galilee soon after her arrival from California. I had just arrived a few months earlier to start my masters.

Jamie Maughan, Ph.D. 1986

Jamie has just completed a text book based on courses in environmental analysis he has taught over the last 15 years. The book will be published in October 2013 by Taylor & Francis Group, CRC Press and titled: *Environmental Impact Analysis: Process and Methods*.

Faustino L. Orach-Meza, Ph.D. 1978

Faustino notes that the School of Sciences (SCOS) focuses on the academic areas of applied sciences (applied biological sciences, public health, general nursing, financial engineering), natural resources management (environment, fisheries, for-



Trident Dedication, November 1962. Courtesy Don Gordon

estry, wildlife, agribusiness), and hospitality (tourism, hotel management, home economics). SCOS therefore wishes to identify similar interest areas with which it can develop collaborative arrangements for joint research, exchange of students and academic staff, publication, and library information.

Anthony Paulson, M.S. 1978

After receiving his Ph.D. in Environment Science from the University of Washington and serving five federal agencies (NOAA, Bureau of Mines, EPA, NOAA/NMFS and USGS/Water), Tony Paulson retired after 33 years of government service in September 2012. He spent the majority of his professional career studying the trace metal biogeochemistry of Puget Sound. He lives with Joan Benderson, his wife of 28 years (and occasionally his 26-year-old son, Philip, and 23-year-old daughter, Monica) in University Place, WA. His retirement includes serving as treasurer for his Unitarian Universalist congregation, as a planning commissioner specializing in storm water and transportation, and as a volunteer at a soup kitchen, homeless shelter, art cinema, and center for the performing arts.

Mark Richardson, Ph.D. 1988

I'm celebrating 25 years of employment at ExxonMobil this year. After working for several years exploring for oil and gas in China with the ExxonMobil Explora-

tion Company, I am now responsible for new opportunities exploration for South America.

Evan Robertson, M.S. 2003

I left SAIC in January so that email is no longer valid. I moved to Colorado and am working for the University of Colorado. My position is funded through the Cooperative Institute for Research in Environmental Sciences (CIRES) and is located at the National Geophysical Data Center (NGDC). At NGDC, I am the multi-beam sonar data manager where I ingest, archive, and make publicly available multibeam data that were collected all over the world.

Pete Sampou Ph.D. 1989

My grandmother (Signy) died this last month (two months shy of turning 108) at home and in bed here at the family farm in W. Barnstable (where our wedding party moved to after the South Ferry Church and Mosby's). Pete and family lived with Sig for 8+ years when we came back to Cape Cod from the Chesapeake 14 years ago. Everyone is healthy and living a good life here on the Cape. Door's always open for visitors!

Ted Van Vleet, Ph.D. 1978

After 33 years, I retired from the College of Marine Science at the University of South Florida this past August 2012. I've been so busy since retiring, I don't know how I ever had time to go to work!

Four GSO PhD alums, from left to right Paula Bontempi (NASA HQ), Colleen Mouw (Michigan Tech), Kim Hyde (NOAA-NMFS), and Stephanie Dutkiewicz (MIT), who attended the first International Ocean Colour Science meeting held on 6–8 May 2013 in Darmstadt, Germany. Other GSO alums attending were Tim Moore, Mike Twardowski, and Jim Yoder. More than 250 international scientists attended the meeting that was convened by the International Ocean Colour Coordinating Group (IOCCG) in partnership with EUMETSAT (organization that operates the European meteorological satellites) and NASA. The meeting included updates from space agency representatives, keynote talks, breakout splinter sessions, two poster sessions and open floor discussions. Not to mention any names, but some attendees were even able to fit in a few sessions at the local beer gardens.

—Jim Yoder



David Evans, Ph.D. 1975

The National Science Teachers Association (NSTA), the largest professional organization in the world promoting excellence and innovation in science teaching and learning for all, announced that Dr. David L. Evans, former Director of the Center for Sustainability: Earth, Energy, and Climate at Noblis, Inc., will serve as the association’s new Executive Director. He succeeds NSTA Interim Executive Director Dr. Gerry Wheeler. Evans was selected by the NSTA board of directors after an exhaustive nationwide search. He will take the lead starting tomorrow, February 7. “We are thrilled to have Dr. Evans as a part of the NSTA team,” said NSTA President Dr. Karen L. Ostlund. “He is a prominent scientist and a distinguished and visionary leader who will guide the association’s future course and continue to establish NSTA as a leader in STEM education.”



Throughout his career, Evans has served the science profession in many different capacities. Prior to joining Noblis in 2007, Evans served as the Under Secretary for Science at the Smithsonian Institution in Washington, D.C. His responsibilities included directing research and education activities, strategic planning, outreach, fund raising, and hiring for the national museum and research institutions, including the Natural History Museum, the Air and Space Museum, the National Zoo, the

National Science Resources Center, the Smithsonian Astrophysical Observatory, the Tropical Research Institute (Panama), and the Environment Research Center. During his tenure at the Smithsonian, Evans oversaw both government and private sector employees and was responsible for federal and endowment budgets.

Evans also served as Assistant Administrator for Oceanic and Atmospheric Research at the National Oceanic and Atmospheric Administration (NOAA), where he was active in climate change research; Deputy Assistant Administrator for the National Marine Fisheries Service; Senior Scientist and Deputy Administrator at the National Ocean Service; and as Program Manager at the Office of Naval Research.

Before coming to Washington, D.C. in the mid-1980s, Evans was a tenured professor of oceanography at the University of Rhode Island and was a classroom teacher in Media, Pennsylvania.

Evans is a former member of the Governing Board of the Indo-U.S. Science & Technology Forum and Chairman of the Board for the Research Channel. He served as a science advisor on climate change to the White House in 2001 and has testified many times before Congress on ocean and climate issues. He is a reviewer for *Science* and other journals, and has served on a number of panels for the National Science Foundation (NSF), National Aeronautics and Space Administration (NASA), and NOAA.

Alumni News

Joshua Kelly unexpectedly found himself on a ship in the middle of the Mediterranean Sea on his very first week as a student at the University of Rhode Island's Graduate School of Oceanography.

"Talk about being thrown into the fire," said the native of North Reading, Mass. "But it was a blast!"

As Kelly prepared to graduate on May 18 with a master's degree in oceanography, he looked back nostalgically on that first expedition aboard the E/V *Nautilus*, a research ship that broadcasts its scientific expeditions live over the Internet 24/7.

The purpose of Kelly's time aboard the ship was to study Foerstner volcano, an underwater volcano off the coast of Italy that erupted in 1891 and produced what he called "floating lava balloons," lava rocks that floated to the surface and have only been observed five times in human history.

"The characteristics of the magma and the eruption itself were very peculiar," explained Kelly, who earned his bachelor's degree in geosciences from URI in 2011. "It was a very shallow water eruption that allowed for conditions that favored the



production of extremely low density eruptive products."

Honored as the Robert D. Ballard Graduate Fellow for his work aboard the *Nautilus*, Kelly's aim was to collect samples of these rocks and study them so he could create a model of how and why these lava balloons are formed. Working in collaboration with URI Professor Steven Carey, a volcanologist, Kelly spent his days aboard ship helping to map the volcano, determine what lava samples to collect, and recording any notable geological, biological, or archaeological observations made by the remotely-operated vehicles (ROV) exploring the site.

Back at Carey's lab on the URI Narragansett Bay Campus, Kelly conducted detailed analyses of the rock samples and created a high-resolution geologic map of the volcano.

In addition to his research, Kelly spent time at the Graduate School of Oceanography as an outreach scientist in the URI Office of Marine Programs, where he led educational field trips and classroom programs on a variety of marine and environmental topics for K-12 students.

Just weeks after graduating last month, Kelly began an internship with the National Aeronautics and Space Administration studying rafts of pumice rocks floating in the Pacific Ocean. He hopes the internship will lead to a permanent job as a research geologist with NASA or another government agency. ■

Hurricanes: Science and Society meets Barometer Bob

I met Barometer Bob at the 2013 National Hurricane Conference in New Orleans where he was receiving the Distinguished Service Award for the Barometer Bob Show. I must admit that I had never heard of Barometer Bob before the first panel discussion that Monday morning, but as it turns out he is a rather well known person in the tropical storm community. Barometer Bob, Robert Brookens, has been broadcasting the weather for more than 20 years from northern Florida where he educates his listeners about tropical systems and severe weather. I was invited onto the Barometer Bob Show to talk about the Hurricanes: Science and Society (HSS) project, www.hurricanesociety.org.



The HSS project is a comprehensive resource about hurricanes, hurricane science, hurricane impacts, and hurricane history. On the Barometer Bob show I was able to highlight our very successful collaboration with the National Hurricane Center and the NOAA Aircraft Operations Center providing webinars about hurricanes to more than 750, fifth grade classrooms in states from Texas to Maine. We also talked about the need for greater awareness of hurricane evacuation zones and the threat posed by storm surge in a landfalling hurricane. If you live by the coast, do you know if your home is in a hurricane evacuation zone? I was also able to tell Bob and his listeners about the latest HSS project, an interactive iBook (an electronic book for the iPad), which will be published soon. I enjoyed talking to Barometer Bob on his show and I hope I get the chance to be on his show again to talk about hurricanes and hurricane education. ■

—Chris Knowlton, Assistant Director Inner Space Center

ANNOUNCING SCIENCE WORTH NOTICING SYMPOSIUM

Please join us for a scientific symposium to celebrate the life, work, and times of Scott W. Nixon, Ph.D. and to demonstrate the legacy and inspiration he left us with that helps us move onward. The scientific sessions and social events will provide an opportunity for Scott's students, lab researchers, colleagues, and family to meet and discuss Scott's work and influence. It will also provide a chance for students and others who did not know Scott to hear about his science.

When: Thursday, August 22–Saturday, August 24, 2013 on the occasion of what would have been Scott's 70th birthday (August 24). We plan to end at noon on Saturday.

Where: Graduate School of Oceanography, University of Rhode Island, Narragansett, RI 02882

Presentations: These will include work done in collaboration with Scott or inspired by Scott. Presentations will be on ongoing research, synthesis work, interesting use of "old" data, and thoughtful reviews of some of Scott's classic papers. The program will be posted in early August.

Pre-registration: This can now be made online at www.surveymonkey.com/s/SWNsymposium. Pre-registration is open until August 14, is \$40.00, which covers coffee breaks, Friday lunch, and a printed program with abstracts. After August 14, registration is \$50.00. Checks should be made payable to the *University of Rhode Island* and mailed to Courtney Schmidt at Box 200, Graduate School of Oceanography, University of Rhode Island, 215 South Ferry Road, Narragansett RI 02882-1197.

NOTE: It is not possible to re-access the survey once you select "Done" on surveymonkey—double check your entry before you hit "Done."

Donations: These can now be made online at www.surveymonkey.com/s/SWNsymposium Funds in excess of the cost of the symposium will be put towards a bench at GSO in memory of Scott. Checks for donations should be made payable to *URI Foundation* and also mailed to Courtney Schmidt.

Website: Go to www.gso.uri.edu and click on "SWN Symposium."

Accommodations: Many attendees will be local and many from outside the area will be staying with friends, but the following lodging options are available:

- The Atlantic House, 85 Ocean Drive, Narragansett, 401-783-6400
 - Village Inn, 1 Beach Street, Narragansett, 401-783-6767
 - Hampton Inn, South County Commons, Route 1, Wakefield, 401-788-3500
- Let them know you are with the GSO-Nixon Conference.

Symposium Organizers: The organizers are students of Scott's, but from different times. Hopefully at least one name is familiar to you. Feel free to contact any of us with questions:

Pat Kremer, patriciamkremer@gmail.com
 (Note: Pat is in California. Email her before you call and keep in mind her time zone!)

Veronica M. Berounsky, vberounsky@gso.uri.edu or (401) 783-8437
 Mark J. Brush: brush@vims.edu or (804) 684-7402
 Courtney E. Schmidt: ceschmidt@gso.uri.edu or (401) 874-6657

**2013 Environmental Merit Award
 Recipient
 Lifetime Achievement Award**

Scott W. Nixon
 (Posthumous)

Scott Nixon's main contribution to the environment in Rhode Island was in-depth research focused on Narragansett Bay. He and a grad student developed a mathematical model defining how the bay worked, which was published in 1981. Thirty years later, in 2008, Nixon worked with students and technicians from his lab to update public knowledge about the bay with an extensive chapter on inputs of nitrogen and phosphorus over time. Nixon carried out distinguished marine ecological research and was an advocate for ecosystem-level thinking and management for both the local and international scientific community for over four decades before his unexpected death in May 2012.

Nixon first arrived at the Graduate School of Oceanography at the University of Rhode Island in 1969, just before he received his doctorate in botany from the University of North Carolina at Chapel Hill. After that he did research, taught and guided 39 graduate students. In 1984 Nixon became coordinator of the RI Sea Grant College Program and in 1986 became its director, a job he kept until 2000. Nixon was respected worldwide for his knowledge on how coastal and estuarine ecosystems work. He investigated and published findings on ecosystems as far away as Kenya and Malaysia and as close as Rhode Island. He studied or served on the panels investigating ecosystems and their problems that were as varied as the lagoons of Venice, restoration of the Everglades, algal blooms in the Potomac Estuary, the fisheries of Egypt's Nile, and nutrients in the Massachusetts Bay Wastewater Outfall.

Through his work and his words, Scott encouraged good environmental practices and decisions throughout his career.

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Tsunami Investigated

On June 13th, 2013 around 4 p.m., a tsunami-like event hit Wickford Harbor, Rhode Island. The change in current was dramatic, accelerating from the normal 1-2 knots up to 6-7 knots out of the harbor, causing small property damage.

Local boat owners contacted the Graduate School of Oceanography, seeking an explanation for this unusual event. In response, a group of URI faculty, marine research scientists, and graduates students met with local yachtsmen, NOAA officials, and others at the URI Bay campus to determine what happened, and why it happened.

NOAA tide gauges showed a tsunami-like event occurring as far north as Maine and as far south as North Carolina. A seismic source, a frequent cause of tsunamis in the Pacific Ocean, was ruled out, as there were no detectable earthquakes in the Atlantic during this time.

The URI team—Christina King, Richard Yablonsky, Yang Shen, John Merrill, Christopher Kincaid and Robert Pockalny—examined other possibilities. Meteorological experts brought attention to the possibility of a meteotsunami—a tsunami caused by an atmospheric disturbance. Thunderstorms that passed offshore earlier in the day on June 13th created a pressure wave over the ocean. The pressure disturbance caused a tsunami-like wave along the coast. Pressure, wind speed and temperature measurements from NOAA's stations along the East Coast suggest the pressure waves originated somewhere east of New Jersey. The research team looked into historical tidal/water level and derecho records and found that a similar, though less energetic wave occurred in New England waters following the June 29, 2012 derecho event that followed an identical path to the ocean. The travel time of this wave from the source (mid-Atlantic) to southern New England matches the 4.5 hour time from the June 13, 2013 event.

There were reports of injury and damage in the mid-Atlantic region, but tide gauge data indicate that the strongest wave response occurred in southern New England, in Narragansett Bay and on Cape Cod.

The possibility of a weather-triggered underwater landslide, which in turn generated or contributed to the tsunami, is also a possibility. More research is required to fully understand the source of the event.

The event was covered by several local news organizations. Their coverage, including interviews with URI GSO team members, may be found on the GSO news website at www.gso.uri.edu/gso-news-0

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Upcoming Events

Thursday, August 22 through Saturday, August 24, 2013
The Scott W. Nixon Symposium: *Science Worth Noticing*
Graduate School of Oceanography, Narragansett Bay Campus

Please join us for a scientific symposium to celebrate the life, work, and times of Scott W. Nixon, Ph.D. and to demonstrate the legacy and inspiration he left us with that helps us move onward. The scientific sessions and social events will provide an opportunity for Scott's students, lab researchers, colleagues, and family to meet and discuss Scott's work and influence. It will also provide a chance for students and others who did not know Scott to hear about his science. See page 7 for details.

Saturday, August 24 at noon
GSO Reunion and Luncheon

Join all your old and new friends in the updated Mosby Center for a luncheon and reunion of all GSO Alumni. We'll begin at noon and then see where the day takes you from there! Please RSVP to debicoty@mail.uri.edu so we can put in a lunch order for you. See you then.

Friday, September 6, 2013 (Rain date September 13)
The Annual GSO Boat Burning

Begins at dusk at the beach on the bay campus with food and drink, conversation, and a roaring fire!

Friday and Saturday, September 6 and 7
Climate Change Seminar
Bullitt Center, Seattle, Washington

Metcalf Institute and The Seattle Times invite journalists based in Washington, Oregon, Idaho, and British Columbia to apply for the upcoming Climate Change Seminar for Journalists, at the newly opened Bullitt Center in Seattle, Washington.

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Coastal Institute Bookstore online shopping features a assortment of Graduate School of Oceanography (GSO) clothing and logo items such as outerwear, T-shirts, tank tops, hats, pens, and even GSO socks, with some items in toddler and youth sizes. At our University of Rhode Island (URI) Narragansett Bay Campus location, the store also carries a unique selection of marine and environmental books and field guides, educational resources for teachers and parents, educational games and toys, and marine jewelry, art, gifts, and clothing. Proceeds from Bookstore sales support marine education efforts at the University. URI faculty, staff, and students, GSO alumni, and current Friends of Oceanography and volunteers always receive a 10% discount on all Bookstore purchases (except Gift Certificates and special order items). The Bookstore is staffed by a dedicated group of volunteers and students, thus hours during the summer are limited, and during the academic year are by appointment. Call 401-874-6211 for questions or directions, or just stop by and ring the door bell! We will be happy to help you if we're available.

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