ISSUE 41 • MAY 2016

THE BEST THING ABOUT RUTGERS ARE THE STUDENTS. WE SALUTE UNDERGRADUATE AND GRADUATE STUDENTS FINISHING THEIR GREAT EFFORTS!- CONGRATULATIONS TO ALL GRADUATES!!

May marks the end of the spring semester and is highlighted with Rutgers graduation ceremonies. This was a momentous year for Rutgers celebrating its 250th birthday. President Obama provided the commencement address reflecting Rutgers historic anniversary and international leadership. This year we were blessed with an exceptionally strong class of students. We congratulate the graduate students who finished their marine science degrees this last year: Jeana Drake (PhD), Lauren Seyler (PhD), Guangyu Xu (PhD), and Lauren Weisel (MS). This year we had 13 undergraduate complete their degrees in marine science. Students who graduated were immediately hired by a range of employers. Several students were admitted to leading graduate schools on the east and west coasts. Students were hired into a range of positions spanning being glider pilots for the US Navy, water quality technicians for the states of New Jersey and Maryland, as well as several were hired by Universities on the east and West coasts as laboratory technicians. A common theme voiced by their employers was that Rutgers students have extensive hands-on experience. Efforts are underway to expand hands-on field research experiences in the coming year.
Congratulations Liam Ramsay for being honored by Career Knights of Distinction!

Congratulations to undergraduate Liam Ramsay for winning the Rutgers Internship Excellence Award (SEBS) for his intern work with RUCOOL. 7 students were honorees at the Career Knights of Distinction Awards Dinner on Wednesday 5/4/2016. Liam’s work focused on dead-reckoning improvement as well as underwater flight performance & optimization.

Tuckerton Marine Station Open House to the Local Community

On Saturday April 30th, the Rutgers University Marine Field Station (RUMFS) in Tuckerton, NJ opened its doors and held an Open House for the public to come explore and learn about current marine science research, as well as the flora and fauna of our local estuary and marsh system of the Great Bay/Mullica River. The Jacques Cousteau National Estuarine Research Reserve (JC NERR) in conjunction with RUMFS hosted this event that was met with windy and chilly spring weather, but the weather did not deter the approximately 150 visitors from all over New Jersey, as well as Pennsylvania, New York, Connecticut, and Vermont! Visitors were able to take a tour of the Field Station learning about various research projects along the way, including – long-term larval fish sampling and identification, frequency and duration of river herring spawning, fish otolith research and applications, and the System Wide Monitoring Program (SWMP) administered by JC NERR in the Great Bay/Mullica River, that monitors water quality, nutrients, and meteorological data. Director of RUMFS, Ken Able, and Operations Coordinator, Roland Hagan, presented the History and Overview of the Field Station, from its inception as a U.S. Coast Guard Station up to present day as a Rutgers research facility. Visitors were also able to get up close to and have an interactive experience with local marine animals in our wet lab. One of the most prevalent comments was to have the RUMFS Open House more often, and we are hoping to do so again this coming Fall as well.

Rutgers scientists reconstruct the past record of tsunamis in south-central Chile

We want to highlight some of the great research going on and encourage people to check out the research papers being produced by the Rutgers which can be accessed at https://marine.rutgers.edu/main/research/publications. This month we highlight work by graduate student Isabel Hong who created a 600 year record tsunamis in Chile which is subject to large earthquakes. Isabel and the sea level research team were able to document major events in 2010, 1960, 1835, and 1751. The picture below shows the hand dug pit used for the study. The
Rutgers marine sciences hosts an international symposium focused on understanding the evolution of Earth's metabolism. The GAIA hypothesis asserts that living organisms and their inorganic surroundings have evolved together as a single system that greatly affects the chemistry and conditions of Earth's surface. This linked system self-regulates global temperature, atmospheric content, ocean salinity, and other factors in an “symbiotic” manner. To assess these processes in the past-present-future, an international symposium was hosted by Rutgers in New Brunswick that spanned an epic range of topics. The meeting drew scientists from around the United States, Canada, England, France, Brazil, Israel, Germany, Denmark, and Czechoslovakia. Results and discussions is leading to a range of science proposals as much effort during the meeting was focused on identifying what we do not know.

Haskin Lab Studies Horseshoe Crabs on Oyster Farms

David Bushek and Daphne Munroe, along with shellfish extension agent Lisa Calvo have been hard at work in the field while the horseshoe crabs are in, collecting data on the ways that these crabs move in, around and among the oyster farms on the flats as they make their way to spawn on the beach slope. These data will contribute to a larger study, led by Ecology and Evolution faculty Brooke Maslo, examining the broader interactions of the Red Knot, a small shorebird that migrates through southern Jersey in the spring. The Red Knot, which was recently federally listed as “Threatened”, forages on horseshoe crab eggs during its brief migratory stopover along the Delaware bayshore. The photos below show Rutgers Marine Biology grads, Sarah Borsetti (top) and Ricky Klie (bottom) helping to set up two of the experiments.
GET YOUR RU OCEAN SWAG!!!!

Rutgers Oceanography tee-shirts are here. Proudly wear the Rutgers Oceanography tee-shirts - funds are raised to host science socials for the undergraduate and graduate students. Tee-shirts go for $15 and will make you look athletic, smart, and dashing. Such a great deal for a great cause. Contact Sarah Kasule if interested (kasule@marine.rutgers.edu). To see the quality people your contribution would support check out our featured graduate students at http://marine.rutgers.edu/main/Featured-Student/.

Above graduate student Brittany Schiel-er at sea recovering a CTD rosette

Please help us enable Rutgers oceanography to support the next generation!

Rutgers oceanography needs your support to meet the environmental and educational challenges facing the world today. Your support is critical to enabling high risk and high reward research, developing students to be the leaders of tomorrow and bringing the public with our scientists into the ocean. Your private gifts will create new laboratories, student fellowships, endowments and feed ambitious new programs. Come join us! Even the smallest gifts have huge impacts by getting students out on the water or getting a student to a professional meeting. So please join us explore the world. Go RU!

New Publications


Donato Giovannelli, Matthew Chung, Justin Staley, Valentin Starovoytov, Nadine Le Bris, Costantino Vetriani. 2016. Sulfurovum riftiae sp. nov., a mesophilic, thiosulfate-oxidizing, nitrate-reducing chemolithoautotrophic Epsilonproteobacterium isolated from the tube of the deep-sea hydrothermal vent polychaete Riftia pachyptila. International Journal of Systematic and Evolutionary Microbiology. Published Ahead of Print: 26 April, 2016 doi: 10.1099/ijsem.0.001106


Able, K. W. Natural history: an approach whose time has come, passed, and needs to be resurrected – ICES Journal of Marine Science, doi: 10.1093/icesjms/fsu049.