



# E-SLATE

## American Academy of Underwater Sciences (AAUS)

### EDITORIAL NOTE –August 2016

Welcome to the August E-Slate. In this edition we have an update from the AAUS president, announce the AAUS BOD election results and the 2016 Kevin Flanagan Travel Award recipients, continue registration for the 2016 AAUS Diving for Science symposium and much more. We welcome news, announcements, job postings, program highlights and images of underwater work at [aaus@disl.org](mailto:aaus@disl.org). Current and past issues of the E-Slate are available at [www.aaus.org](http://www.aaus.org).

#### AAUS President's Message

I hope everyone is having a safe and productive summer. I want to update the membership on the happenings of the Academy so far this year and where we're going from here.

Our two big pushes have continued to be the development and implementation of the AAUS Organizational Member Accreditation Program and the AAUS Diving Safety Officer Certification Program. Both these initiatives were identified during the strategic planning process and have been talked about for several years.

OM Accreditation Program – We are moving forward with this program in a beta-phase using the guidelines that were developed by previous AAUS BoDs. The guidelines are available for review on the AAUS website at [http://secure.aaus.org/uploads/protected/files/documents/aaus\\_om\\_accreditation\\_program/aaus\\_accrditation\\_guide\\_2016.pdf](http://secure.aaus.org/uploads/protected/files/documents/aaus_om_accreditation_program/aaus_accrditation_guide_2016.pdf) In a nut shell, there will be regional coordinators that will lead review teams (RT) during a pre-onsite review, an onsite review, and post onsite recommendation. The pre-onsite review consists of the RTs using a check list to going over the OM's paperwork. Items such as dive manuals and dive plans are reviewed. The onsite review will be conducted on dates to be worked out between the RT and OM. The onsite review will consist of the RT doing a thorough inspection of the facilities, files, etc. to make sure they're up to the AAUS standards. The RT will also be responsible for the post review briefing with the OM and communication with the AAUS Accreditation BoD (yet to be announced). The RT will notify the OM of any items or situations that need to be addressed and a timeline for these items to be corrected. Once all this has been done, the Regional Coordinator will submit a recommendation to the Accred. Committee. We are also working with ITI to get some external feedback on this process.

DSO Certification Program – We're working from the process that was originally developed in 2008 and has been run twice by AAUS. I believe this process was reviewed and approved by the BOD and membership back in 2009 in Atlanta. To get a fresh take on this, I have spoken to ITI at length about the needs of the AAUS and they're working with us on creating this certification. The goal here is to have a meaningful credential that means something not only within the science community but also outside of it. This program is not as far along yet as the accreditation program and I'll be reporting back with updates.

It is important to note that both these programs are optional at this time.

If you have any questions about either of these programs please feel free to contact me at 305.421.4107 or email at [rgomez@rsmas.miami.edu](mailto:rgomez@rsmas.miami.edu). Take care and safe diving.

### NEWS/ANNOUNCEMENTS

#### BOD Election Results

The 2016 AAUS Board of Directors (BOD) election results are tallied and the Board congratulates the newly elected Director at Large, Jim Hayward. Jim currently serves on the AAUS BOD and will begin his second term on January 1, 2017. On behalf of the Academy, we thank all of the candidates for participating in the election. Next year AAUS will elect a President-elect, a secretary and a Director at Large. We encourage membership to consider nominations for these position and to vote in the elections.

#### 2016 AAUS Bylaws Change

Upon recommendation of a CPA, the AAUS Board of Directors reviewed and approved a proposed language change in our bylaws concerning the review of the AAUS finances. It was made available to the AAUS Membership for review and commentary for 60 days between March 1- April 30, 2016). Following that period, the AAUS BOD voted to approve the change on 27 May 2016. As of June 1, 2016 the bylaws now read:

AAUS Bylaws-Page 9 Article 1, Section 1, Subsection (c)-  
*"a compiled financial statement with full disclosure of the books, records and accounts of the American Academy of Underwater Sciences shall be completed regularly, in accordance with generally accepted accounting principles."*

## 2016 AAUS Kevin Flanagan Travel Award

The 2016 Kevin Flanagan travel award winners are Allie Sifrit, University of Hawai'i and Charlotte Levy, Oregon State University.



Charlotte is a senior distance student in Oregon State University's Fisheries and Wildlife Sciences B.S. program. She currently lives in Anchorage, Alaska and is conducting summer research with Alaska Pacific University under the guidance of Eloise Brown and in collaboration with NOAA. Charlotte is studying the successional changes in the fish, invertebrate and macroalgae assemblages in Alaska's first artificial reef system. Charlotte is

passionate about shark conservation, and plans to attend graduate school to pursue a future in marine research.



Allie graduated from the University of Hawai'i at Manoa (UHM) with a BS in Marine Biology and a BA in Spanish. She is the 2016 OWUSS and AAUS Scientific Diving intern hosted at the University of Georgia and will be beginning a Master of Marine Affairs at the University of Washington in the School of Marine and Environmental

Affairs in September 2016.

Find out more about both of these students at [http://www.aaus.org/2016 kevin flanagan](http://www.aaus.org/2016_kevin_flanagan)

The Kevin Flanagan Student Travel Award is a competitive award developed to support the professional development of students engaged in diving science or the study of diving science. The award was created in memory of Kevin Flanagan (1970-2012), an AAUS board member (2009-2011) and diving safety officer (1998-2012). Donations to fund this award can be given at [www.aausfoundation.org](http://www.aausfoundation.org).

Please indicate "K Flanagan Fund" on the donation page. We hope to make this our first permanently endowed fund by reaching \$60,000. Join us in our efforts to honor Kevin and provide students with much needed travel funds.

## 2016 NOAA's Nancy Foster Scholarship Recipients

NOAA's Office of National Marine Sanctuaries has selected the 2016 recipients of the Dr. Nancy Foster Scholarship, representing graduate-level areas of study such as marine biology, oceanography and maritime archaeology. This year's recipients are Andrea Kealoha (Texas A&M University), Angela R. Szesciorkia (Scripps Institution of Oceanography) and Jessica Hale (University of Washington). Find out more at <http://fosterscholars.noaa.gov/>.

## 2016 Lee H. Somers Scientific Diving Intern Blog

*Week 2&3*

I drove from Athens, GA to Savannah, GA which was about 4 hours in order to get to Skidaway Institute of Oceanography (SkIO). I will remain here at SkIO until August 7th. I have mostly been working with the UGA Marine Extension (MarEx) Aquarium. The MarEX Aquarium is an educational aquarium with 16 tanks of marine organisms that can all be found along the Georgia Coast. I have been helping feed the sea turtles, sea horses, and sea jellies as well as cleaning acrylic tank windows and protein skimmers. I am also responsible for the reptiles which are not on display. They have a few different snake species, mud turtles, a diamondback terrapin and some lizards. The MarEX Aquarium also leads week long summer camps for kids of varying ages. I was able to go with the summer camp to Wassaw Island, which is only accessible by boat and is a National Wildlife Refuge. We spent the day beach combing, swimming and we also did some seine net fishing for the kids to see the sea creatures.

During the time I am not helping the MarEX Aquarium, I have been volunteering elsewhere around SkIO. The Gray's Reef National Marine Sanctuary (GRNMS) has an office on SkIO and I attended their "Get Into Your Sanctuary" event. This was a nation-wide event on Saturday June 25th where National Marine Sanctuary Offices held outreach events to publicize the sanctuaries. The GRNMS office unveiled new informational signs which were put up at boat ramps along the Georgia Coast. Additionally, I am helping the MarEX shellfish lab with a few projects. I helped with a small scale oyster spawn for the oyster hatchery and I have been helping with a black gill shrimp experiment. My roommate at SkIO is doing research involving intertidal crabs, so I also helped her collect oyster clusters from the salt marsh, and go through the clusters to find mud crabs and other small crab species.

I have been quite busy with various groups around SkIO and I am looking forward to upcoming field work opportunities. Diving on the Georgia Coast has turned out to be quite difficult. GRNMS is about 40 miles away by boat and the seas have been too rough for us to get out there to dive, but hopefully I will get to go diving soon!

*Allie Safrit*

*Lee H. Somers Intern 2016*

## STUDENT OPPORTUNITES

### Hollis Gear Award Deadline Extended

The application deadline for the Hollis Gear award has been extended to August 30, 2016. Hollis ([www.hollisgear.com](http://www.hollisgear.com)) graciously funds a scholarship program for AAUS student members engaged in, or planning to begin, a research project in which diving is or will be used as a principal research tool or study scientific diving. Hollis

will provide up to \$2500 in Hollis diving equipment. Scholarship winners are announced October 01, 2016. Find more information and application instructions at [www.aausfoundation.org](http://www.aausfoundation.org) \*Please note that persons are not eligible to compete for more than one AAUS scholarship per year, excluding the Kevin Flanagan Travel Award.

## UPCOMING EVENTS

### 2016 AAUS Diving for Science Symposium

Registration for the 2016 AAUS Diving for Science symposium is now open and workshops are filling up quickly! Many workshops have a deadline of August 15th for registration. If you are planning to attend a workshop but are unable to register before August 15, please contact the office so that a space may be held for you. **Please note that there have been changes to the workshop schedule.** We have added a PSI Visual Inspection workshop in addition to the CTS Visual Inspection workshop already scheduled. Additionally, unfortunately, we have had to cancel the Seabass workshop but have added an otic barotrauma workshop instructed by Dr. David Charash.



Special room rates are available for attendees at the Hampton Inn and the Holiday Inn in Kingston, Rhode Island. Please make sure to book prior to **Monday, August 15, 2016** to receive the special discounted rate. A full schedule, lodging information and registration are available at <https://www.regonline.com/2016aausdivingforscience>.

### National Diving Safety Officers Meeting 2016

Please submit any agenda items for the 2016 Diving Safety Officers' meeting to Jim Hayward ([ucbdiver@berkeley.edu](mailto:ucbdiver@berkeley.edu)) by September 10, 2016.

## JOB ANNOUNCEMENTS

Full information and application instructions for the following jobs can be found at [www.aaus.org/job\\_board](http://www.aaus.org/job_board)

Florida State University  
*Diving Safety Officer*

California Science Center  
*Assistant Dive Safety Officer*

## New Underwater Microscopic Imaging System Developed by Scripps

Posted by [Ocean News](#) on Wednesday, 20 July 2016

A new microscopic imaging system is revealing a never-before-seen view of the underwater world. Researchers from Scripps Institution of Oceanography at the University of California San Diego have designed and built a diver-operated underwater microscope to study millimeter-scale processes as they naturally occur on the seafloor.



*Scripps graduate student Andrew Mullen positions the Benthic Underwater Microscope to study coral competition.*

*Photo courtesy: Scripps*

The Benthic Underwater Microscope, or BUM, is a two-part system—an underwater computer with a diver interface tethered to a microscopic imaging unit—to study marine subjects at nearly micron resolution. The instrument has a high magnification lens, a ring of focused LED lights for fast exposures, fluorescence imaging capabilities, and a flexible tunable lens, similar to the human eye, to change focus for viewing structures in 3-D.

“This underwater microscope is the first instrument to image the seafloor at such small scales,” said Andrew Mullen, a PhD student at Scripps and the Jacobs School of Engineering and co-lead author of the study published in the July 12 issue of the journal *Nature Communications*. “The system is capable of seeing features as small as single cells underwater.”

The motivation for building the imaging system was to better understand the many ecological processes taking place underwater on a microscopic scale, according to the Scripps researchers. “To understand the evolution of the dynamic processes taking place in the ocean, we need to observe them at the appropriate scale,” said Jaffe, the senior author of the study, and head of the Jaffe Laboratory for Underwater Imaging at Scripps.

Using the microscope, the research team observed a previously unreported honeycomb pattern of initial algal colonization and growth in areas between the individual coral polyps during coral bleaching. These findings provide insight into a process that Scripps marine ecologist Jennifer Smith, a co-author of the study, called the “succession of algae” where small filamentous algae initially settle on the ridges between coral polyps and eventually smother the

living tissue. The images showed that algae are able to actively overgrow living corals during a bleaching event. “This instrument is a part of a new trend in ocean research to bring the lab to the ocean, instead of bringing the ocean to the lab,” said study co-lead author Tali Treibitz, a former Scripps postdoctoral researcher now at the University of Haifa’s Charney School of Marine Science.

Read more at <https://goo.gl/qiBZ1J>

The mission of the American Academy of Underwater Sciences is to facilitate the development of safe and productive scientific divers through education, research, advocacy, and the advancement of standards for scientific diving practices, certifications, & operations.

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