



ACADEMIC DIVING PROGRAM



On March 10th, the FSU Great Give generated over \$5,500 for the new [FSUCML Diving Scholarship](#). In addition to funding generated through the Great Give, PADI, Aqua Lung and Divers Alert Network will provide support for the scholarship recipients in the form of certification materials, equipment, and diving accident insurance. A panel will be selecting the 2021 recipient this fall from a pool of deserving research-focused students. Preference will be given to students from historically underrepresented groups. If you know of someone that might be interested, please encourage them to apply.

Summer research diving is underway with divers operating out of the FSU Marine Lab, the Florida Keys, and the Caribbean. The McCoy Lab began diving this week in Bonaire, becoming the first FSU dive team to work internationally since the Pandemic began. All divers using equipment from the Academic Diving Program will be using new Aqua Lung regulators. With funding provided by the Office of Research, ADP purchased twenty new Aqua Lung Core regulators with in-line i300C computers. Three new BARE dry suits and ten new Aqua Lung BCDs were also acquired

including new Aqua Lung Soul BCDs - the first BCD in the dive locker that is designed for women.

The 2021 Introduction to Scientific Diving course concluded on April 17th with divers-in-training punctuating their semester long training on a charter aboard the R/V *Apalachee* to K-Tower. This semester marked the first class to be taught as a credit course since 2017. Twelve divers successfully completed their AAUS certifications. The next training class is scheduled for spring 2022. For more information, visit the [FSU Coastal and Marine Laboratory website](#) or contact the DSO at cpeters@fsu.edu.

The Diving Control Board would like to welcome two new members and bid farewell to two long serving members. Former FSUCML Director Dr. Felica Coleman and former FSU Environmental Health and Safety Director Tom Jacobson both stepped down from the Board after serving FSU's scientific diving community for over a decade. New FSUCML Director Dr. Joel Trexler and new EH&S Director Jim Stevenson have taken their places after being appointed to the Board in early 2021.



Scientific-Divers-in-Training, Sarah Smith and Lena Kury work on an underwater physics lab at Morcom Aquatics Center.

DIVER ACHIEVEMENTS

- ◆ Graduate student Erica Atkins was awarded the 2021 FSUCML Board of Trustees Scholarship.

- ◆ Rachael Best was awarded the Women Divers Hall of Fame Graduate Scholarship in Marine Conservation for her work on gorgonian octocoral population ecology, as well as the 2021 FSUCML Board of Trustees Scholarship.
- ◆ Nika Blank was chosen as the runner up for the AAUS Master Scholarship and awarded \$1500 to conduct her thesis on “Investigating latitudinal changes in hardbottom communities of the West Florida Shelf.” Blank also was awarded funding through the Southern Association of Marine Laboratories 2021 Lou Burnett Award and the 2021 FSUCML Board of Trustees Scholarship.
- ◆ Ph.D. student Randi Bowman was awarded an NSF Graduate Research Fellowship to her study on the effects of stressors on coral reefs.
- ◆ Ethan Cissell received the American Museum of Natural History Lerner-Gray Fund for Marine Research to fund diving related research offshore of the FSU Marine Lab. Cissell also received Honorable Mention for the AAUS Doctoral Scholarship.
- ◆ Ashley Dawdy was awarded the 2021 FSUCML Board of Trustees Scholarship.
- ◆ MSc. student Blake Hamilton has been awarded funding through the Southern Association of Marine Laboratories 2021 Lou Burnett Award, and the 2021 FSUCML Board of Trustees Scholarship.
- ◆ In the last year, FSU graduate Shawn Joy and his research partners were awarded the National Science Foundation Transformative Research Grant, Florida Division of Historical Resources Small Matching Grant, and the National Park Service Hurricane Michael Grant.
- ◆ Ph.D. Candidate, Josh Manning, received the Society for Integrative and Comparative Biology (SICB) Grant-in-Aid of Research (GIAR) to support his project investigating the 'dear enemy' effect in the Stoplight Parrotfish (*Sparisoma viride*). He was also chosen to receive the William R. Dawson Award at SICB's 2021 virtual annual meeting.
- ◆ Josh Manning and Dr. Sophie McCoy are currently hosting the AAUS Mitchell Scientific Diving Research Internship. UNC Wilmington graduate Krista LaForest was awarded the position and will be helping Manning complete his field work in Bonaire on crustose coralline algae and parrotfish behavior.
- ◆ Sean McCollum was awarded 2021 FSUCML Board of Trustees Scholarship.
- ◆ Dr. Dan Okamoto's Lab was recently awarded an NSF grant to study the impacts of marine heatwaves on purple sea urchin population dynamics and kelp forests in California [\[Link\]](#), as well as a grant from Parks Canada to develop tools to study trade-offs between recent natural recolonization of sea otters, nearshore invertebrate fisheries, and kelp forest ecosystem dynamics in British Columbia.
- ◆ Bobbie Renfro was chosen as the runner up for the AAUS Doctoral Scholarship and awarded \$1500 to support her research on the effects of nutrient enrichment on coral reef sponges.
- ◆ Matthew Schumm was awarded the Mote Research Assistantship from the William and Lenore Mote Endowment, as well as a Smithsonian fellowship to

study how fisheries and variation in ecosystem productivity interact to shape life history and population dynamics.

- ♦ Nate Spindel was awarded the Mote Research Assistantship from the William R. and Lenore Mote Eminent Scholar in Marine Biology Endowment at FSU, as well as a 1-yr Smithsonian Institution Predoctoral Fellowship to study integrated effects of temperature, pH, and nutrient concentration on algal nutritional quality, herbivore metabolism, and herbivory along a tropical upwelling gradient at the Smithsonian Tropical Research Institute.

Have you received a diving related grant or award lately? Please let us know at fsucml-dso@fsu.edu.

IN OTHER NEWS

- ♦ The latest update to the COVID Exposure Control Guidelines went into effect May 18th. Changes included COVID-19 testing exemptions for those who submit documentation of vaccination, and testing results are no longer required to be submitted to the DSO. For information on how this will affect your dive plans please contact the DSO.
- ♦ The Department of Anthropology's Underwater Archaeology Field School begins June 21st. Dr. Jessi Halligan will be instructing the Field School for the fifth time, and the first since 2019. Each student participating must be an AAUS Scientific Diver.



SCHOLARSHIPS

The AAUS Foundation awards several scholarships to graduate students engaged in, or planning to begin, a research project in which diving is an important research tool or the research topic is diving science. This includes awards for travel, equipment, and research expenses. The proposal deadline is June 30th. [Learn More](#)

The AAUS Diversity Scholarship is geared toward underrepresented groups in our community and removing entry costs associated with basic open water certifications. The scholarship will provide up to \$1200 for entry level training and equipment. The application deadline is June 30th. [Learn More](#)

The Academy of Underwater Arts & Sciences (AUAS) is overseeing applications to the Zale Parry Scholarship Program. The program is open to those candidates who are currently enrolled in a [graduate](#) school program (Masters or Ph.D.) in the diving fields of study (Marine Conservation and Education, Diving Medicine and Hyperbarics, Ocean Engineering, and Underwater Archeology). Due to the pandemic, applications are not being accepted at this time. The applications deadline is August 31st. [Learn More](#)

The FSUCML Diving Scholarship provides funding for deserving FSU students to become Scientific Divers. Preference will be given to students from historically underrepresented groups that are enrolled in scientific programs with identified research purposes. [Learn More](#)

The Women Divers Hall of Fame offers dozens of scholarships and training for divers at all levels of their careers. The applications period for this year begins on September 1st. [Learn More](#)

Our World Underwater Scholarship Society awards a Rolex North American Scholarship to provide a hands-on introduction to underwater and aquatic-related endeavors for a student diver considering a career in an underwater-related discipline. The range of experiences may include active participation in field studies, underwater research, scientific expeditions, laboratory assignments, equipment testing and design, photographic instruction, and other specialized assignments. Applications will be accepted beginning October 1st. [Learn More](#)

PADI Foundation Scholarships encourages and supports research and education related to aquatic environments. Applications will be accepted beginning November 1st. [Learn More](#)

The Sea of Tomorrow Society Scholarship Program offers various scholarships to young adults expand knowledge and research in marine conservation, biology, archaeology and more. [Learn More](#)



Dr. Dan Okamoto's Lab received a grant from Parks Canada to study kelp forest ecosystem dynamics in British Columbia, as well as an NSF grant to study the impacts of marine heatwaves on purple sea urchin population dynamics and kelp forests in California.

RECENT PUBLICATIONS

- ♦ **Álvarez-Noriega M, Burgess SC, Byers JE, Pringle JM, Wares JP, Marshall DJ** (2020) *Global biogeography of marine dispersal potential. Nature Ecology and Evolution.*[\[Link\]](#)
- ♦ **Burgess SC, Johnston EC, Wyatt ASJ, Leichter JJ, Edmunds PJ.** (2021) *Response diversity in corals: hidden differences in bleaching mortality among cryptic Pocillopora species. Ecology* [\[Link\]](#)
- ♦ **Cissell, EC, and SJ McCoy** (2021). *Shotgun metagenomic sequencing reveals the full taxonomic, trophic, and functional diversity of a coral reef benthic cyanobacterial mat from Bonaire, Caribbean Netherlands. Science of the Total Environment, 755(1):142719. doi: 10.1016/j.scitotenv.2020.142719.* [\[Link\]](#)
- ♦ **Cissell, EC, SA Kranz, and SJ McCoy (2021).** Rhodolith holobionts are not a source of fixed nitrogen in a northeastern Gulf of Mexico patch reef. *Bulletin of Marine Science, 97(1). doi: 10.5343/bms.2020.0041*
- ♦ **Dee, LE, Okamoto, DK, Gårdmark, A. Montoya, J, Miller SJ.** *Temperature variability alters stability and collapse of interacting*

- species*. 2020. *Philosophical Transactions of the Royal Society B*. 375: 2019045.
- ♦ Ford, Benjamin, **Jessi J. Halligan**, and Alexis Catsambis, 2020, *Our Blue Planet: An Introduction to Maritime and Underwater Archaeology*. Oxford University Press.
 - ♦ Grøn, Ole, Lars O. Boldreel, Morgan F. Smith, **Shawn Joy**, Rostand Tayong Boumda, Andreas Mäder, Niels Bleicher, Bo Madsen, Deborah Cvikel, Björn Nilsson, Arne Sjöström, Ehud Galili, Egon Nørmark, Changqing Hu, Qunyan Ren, Philippe Blondel, Xing Gao, Petra Stråkendal, and Antonio Dell'Anno. 2021 *Acoustic Mapping of Submerged Stone Age Sites—A HALD Approach. Remote Sensing* 13(3). DOI:10.3390/rs13030445.
 - ♦ **Halligan, Jessi J.**, 2020 *Crossing the waterline: Integrating terrestrial and submerged site investigations in the Aucilla River, Florida. The Journal of Island and Coastal Archaeology* 16(1):46-63.
 - ♦ **Halligan, Jessi J.**, 2020, *Geoarchaeological framework of Late Pleistocene and Early Holocene sites in the Aucilla River Basin, Northwest Florida, USA. Geoarchaeology* 36(2):213-237.
 - ♦ **Johnston EC**, Counsell CWW, Sale TL, **Burgess SC**, Toonen RJ (2020) The legacy of stress: Coral bleaching impacts reproduction years later. *Functional Ecology*. 34: 2315-2325 [\[Link\]](#)
 - ♦ **Johnston EC**, Wyatt ASJ, Leichter JJ, **Burgess SC** (2021) Niche differences in co-occurring cryptic coral species (*Pocillopora* spp.). *Coral Reefs*. [\[Link\]](#)
 - ♦ **Joy, Shawn**, 2020 *Coastally-adapted: A developing model for coastal Paleoindian sites on the North American eastern continental shelf. The Journal of Island and Coastal Archaeology*:1–20. DOI:10.1080/15564894.2020.1803459.
 - ♦ Lee, LL, Gwiisihgaa (McNeill, D), Ridings, P, Featherstone, M, **Okamoto, DK, Spindel, NB**, Galloway, AEW, Saunders, GW, Adamczyk, EG, Reshitnyk, L, Pontier, O, Post, M, Irvine, R, Gulxa taa'a gaagii ng.aang (Wilson, N) and SGiids Kung (Bellis, V). Chiixuu Tii iinasdlli: *Indigenous Ethics and Values Lead to Ecological Restoration for People and Place in Gwaa Haanas. Accepted in Ecological Restoration*.
 - ♦ **Malinowski***, CR, RF Perrault, **FC Coleman, CC Koenig**, JM Stilwell, C Cray, NI Stacy. In press. *The iconic Atlantic Goliath Grouper (Epinephelus itajara): A comprehensive assessment of health indices in the southeastern United States population. Frontiers in Veterinary Science (Veterinary Experimental and Diagnostic Pathology)*.
 - ♦ **Okamoto, Daniel K.**, Stephen C. Schroeter, and Daniel C. Reed. "Effects of ocean climate on spatiotemporal variation in sea urchin settlement and recruitment." *Limnology and Oceanography* 65.9 (2020): 2076-2091
 - ♦ **Olsen KC**, Ryan WH, Winn AA, Kosman ET, **Moscoso JA**, Krueger-Hadfield SA, **Burgess SC**, Carlon DB, Grosberg RK, Kalisz S, Levitan DR (2020) *Inbreeding shapes the evolution of marine invertebrates. Evolution* 74: 871-882. [\[Link\]](#)

- ♦ **Peterson, C.T., R.D. Grubbs.** 2020. *Distribution and abundance of elasmobranchs and large teleost fishes in a subtropical seagrass ecosystem: community structure along environmental and spatial gradients.* Environmental Biology of Fishes, 103: 319-338pp.1-20.
- ♦ **Rassweiler, A, Okamoto, DK,** Reed, DC, Kushner, D, Schroeder, D, Lafferty, K. *Improving the ability of a BACI design to detect impacts within a kelp-forest community.* Accepted in *Ecological Applications.*
- ♦ **Spindel, NB,** Lee, LL, **Okamoto, DK.** *Zombies of the nearshore: Metabolic depression in sea urchin barrens associated with food deprivation.*

Please submit your diving related research publications to fsucml-dso@fsu.edu.

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