NEWSLETTER

WINTER 2023, ISSUE 14



Students from Biology and Conservation of Marine Mammals (FW 302), a summer field course taught by Renee Albertson and Kate Stafford at Hatfield Marine Science Center, viewing the coast. Photo taken by Renee Albertson.

FROM THE ASSOCIATE DIRECTOR'S DESK

In this New Year, we eagerly anticipate new work together. All university units are contributing to these activities and accomplishments. For a peek at unit contributions, check out: beav.es/5bx. Deeply appreciated is generous donor support, which allows us to provide crucial new awards and scholarships to advance marine studies by students and faculty. More information about awards can be found at MSI and Hatfield webpages. Throughout the entire year, students and faculty spend time teaching and learning about the ocean and coasts. In the past summer, nearly 150 undergraduates participated in ocean-focused programs, by taking classes at Hatfield and interning with research labs, nonprofits and businesses. Planning is now underway for experiential learning in all terms in 2023 and beyond, including new courses, an outstanding summer 2023, and expanded set of fall term courses. Students and faculty from different use learning and research spaces and resources at the Gladys Valley Marine Studies Building, seawater labs in the Education Wing, Guin Library, State and Federal agency partner labs, the



Kristen Millgan,Associate Director
Marine Studies Initiative

HMSC Visitor's Center operated by Oregon Sea Grant, and much more. Coastal-based opportunities include studies at a diversity of field sites, including forests, rocky intertidal, mudflats, working waterfronts, coastal estuaries and ocean waters. On behalf of the MSI, I wish everyone the best in this New Year.

-Kristen Milligan, Marine Studies Initiative Associate Director.

Ocean11 Update



Ocean11 students hiking Wilder Trail during their overnight to Newport where they visited Hatfield, OMSI Camp Gray and Oregon Coast Community College Aquarium Science Program.

Ocean11 marine club had a fantastic Fall 2022! Twelve new leaders joined our solid student Leadership Team, bringing boatloads of enthusiasm and energy. The Team built strong relationships on their Fall Leadership Retreat and carried their commitment to each other and the club throughout the term. The new 2022-23 school year started off strong with a big OSU football Tailgate & Watch Party. (Go Beavs!) Then our Fall Kick-off meeting saw a record 110 students attending! OSU students sure love the ocean and want to care for it in tangible ways. Through their five Committee Teams, Ocean11 leaders planned activities related to how they connect with the ocean. Next Gen Outreach Committee participated in OSU Discovery Days, leading ocean activities for 900 local school children. Research & Learning Opportunities hosted a workshop on tailoring your resume for government jobs. Community Outreach Team partnered with the Red Cross for their Blood Drive, sold metal straws and other ocean merch on campus, and organized a big Beach Clean Up near Devils Punchbowl. Our creative Social Committee helped club members connect with each other through a Float-in at the Women's Building Pool, ocean-themed Pumpkin Carving and a Holiday Party where 50+ students gathered to celebrate the SEAson. Our Field Trip Team organized and ran two quality experiences—a tour of the Ocean Observing Center, and a Newport overnight exploring the Hatfield Marine Science Center, coast forest trails, the Oregon Coast Community College Aquarium Science Program, and the beach (of course!). Ocean11 thanks all of the faculty, staff and volunteers who helped make our Fall Term fantastic. Next up? Bring on a wonderful and wild Winter Term!



Are you an undergraduate student with a passion for the ocean? If so, OSU's Ocean11 marine club may be the perfect fit for you!

For information about how to get involved, contact Ocean11 at **ocean11osu@oregonstate.edu**

For more information about Ocean11 visit: (beav.es/ocean11)

Academic Program News

In Fall 2022, undergraduate and graduate programs across the university welcomed new and returning students. Students visited the coast because of courses, student-organized field trips, and programmatic orientation visits. We have been excited to spend more time with OSU Admissions Office student ambassadors, such as during their one-day visit to Hatfield Marine Science Center in September. Fall courses included: Oregon Coast Math Camp (OC515), Observing Climate (ATS295), Coastal Ecology and Resource Management (FW426/526), Methods in Physiology and Behavior of Marine Megafauna (FW469/569) and Honors College colloquium Sensors in the Wild.

Literatures of the Coast (ENG340) was a new course, part of the Marine Studies curriculum, taught by College Liberal Arts' faculty Raymond Malewitz. In this literature course, thirty-two students explored the diverse means by which literature and the arts represent coastal and marine life; they also created written works in graphic novel format, some of which are likely to be displayed in the upcoming year. Stay tuned for more information.

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In December 2022, we joined in celebration of the first cohort of CLAs' Marine Studies undergraduates completing their final year capstone projects. School of Writing, Literature and Film instructor Liddy Detar led four students through their capstone projects, in collaboration with a team of faculty mentors. Hearty congratulations to this group!

Ashley Osborne Qualitative Data Analysis through a Narrative Policy Framework: How are Scientists, conservationists and stakeholders (engineers, offshore wind farms, shipping companies) framing noise pollution? Mentor: Lori Cramer, CLA-School of Public Policy

Lauren Rice Shellfish Farming, Environmental Threats, and Adaptive Capacity Mentor: Kristen Green, CLA-School of Public Policy

Tate Scarpaci Urchin Dulse Co-culture

Mentor: Tom Calvanese, MSI-Port Orford Field Station

Congratulations to Tate for graduating in Fall term with an OSU Marine Studies undergraduate degree!

Yongchao Zheng The Momentous Ming Empire and Civilization Mentor: Nicole von Germeten, CLA-School of History, Philosophy, and Religion

Faculty Update

On December 1, 2022 over 50 faculty members from across campus gathered at the Memorial Union for the 5th annual Marine Studies Initiative Update meeting. The meeting was focused on discussing recent progress, networking with colleagues, and celebrating the ways OSU faculty work together toward the Initiative's goals. Attendees recognized the contributions of MSI to OSU's just-completed Strategic Plan 4.0 goal to support interdisciplinary education, research and engagement. MSI blazed the way for how to do interdisciplinary collaboration, certain to be a centerpiece of OSU's next strategic plan. We celebrated the success of the 11 faculty hires enable by MSI, including the promotions and tenure of the original 4 MSI hires. We look forward to next year's update!



Faculty members networking at the annual Marine Studies Initiative update meeting held in the Memorial Union.

Course Spotlight

View of Vatia Bay, American Samoa. Photo by Patricia Fifita



A traditional Samoan fale at Utulei Beach, American Samoa.

Introduction to Pacific Island Studies (ES 260), is an introductory course to Pacific Islands Studies that aims to deepen students' knowledge, appreciation, and understanding of the histories, struggles, resilience, and unique cultures, people, land, and seascapes of Oceania. Although relatively small in population, the Pacific Islands, also known as Oceania, span one-third of the globe. encompassing about one-fourth of the world's languages and including some of its most unique ecological zones. Pacific Islanders are part of a long history and ongoing story of movement, navigation, settlement, innovation, cultural encounter, and adaptation to island environments representing critical histories of cultural achievement and political struggle. Oceania has also been an object of

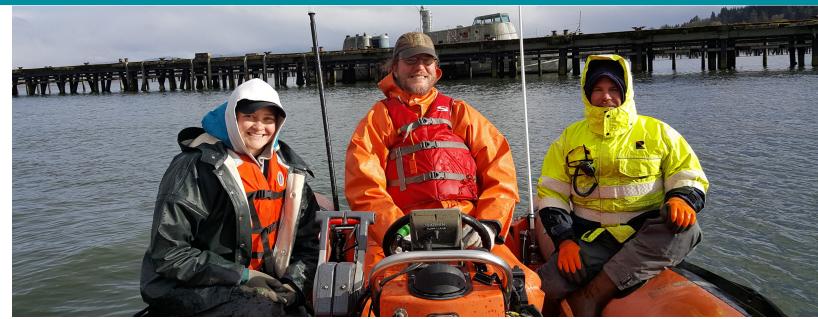
colonial interest and fantasy since the earliest days of European exploration and continues to generate images of the "exotic," including other stereotypes counter to the reality of Pacific Islander experiences. This course will critically examine the geography, histories, cultures, and experiences of indigenous Pacific Islander communities living inside and outside the region. The course explores a range of historical and

contemporary issues within Oceania, such as celestial navigation and the revitalization of traditional navigational practices, the impacts and legacies of colonialism and the militarization of the islands, migration and settlement, climate change, food sovereignty, ecological health and well-being, Traditional Ecological Knowledge (TEK) and natural resource management (marine and terrestrial), tourism, indigenous art, and creative expression. The course explores these issues and histories through a combination of lectures, critical reading of Pacific literature, large and small group discussions, films, and creative projects. In her approach to teaching the course, Patricia Fifita, an indigenous Pacific scholar of Tongan ancestry, engages indigenous Oceanic frameworks, research methodologies, and metaphors. Her teaching philosophy incorporates critical pedagogies and creates space within the classroom for the co-creation of knowledge and experiential learning.



Patricia Fifita, Assistant Professor, School of Language, Culture, and Society, College of Liberal Arts

Dive and Boating Courses



MOTC (Motorboat Operator Training Course) Students on boat in Astoria, Oregon



Personal Floatation Devices (PFDs) - OSU personnel using small motorized or nonmotorized vessels for research must wear an appropriate PFD at all times while on the water. 85-90% of drowning victims were not wearing life jackets. Learn more about life jacket safety at beav.es/59U

Spring Term Scientific Diving Course and Motorboat Operator Training Course

Introduction to Scientific Diving FW 430/530; CRN 58716 & 58970

American Academy of Underwater Sciences Scientific Diving Course: Prepares students to manage the task loading associated with performing scientific work underwater through a combination of classroom, confined water, and open water training. Introduces the diver to basic techniques and equipment used in underwater data collection.

Motorboat Operator Training Course: Scientific Boating Safety Association (SBSA) Motorboat Operator **Training Course (MOTC)**: Meets OSU basic small boat operator training requirement and is accepted by USDOI, NOAA, and other SBSA institutions. This hands-on basic boating course is sponsored by OSU Small Boat Program (OSU Research Office) and the OSU Department of

Fisheries, Wildlife and Conservation Sciences.

Do you dive or operate small craft as part of your job or classes? Then you are required to get your work reviewed and approved in advance, so reach out to the Diving and Small Boat Safety Office! research.oregonstate.edu/diving

Boating for fun? Then prepare the right way! beav.es/5ym

Program Contacts

Kevin Buch

Scientific Diving and Small Boat Administrator

Taylor Eaton

Boating Safety Officer

Send inquiries for either course to *diving.safety@oregonstate.edu*



OSU Scientific Diver collecting data in Moorea, French Polynesia

Outreach Hatfield Updates



Jack Barth sharing with K-12 students from the Taholah School on the Quinault Indian Nation on how an underwater glider is used to understand changing ocean conditions along the central Washington coast. Photo by Joe Schumacker.

In mid-September, 2022, I had the pleasure of visiting with the students at the Taholah School on the Quinault Indian Nation (QIN) on the central Washington coast. As part of my ocean observing in Pacific Northwest waters, we had just recovered an autonomous underwater glider off Westport, WA, so had the chance to share about the cool glider technology and changing ocean conditions in the Quinault's fishing grounds. This ocean observing project is a collaborative effort with the QIN and the Columbia River Inter-Tribal Fish Commission. The glider is a robot under the sea measuring ocean temperature, salinity, chlorophyll, and, importantly, dissolved oxygen, and sending that data to shore via satellite cell phone. The data reveal information on hypoxia – low oxygen that is harmful to marine animals -- that is very valuable for informing tribal crab harvests.

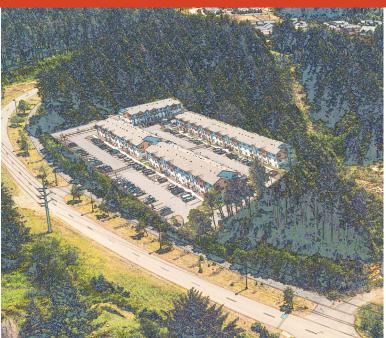
The original plan was to meet with about 20 Quinault high school students, but the Taholah School principal invited the entire K-12 school to a class assembly in the gym, some 150 students and staff! The students were fascinated by the glider and what could be learned in waters just off their coast. Joe Schumacher, QIN Marine Resources Scientist, worked with Taholah School teachers and the students to view the glider data during its 2-week mission off the coast. Questions during the school assembly ranged from "why is the glider painted yellow" to "how much power does it take to run the glider and how long can it stay out at sea?"

These glider missions will continue each summer and QIN students will become increasingly involved, engaging their curiosity about the new glider technology that provides "eyes beneath the sea."

This work is funded through the Northwest Association of Networked Ocean Observing Systems (*nanoos.org*) through a grant from NOAA.



The Taholah School of the Quinault Indian Nation, home of the Chitwhins or Black Bears in Quinault, on the central Washington coast.
Photo by Jack Barth.



Stay tuned for news on the upcoming Hatfield housing project, slated to start in 2023!

Above is an artist's concept sketch showing the location and potential footprint of a new housing facility for students and visiting researchers. The next phase of the project is the building design. Updates on the process will be forthcoming in the next couple of months.

HMSC Marine Science Day 2023:

Theme: One Community: Above and Below

When: April 8, 2023, 10 AM- 4 PM

Where: Hatfield Marine Science Center, Newport "We are thrilled to be holding Marine Science Day in person again. At this once-a-year open house, visitors can explore behind the scenes through our marine research labs at the Hatfield Marine Science Center. Scientists will have interactive exhibits and be on hand to answer questions and discuss their research".

-Cinamon Moffett, Research Program Manager, Hatfield Marine Science Center

This is a free, family-friendly event. Everyone is welcome!

HMSC Research Seminars:

HMSC Research Seminar Series takes place every Thursday from 3:30- 4:30 PM PST. Visit the OSU Events Newport Calendar (*beav.es/3x3*) for the seminar schedule with onsite and login details.

Hatfield Visitor Center:

The Hatfield Marine Science Visitor Center is open to the public 10 AM to 4 PM, Thursday through Monday. Visitors can purchase a ticket online before the visit. Tickets are \$3 each for guests five and up, and tickets are good for the entire day. Purchase a ticket and learn more at (beav.es/3dJ).

Port Orford Field Station

Welcome Tate!

The Port Orford Field Station welcomes Tate Scarpaci aboard as our new Station Assistant.

Tate Scarpaci, recent OSU and Marine Studies graduate, has accepted a part-time position as Biological Sciences Research Technician at the OSU Port Orford Field Station, where he will work with Tom Calvanese, Station Manager. Tate will work with Tom in support of our mission to carry out near shore and coastal interdisciplinary research, education, and community engagement in the near shore oceans and coastal ecosystems in the southern coast region.

Learn more about Port Orford Field Station at: portorfordfieldstation.oregonstate.edu



Tate is ready to dive into work at OSU Port Orford Field Station.

MSI Upcoming Events

The Science of Well Being

Free Virtual Lecture! April 4, 2023, 6:00 - 7:00 p.m. on Zoom. The Provost's Lecture featuring Laurie Santos is the second lecture in the 2022-23 series. Santos is a renowned psychologist, host of the popular podcast *The Happiness Lab*, and professor of psychology at Yale University. The lecture titled "The Science of Well-Being" will focus on her expertise on human cognition and how behavioral change through positive psychology can lead to a happy and fulfilling life. Following the lecture, Santos will engage in a moderated Q&A with an OSU moderator. Check back for registatrion link and to learn more visit: *leadership.oregonstate.edu/provost/provosts-lecture-series*

Marine Science Day

Save the date! April 8, 2023, 10:00 a.m. - 4:00 p.m. at Hatfield Visitor Center, Newport Learn more and check out activites from 2022 here: hmsc.oregonstate.edu/marine-science-day

World Ocean Day

The United Nations has designated June 8 as World Oceans Day. Learn more about World Oceans Day at (*UNWorldOceansDay.org*). This year to celebrate World Ocean Day the Marine Studies Initiative will host an event on June 8 for OSU community members to stop by and have some snacks, play games, and learn more about World Ocean Day. Visit (*beav.es/ifD*) for MSI special updates on World Ocean Day and to learn more about our event.

Student Ocean Interest Fair

Connecting and Learning about your passion! Feburary 7, 2023, 5:30 - 7:30 pm, Strand 300 and surrounding classrooms. We'll have experienced OSU scuba, surfers, photographers, birders, anglers and more for you to learn from, ask questions of and share ideas. More details to come!



A transforming climate and ocean is leading to unpredictable changes. One such phenomenon is hypoxia, a low-oxygen condition that can harm and kill sea life.

Oregon State Productions presents Understanding Hypoxia: Dead Zones on the Pacific Coast which explores the science of hypoxia and the communities that are impacted.

Watch the video here: beav.es/5Bx



Follow us on social media!



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Marine Studies Initiative



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Donor Supported Funds for the

MARINE STUDIES INITIATIVE

Our Mission

Create a healthy future for our ocean and the planet through transdisciplinary research and teaching that emphasizes collaboration, experiential learning, engagement with society, and problem solving.

Marine Studies Innovation Fund (Unrestricted) (Fund #270020)

The Fund for innovation provides unrestricted support for the Marine Studies Initiative (MSI). Unrestricted funds are critically important for the growth and development of this new initiative. They allow for important strategic planning opportunities, provide faculty/undergraduate research opportunists, and allow flexibility for MSI to take advantage of emerging opportunities.



TO BE ESTABLISHED WITH YOUR HELP:



Student Success and Academic Programs

We are particularly interested in supporting student's "access to the sea." This can take many shapes, for example, small awards to enable student research. One important need is for helping students spend time at the coast, in particular to support housing during their studies at the Hatfield Marine Science Center in Newport. Please contact us if you would like to help. You can also made a donation through the Marine Studies Innovation Fund with a note about where you would like your donation to be used.

OSU Port Orford Science & Education Support (Fund #4100-140330)

The station supports access to this unique marine and terrestrial ecosystem for transdisciplinary research and education, community priorities, and economic opportunities. Your donation will enhance our ability to continue to provide this vital support to students and researchers, and to expand our work in this hard-working rural community, as its residents embrace the new blue economy.





MARINE STUDIES INITIATIVE

global challenges need global champions



Dam Proud Day is April 26, 2023

Dam Proud Day 2023

Global challenges need global champions and the Marine Studies Initiative accomplishes this by providing students with access to the sea, the unparalleled living-learning laboratory, and Oregon's 350-mile coastline. Along Oregon's coastline, students have access to the university's facilities such as the Hatfield Marine Science Center campus, and the Port Orford Field Station. These coastal facilities provide students with environments that encourage creative collaboration that have lifelong meaningful impacts.

Become a partner in this exciting initiative by making a gift today that will have a profound impact for the students of Oregon State University and the future of the Earth's ocean and coasts.

To make a gift, please go to: beav.es/5D6

- 1. In the "I want to give to" dropdown menu select "Marine Studies Initiative Innovation Fund" or another MSI fund
- 2. Make a gift of your choice

Or send a check payable to 'OSU Foundation' with notation for MSI and list fund name, to Oregon State University Foundation, 4238 SW Research Way, Corvallis, OR 97330.

If you need assistance or details on other gift opportunities, call 800-354-7281 or 541-737-4218. Or, email: annual.giving@oregonstate.edu



Contact the Marine Studies Initiative at:

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marine.studies@oregonstate.edu

Scan the QR Code to check the Marine Studies Initiative Website or click here: beav.es/iNL



