

# NEWSLETTER

WINTER 2020, ISSUE 5



*Kristen Milligan, Associate Director (right), and Ocean11 group on a field trip to Seal Rock, Oregon.*

## FROM THE ASSOCIATE DIRECTOR'S DESK

Promotions are underway  
for summer courses at  
Hatfield! ([beav.es/Zvx](https://beav.es/Zvx))

The vision embraced by OSU's Marine Studies Initiative is one of heightened ocean literacy, engaged scholarship, and making a positive difference for current and future generations. On our collective path to this horizon, the MSI Office is seeing expanded offerings at the coast, progress in transdisciplinary research efforts, and more people engaged in activities such as the Ocean11 student club and faculty field trips to the coast.

The new Marine Studies Building at OSU Hatfield Marine Science Center in Newport will be opening this summer, offering extraordinary spaces for education and research. Learn more: ([beav.es/4wi](https://beav.es/4wi))

This winter and spring, weekend field courses from Fisheries & Wildlife and Integrative Biology introduce undergraduates to the study of marine life and the breadth of academic offerings and research at Hatfield. Faculty from College of Earth, Ocean, and Atmospheric Sciences are offering a new introductory oceanography course on Corvallis campus (OC 202X) as well as courses for students to get at-sea experience (OC 295/6 and 495X/6X). The 15-credit spring term Marine Biology and Ecology (BI 450) is a capstone experience for students focused on marine science. Team-taught by Integrative Biology faculty, this coastal-based course provides a model for degree programs seeking a curricular pathway to the coast.

The College of Liberal Arts' Marine Studies undergraduate degree is continuing to move ahead in the curriculum proposal process. We look forward to working with colleagues from across campus to launch this new interdisciplinary degree program focused on liberal arts approaches to ocean and coastal issues. If you have questions, please contact us.

On behalf of the Marine Studies Initiative office, I thank you for your interest and contributions to this important, multi-faceted endeavor. I look forward to seeing you at the beach!

- Kristen Milligan, Marine Studies Initiative Associate Director



*MSI Intern Renee Doran holding a seastar.*

## STUDENT SPOTLIGHT

Renee Doran, is a student intern with the Fisherman First Aid and Safety Training (FFAST) program, a joint project between the College of Public Health and Human Sciences, Sea Grant, and the Marine Studies Initiative. FFAST is a US Coast Guard-certified first aid training program. During her internship, Renee is helping to improve the program by using data from safety course tests and evaluations to improve class content. She is also helping share information and materials about the FFAST program. FFAST partners with organizations in Alaska and on the East Coast allowing fishermen the opportunity to take the course.

Renee is a 4th-year Biology major with a Marine option and minor in Theatre Arts. She spends her free time in the Oregon State Theatre Department, helping construct and paint sets or working backstage in productions.

## PORT ORFORD FIELD STATION FAQ

**What is Port Orford Field Station (POFS)?** The Port Orford Field Station supports transdisciplinary research, education, and community engagement in Oregon's wind-swept South Coast. POFS supports the Marine Studies Initiative mission in the region. The station fosters coastal stewardship and sustainability by supporting access to the region's unique marine and terrestrial ecosystem for research and education purposes.

**Where is the Port Orford Field Station?** The station is situated on a beach bluff near the Port of Port Orford, Oregon, and serves as a hub supporting scientific research, student learning, community priorities, and economic opportunities.

**How do we support OSU students and faculty?** Researchers and students are supported through access to labs, an office, a classroom, lodging with a kitchen, and a SCUBA tank air fill station. Internship programs allow students to participate in hands-on research projects where they learn to integrate the knowledge of marine science, field research, teamwork, communication, and problem-solving. Courses in partnership with OSU Cascades are also offered at the station.

Students and researchers making use of the station to conduct research and study in the region are eligible to apply for grant funding in support of their work. Visit the

station's website to learn more about the facilities and how to apply for grants.

To learn more about the Port Orford Field Station, you can visit the website at [research.oregonstate.edu/port-orford](http://research.oregonstate.edu/port-orford)

## RESEARCH & INNOVATION

**Microplastics** - The Marine Studies Initiative is teaming with researchers from OSU's Department of Environmental and Molecular Toxicology to support their new National Science Foundation funded project ([beav.es/4o2](http://beav.es/4o2)) that focuses on micro and nanoplastic transport, fate, uptake and impacts in aquatic systems, ranging from freshwater to marine systems. While much work has been done on macroplastics (plastics visible to our bare eyes) the new project will focus on smaller particles that can be ingested by the smallest and the largest aquatic organisms. MSI will work with lead investigators Stacey Harper and Susanne Brander to communicate the results of their research to a variety of audiences. The communications team will feature an OSU Digital Arts and Communication student intern working in the MSI office and a graduate student focused on science communications. The project has also launched the Pacific Northwest Consortium on Plastics ([pnwmicroplastics.org](http://pnwmicroplastics.org)) that will bring together regional scientists, regulators, and community coalitions to compile and organize data on plastics in the aquatic environment and their effects on aquatic species.





# MSI SUMMER INTERNSHIPS

During summer 2020, Oregon State University's Marine Studies Initiative will offer transdisciplinary internships for OSU students to work with faculty mentors on projects that advance knowledge and understanding in a variety of fields. Housing is provided, and some support funds are available for field travel and supplies. [Check beav.es/ZCD](https://beav.es/ZCD) for most current offerings and deadlines.

## Aquatic Microbiology

An undergraduate student will work with Dr. Carla Schubiger of the Carlson College of Veterinary Medicine on a project related to aquatic animal disease agents, functional feeds, or seafood safety. The internship will be based at the Hatfield Marine Science Center and will involve data collection and analysis, and possibly some fieldwork. Experience in microbiology, chemistry, biochemistry, biology knowledge, and laboratory skills are preferred, but more important is work ethic, motivation, and enthusiasm.

## Redfish Rocks Marine Reserve Interpretation

We are looking for a motivated and outgoing student to work at

the Port Orford Visitor Center and communicate to visitors about the Redfish Rocks Marine Reserve, and the importance of collaboration with the fishing community. The intern will help recruit volunteers for community science programs with partner agencies such as CoastWatch, COASST, and the Marine Mammal Stranding Network. In addition to gaining confidence in public speaking skills, the intern will gain experience in data collection and analysis, science communication, and ecological and cultural aspects of the Redfish Rocks Marine Reserve.

## Tillamook Bay Water Quality Monitoring

An undergraduate student will have the opportunity to be involved in fieldwork, data analysis, and community outreach related to the Tillamook Estuaries Partnership's (TEP) and Oregon Department of Environmental Quality's long-term bacteria monitoring effort, ocean acidification and hypoxia monitoring project in Tillamook Bay. The position is located in Newport, OR, in collaboration with US EPA, and the student will drive to Tillamook Bay to perform fieldwork.

## Ocean Acidification & Hypoxia

Based at the Oregon Coast Aquarium in Newport, an undergraduate student will work with the Education and Exhibits departments to conduct research on visitor awareness about ocean acidification. Guided by a social marketing framework, the student will create research tools to gather data on visitors' knowledge, values, and behaviors related to ocean acidification. The student must be comfortable and confident in approaching guests to request participation in the research and collect verbal data.

## Science Filmmaking

An undergraduate student will work closely with a science filmmaker from Oregon State Productions to complete a short documentary about a marine-related research project being conducted at the Hatfield Marine Science Center -- whether it's an economic look at coastal resilience or the impact of ocean acidification on oyster larvae. Preference will be given to a student pursuing a degree in the natural sciences, with some camera experience.

## UPCOMING EVENTS

### Port Orford Field Station Open House

Friday, March 20, 3 - 6 PM, Port Orford Field Station (444 Jackson St. Port Orford, OR 97465)

The station will be open for tours from 3-4 pm and student posters will be available to view during the event.

### Marine Science Day

Saturday, April 11, 10 AM - 4 PM, Hatfield Marine Science Center

Meet the scientists and researchers who make this event unique in the Northwest. Admission is FREE.

**EVENT CANCELLED:**  
Due to COVID19 concerns.  
Visit [beav.es/4St](http://beav.es/4St) for up-to-date information on all OSU events.

### Marine Studies Building Grand Opening

Tuesday, June 9, Hatfield campus  
Come tour the 72,000 square-foot, three-story building and view research labs, community space, auditorium, and other facilities. More details TBA.

### Heceta Bank Screenings

**Bend** - Tuesday, March 17, McMenamins Old St. Francis School  
**Coos Bay** - Saturday, April 18, the Egyptian Theater

A series of special screenings presenting one of Oregon's most unique marine habitats. Stay tuned for additional 2020 screenings in **Corvallis** and **Portland**!



Sunset at the new Marine Studies Building. Shot by Sharon Biddinger.

## HATFIELD NEWS

### Marine Studies Building

As the Marine Studies Building nears completion, excitement is growing as new academic and research programming is developed, and plans are made to welcome new students and faculty to the Hatfield campus. The Marine Studies Building Grand Opening is scheduled for Tuesday, June 9th. Visit [events.oregonstate.edu](http://events.oregonstate.edu) for more details closer to the event.

### Newport Student Housing

Plans are underway to develop and construct new student housing in Newport. The student housing construction will take place outside of the tsunami inundation zone, and the first phase will

house approximately 120-160 students. Dependent on approvals, the first phase of housing is anticipated to be available in 2021.

### King Tides

Every year in early winter, high tides in Oregon are higher than usual and referred to as "King Tides." King Tides occur when the Earth is closest to the sun. This January, the Oregon Coast saw record King Tides as well as winter storm surges making beaches very unsafe. An amazing diversity of debris was also pushed onto the shore including several Ocean Observatories Initiative research devices that were successfully recovered.



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](mailto:ocean11osu@oregonstate.edu)

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