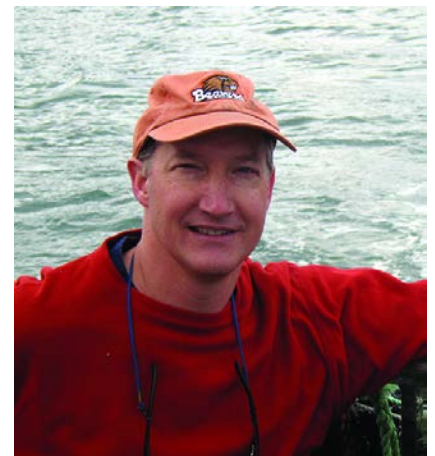




c/o Maddie Delgado

From the Executive Director's Desk

I hope you enjoy this inaugural issue of our Marine Studies Initiative newsletter, our way of staying in touch about efforts across campus to deliver on the goals of the Marine Studies Initiative. We've been busy building connections across OSU, between Corvallis and Newport, and all along the Oregon coast. We seek to 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. Currently underway are a number of activities to advance our Marine Studies Initiative goals, such as developing a portal for any OSU student to "put the ocean in their major"; the creation of a new Marine Studies undergraduate major and minor to be housed in the College of Liberal Arts; and the expansion of marine learning opportunities at the Hatfield Marine Science Center (HMSC) for all programs across OSU. To deliver on these expanded marine programs at the coast, the construction of the new Marine Studies Building at HMSC in Newport is underway! Ground preparation is nearly complete. Look for the building to start rising tall soon. We're excited to welcome our new Academic Advisor, Cynthia Leonard, who has been busy meeting with prospective students and getting information about marine programs into OSU's recruiting materials. Let's stay in touch – please stop by the Marine Studies Office in Strand 300, visit our website or drop us a line. We welcome your participation!



Academic Program News

Welcome to the MSI Office

The Marine Studies Initiative's core academic development goal is to provide a transformational educational experience centered on marine studies. Established in summer 2016, our office is located in Strand Agricultural Hall and designed to be an organizational hub for program development. We greatly appreciate efforts across OSU to develop new and improved marine-related experiences for students. Looking forward to the upcoming academic year, we expect to see new courses and the advancement of a new undergraduate, liberal arts degree. Stay tuned and contact us if you have any questions.

Thank You!

The new MSI summer internships would not have been possible without the outstanding internship program structures at Hatfield Marine Science Center, College of Earth, Ocean, and Atmospheric Sciences, and Oregon Sea Grant: The [National Science Foundation funded Research Experience for Undergraduates](#) and the [Oregon Sea Grant Summer Scholars Program](#). We are extremely grateful for our MSI intern mentors: Tom Calvanese, John Chapman, Itchung Cheung, Bob Dziak, Mark Farley, Jennifer Fisher, Lisa Hildebrand Miles Phillips, Chuck Toombs, Leigh Torres, and Shixiao Yu.

Summer Interns at the Coast

This past summer, 46 students lived, explored, and worked along the Oregon coast as part of numerous internship experiences. Six of these students were sponsored by the Marine Studies Initiative, providing students with opportunities in marine science and beyond.

At Hatfield Marine Science Center

[Jake Pinkus](#), an Ecological Agriculture student at the University of Vermont, focused on dulse farming and exploring ways to produce high quality seaweed with low environmental impact. [Cora Rose Bobo-Shisler](#) used her background as an Ecological Engineering major at OSU to examine sediments in Yaquina Bay and the relationship between bacteria and the declining populations of mud shrimp in the bay. [Charles Leal](#), an Environmental Science student at OSU, his project focused on the impact of the recent invasion of pyrosomes along the Oregon Coast.

HMSC also hosted [Tara Pierce](#), a master's candidate in the Environmental Arts and Humanities program and this summer's Artist-in-Residence. Check out her 'spotlight' on page 6.

In Bandon and Port Orford

Further down the coast, OSU interns [Keana Pigg](#) and [Haley Kent](#) explored new horizons. In Bandon, with the College of Business, Keana's internship focused on tourism along the Oregon coast. She helped design a professional development program to train those in the tourism industry on sustainable practices. At the Port Orford Field Station, Haley worked with a team of students and researchers to study the foraging ecology of gray whales.

Learn more about the summer interns by watching [videos](#) about their work!



Thirty of the interns, who spent their summer living and working at the coast, smile after a long day of visiting various OSU locations across Oregon. c/o Itchung Cheung

Research and Innovation

It's been a busy year advancing a number of transdisciplinary marine research efforts. Two of these are highlighted below and we continue to support cross-college work on ocean acidification, among other pressing ocean challenges.

KEEP UP-TO-DATE

Research stories from [Terra Magazine](#)

Marine [newsfeed](#)



c/o Allie Bard @ PISCO

Food from the Sea

One of our aims is to address societal, ocean-related challenges by cultivating university-wide research and innovation focused on specific themes.

“Food from the Sea” is one of these focal areas. Led by Gil Sylvia, Director of OSU’s Coastal Ocean Marine Experiment Station, a group of OSU faculty and representatives from marine resource agencies, seafood industry, and community partners have been pursuing the vision of a research and education effort dedicated to seafood systems.

This work focuses on developing new approaches to enable fishing, aquaculture, and seafood industries and managers to meet increasing demands for healthy seafood while sustaining wild fisheries and estuarine, coastal, and ocean ecosystems.

[Learn about a May 2018 workshop in Newport, OR that brought together more than 100 participants.](#)



Dungeness Crab Research

Dungeness crab is an important part of the Northwest’s seafood heritage. Commercially harvested since the 1800’s, Dungeness crab is Oregon’s most valuable ‘single species’ fishery. The Eder Family Fund for Dungeness Crab Research supports research related to this iconic species. Three projects started this summer, with support from this fund and through a competitive proposal process facilitated by the Marine Studies Office.

- **Sarah Henkel (*Integrative Biology*) and Curtis Roegner (NOAA)** – Understanding crab movement in varied habitats and how it relates to food availability
- **Xiuning Du (*CIMRS*)** – Observing the presence of harmful algae on Heceta Bank, Oregon and its relation with demoic acid
- **Laurel Kincl and Viktor Bovbjerg (*College of Public Health and Human Sciences*)** – Building capacity for fishermen first aid safety training



Hatfield students and staff examine the body of a California sea lion as part of their summer coursework. c/o Mark Farley

Hatfield Marine Science Center An Exciting Summer at HMSC

This was a record-breaking summer of academic activities at the Hatfield campus with a large group (33) of undergraduates research interns, summer session students (59) enrolled in courses, and a myriad of engagement activities. HMSC received a renewal of their NSF Research Experience for Undergraduates (REU) Award of \$750K. The 3-year NSF award will support twenty marine research opportunities each year for undergraduates from all over the country at OSU (NSF OCE-1758000). This past summer, through additional support from MSI, an additional four Oregon State University students participated in the program. The MSI also provided additional summer session housing awards to students taking advantage of the expanding range of courses, such as Biological Oceanography and Photographic Field Studies. Other highlighted activities for students at Hatfield this summer included an Agency Career Panel, a tour of the MSI office, O.H. Hinsdale Wave Research Lab, the OSU Ocean Observing Center, the OSU Marine and Geology Repository, and the NOAA research vessel R/V Rainier, just to list a few.

Finally, Hatfield hosted a group of national science writers who participated in [OSU's Media Fellowship program](#) – they spent two days doing a deep dive on the latest in marine research, learning about the many exciting projects that are conducted by faculty, staff and students at HMSC.

Port Orford Field Station Another Busy Field Season

We've been busy this summer working to deepen our understanding of gray whale foraging ecology, [juvenile fish recruitment](#) at the [Redfish Rocks Marine Reserve](#), [Elk River salmon](#), and [ocean acidification](#). We hosted our first MSI intern, part of a team of 5 students working under the direction of Dr. Leigh Torres of the [GEMM Lab](#), with on-site support from Station Manager Tom Calvanese. We worked with partners to support outreach and engagement initiatives like the [Redfish Rocks Rangers](#) volunteer interpreter program, [stranded marine mammal](#) and [ocean acidification monitoring](#), and Science Pub nights. We are looking forward to offering additional internships and field courses in the coming months, and all students are welcome to visit the beautiful "south coast outpost" of the MSI in Port Orford!



Artwork by Hatfield's Artist-in-Residence, Tara Pierce.

Marine Studies Building Latest Construction Updates

Construction of the Marine Studies Building Project started in March 2018. The Hatfield campus saw a lot of heavy activity associated with the Deep Soil Mixing process. The 130 ft tall drill rig could be seen all over the City of Newport as it drilled a network of 100's of 100-foot deep holes for the building sub foundation. This sub foundation will anchor the building preventing disruption due to liquefaction during a seismic event. As that work is now complete, we will start to see above ground building activity. The target date for building completion is early 2020.

Check out more updates and a live construction webcam feed at <https://fa.oregonstate.edu/msi>

Outreach and Engagement

Getting Out There

We are definitely out there actively connecting with future marine-minded students. Cynthia Leonard and Marianne Stites (MSI's Academic Advisor and Outreach Assistant, respectively) jumped into MSI's first summer START, which is OSU's undergraduate new student orientation. They engaged with many new students from all over the United States who wanted to know what the MSI is all about and how to "Put the Ocean in Your Major". Through fun, interactive activities, we were excited to see how knowledgeable and passionate students are about marine issues. Whether they were a Zoology, Engineering, Microbiology, Computer Science, Graphic Design, Marine Biology, Physics major or undecided, these students wanted to know how to get involved in marine programs and spend as much time as possible at the coast. Cynthia is also building relationships with future and current students who email us, drop by our office or stop at our table at OSU and community events such as the Native American Longhouse Salmon Bake and Corvallis' Da Vinci Days. This fall, she will join the OSU team exhibiting at local and statewide college fairs to connect with thousands of high school students pondering college and their majors.

High school teachers can influence students' college and career decisions. Cynthia will be connecting with teachers by participating in

upcoming statewide teacher conferences for natural and social science educators – look for activity highlights in future newsletters. They will spread the news about the many exciting programs at OSU for students to explore and learn about our coasts and ocean.



OSU's [Marine Science Media Fellowship](#) program hosted 12 writers this summer. Here- Charlie Plybon (Surfrider Foundation) and OSU faculty Francis Chan (Integrative Biology) introduce the writers to monitoring of ocean pH at the Otter Rock Marine Reserve. c/o Mark Farley

Welcome, Cori Kane

OSU-ODFW Marine Reserves Research Associate

Thanks to support from the David Lucile Packard Foundation and Oregon Department of Fish and Wildlife (ODFW), we have been able to continue a post-graduate training position focused on marine reserves ecosystem science, outreach, and engagement. This position is a formal bridge between ODFW's Marine Reserves Program and OSU expertise. Based in Newport, Cori begins her work this month to assist the program and facilitate knowledge exchange among the network of experts studying Oregon's nearshore ocean. She will also be developing new opportunities for student work. She recently received her doctorate from Washington State University, where she studied the resiliency of coral reefs and fishes of West Hawaii-- focusing on the shallows to depths of over 500 feet. Welcome Cori!



OSU interns Robyn Norman and Haley Kent sampling zooplankton aboard a tandem kayak in Port Orford during a gray whale foraging ecology study. c/o Tom Calvanese

SPOTLIGHT'S ON!



Take a look at what these amazing folks are doing in Corvallis and out at the coast.

Cynthia Leonard

MSI's New Academic Advisor

Cynthia is the new academic advisor for the Marine Studies Initiative, jumping on board with us in March 2018. Coordinating with the different OSU colleges, departments, and Hatfield Marine Science Center, Cynthia's role is to mentor and advise students, providing them with support and clear pathways to marine-related courses, internships, and other training opportunities. Her favorite thing about the position so far has been interacting and working with students. She says, "I love to get to know a student as a person -- hear their stories, what their interests and passions are, how they got interested in the ocean and the coast..." Come by the MSI office to ask Cynthia all of your marine student-related questions!



Cynthia with MSI tourism intern Keana Pigg in Bandon, OR



Tara with one of her art pieces at the 2018 Corvallis Art Walk

Tara Pierce

Masters Student –
Environmental Arts & Humanities

This summer, Tara Pierce lived in Newport as Hatfield's first artist-in-residence. She says her artwork and writings "are centered around knowledge production and destroying the western, socially constructed dualisms that promote a hierarchy of knowledge. The goal is to promote transdisciplinary work because climate change is a transdisciplinary problem." Of her time at Hatfield, Pierce said, "I had the opportunity to observe science through the lens of art. I wanted to be at HMSC because my earliest memories are of the Monterey Bay Aquarium and playing at the beach. The ocean is my first love." During undergrad, Pierce tried to major in biology and art, eventually finding her calling by dedicating her art career to marine life.

Upcoming Events

New Horizons Lecture

Oct. 5th, 6-7 pm,

LaSells Stewart Center

Dr. Kelly M. Brunt works on NASA's ICESat-2 mission examining the implications of changes in polar ice sheets for mean sea level rise. The lecture will give an overview of the new technology and discuss how satellite laser altimetry data can be used to examine global issues of climate change and earth system trends.

State of the Coast

Oct. 27th, Coos Bay, Oregon

State of the Coast is a chance to have fun and learn while listening to informative talks on current marine science and policy issues, participate in hands-on activities, and network with research, industry, and community leaders. This is Oregon's coastal conference for everyone! The Marine Studies Initiative is one of this year's sponsors.

Ocean Observing Center Tour

Oct. 11th, 4-6 pm,

126 SW McKenzie, Corvallis

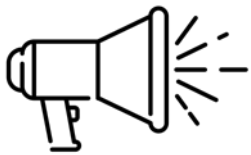
Come tour OSU's Ocean Observing Center and celebrate OSU150. View the giant surface buoys, seafloor platforms and underwater robots that OSU scientists use to explore the ocean off the Pacific Northwest coast.

MSI Open House

Nov. 16th, 3:30-5:30 pm,

Strand Hall, Rm 300

Join us in the Marine Studies Initiative office for an afternoon of refreshments, music, good company, and updates on MSI. We will also be displaying the work of interns and students who spent time at the coast. We can't wait to see you there! An [RSVP](#) is encouraged.



If you have an upcoming marine-related event, please add "Marine Studies Initiative" in addition to your organization when creating the event in the OSU Calendar.

Please contact Marine.Studies@oregonstate.edu if you would like us to promote your events through our newsletter or webpage.

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