UW FRIDAY HARBOR LABORATORIES

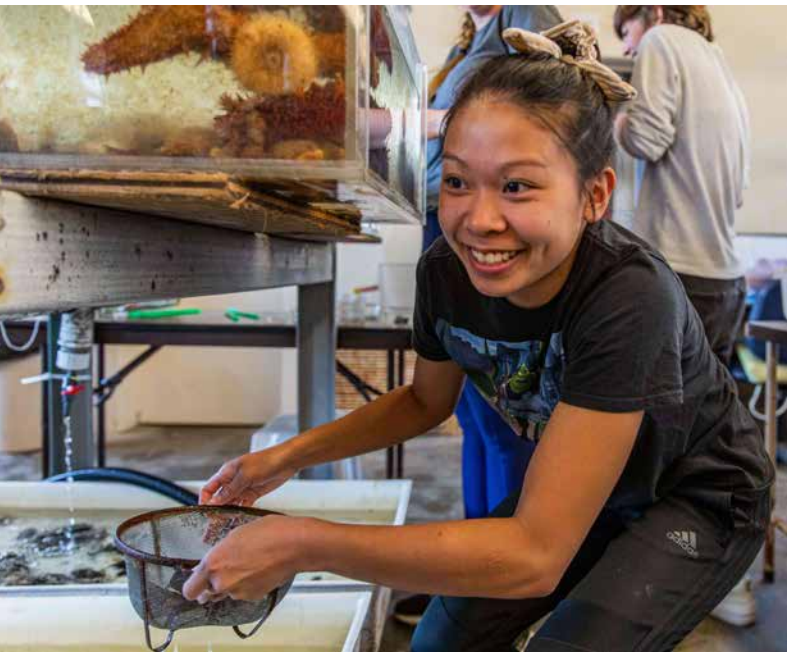
Intertidal Tidings

AUTUMN 2022 volume 43

GET YOUR HANDS DIRTY!

by Mason Wiley, FHL Student Services Manager

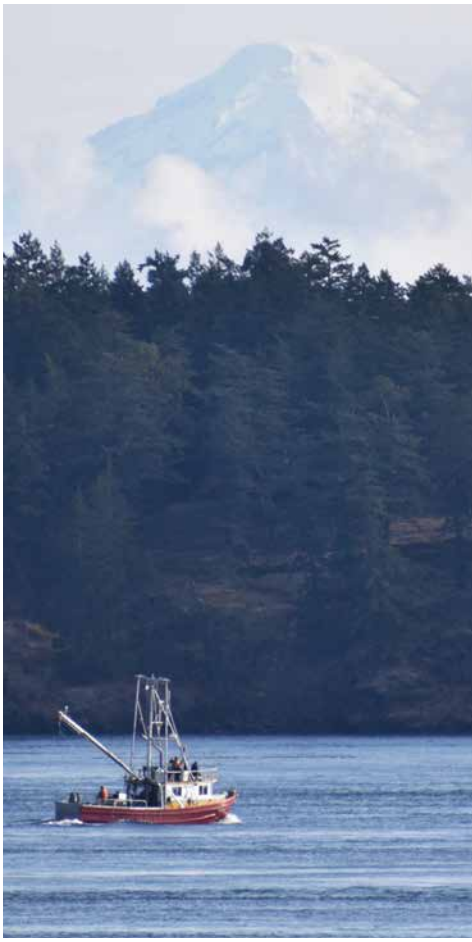
Friday Harbor Laboratories (FHL) is proud of its over 100 years of hosting marine science research courses for students from all over the world. A sentiment we frequently hear from our alumni is that our courses were a formative part of their education and set them on a path for a career in marine science research. For those who haven't had the opportunity to take or instruct one of our courses, you may be asking, "what's so special about them?" The answer is comprised primarily of two parts. First, our courses are distinct for their hands-on approach to understanding the natural world. Indeed, you can take our slogan "Get Your Hands Dirty!" quite literally. Second, the curiosity and enthusiasm for all things oceanic from both the students who take FHL courses and the instructors who teach them create an environment with strong potential for life-long friendships and professional connections within the marine science community.



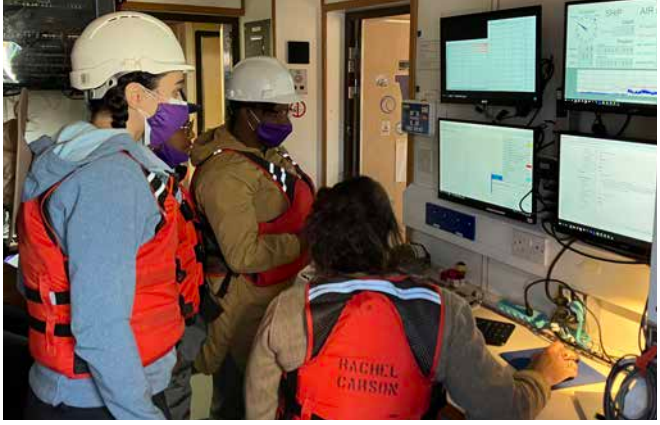
***Above**: Course students operate their own sea tables to run experiments using specimens they've collected.*

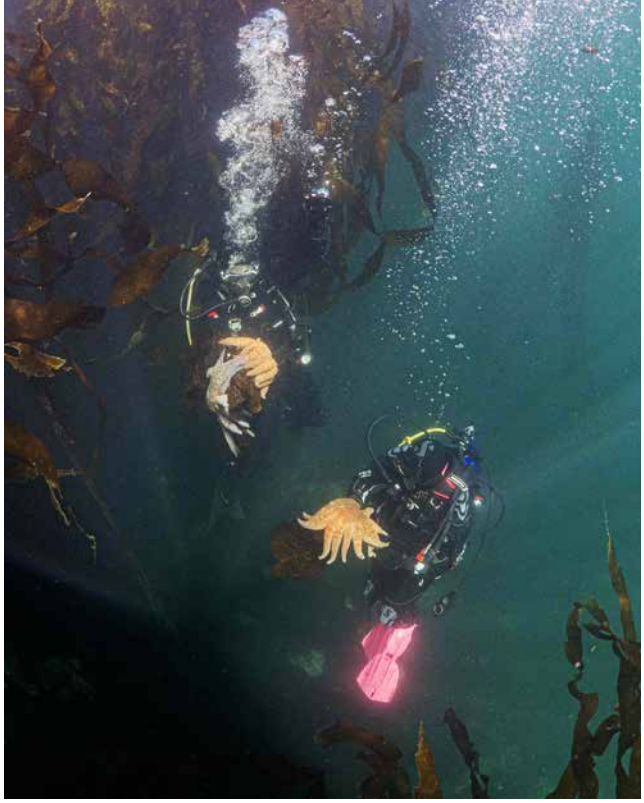
***Right**: Students in our Pelagic Ecosystem Function apprenticeship ride aboard FHL's R/V* Kittiwake *under a looming Mount Kulshan (Mount Baker).* Photo: Matt Baker.

FHL courses can be divided into two categories based on the season they are offered. Our spring and autumn courses are mostly geared towards undergraduate students seeking a chance to hop on a boat or wade into the intertidal to get the data they need for their own research project while learning basic concepts in marine biology. For instance, our Zoology Botany (Zoo-Bot) program boasts decades of impressive, budding marine scientists learning fundamental facts about the flora and fauna you'd find in the Salish Sea before carrying out their own research projects. The success of this program led us to create a similar autumn combination of courses in ecology and comparative anatomy, along with a research course that lets students tie everything they've learned into a self-led project. Students at the beginning of their undergraduate studies can also take our Spring Marine Studies program, which hosts a diverse array of topics pertaining to the Salish Sea, including indigenous history, natural history, and marine mammals.



Finally, spring and autumn also offer Research Apprenticeships where students take a single 15-credit class that is entirely research-based. That's right — no quizzes, no tests! The most popular example is our Pelagic Ecosystem





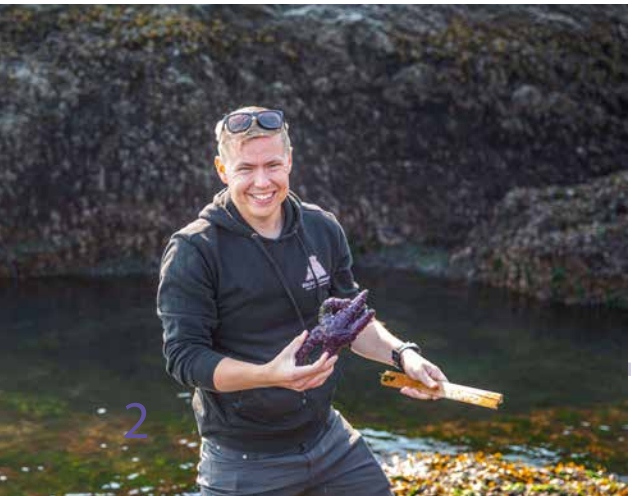
GET YOUR HANDS DIRTY (CONTINUED)

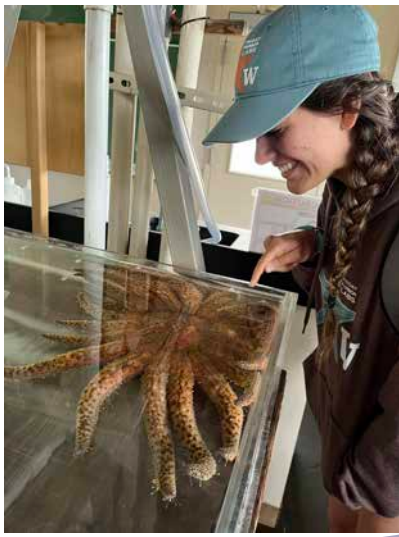
Function apprenticeship, which now has 17 years of student-driven research projects that cover the gamut from the tiniest phytoplankton to our beloved, local megafauna.

Our summer offerings are intense, 5-week courses in specialized marine science topics taught by a unique cadre of experts. On a busy summer day on the FHL campus, you may see a group of students and instructors painstakingly dissecting a marine worm and analyzing its DNA while another group is CT scanning skulls of carnivorous fish and 3D printing the teeth to understand how they bite and tear their prey. A group of students may be practicing rescue diver skills off the dock while another is hunched over microscopes watching single-cell embryos split into two. In 2023, we plan to host summer courses in marine botany, changing coastlines, larval ecology, fish swimming, invertebrate zoology, and marine birds and mammals!

It's no wonder that students from all over the world apply to call FHL home for five to ten weeks of the year. In the summer of 2022, our students hailed from Israel, Japan, Brazil, Ecuador, Colombia, China, Canada, and dozens of universities throughout the United States. Their degree tracks included marine biology and oceanography in addition to PhD candidates in engineering, public health, paleontology, and physics. Having all these students together and mixing in resident and visiting researchers makes our campus come alive. Conversations in the Dining Hall bounce through a myriad of interesting topics, which often morph into the ingenious class research projects we see presented at the end of each quarter. It's not uncommon for us to receive thoughtful videos filmed and edited by students after a quarter that capture the "science summer camp" vibe we promote. An average day for a student could be spending time with a peer on the shore during low tide collecting specimens, manufacturing a PVC and Tupperware device for some unique experimental setup, analyzing data using Python, going to the "Invert Ball" (yes, the students dress up like invertebrates for an annual party) in the evening, and then capping things off with some night lighting off the dock.

An expression we often hear from people visiting the campus after being away for decades is that they are pleasantly surprised that we've managed to maintain our sense of community over the years. They think back on the course they took here that was so instrumental in setting their path in science, and are happy to see the next generation have those same opportunities. As beautiful as the San Juan Islands are, it truly is the 'who we teach' and 'how we do it' that makes FHL such a special place. ■





***Top left**: Students in the GEODUC program view monitors reporting data from the CTD aboard the R/V* Rachel Carson *while at FHL.*

***Top right**: Student research divers in our Marine Subtidal Ecology course collect sunflower seastars (*Pycnopodia helianthoides*) for a researcher studying this endangered species at FHL.* Photo: Tim Dencker

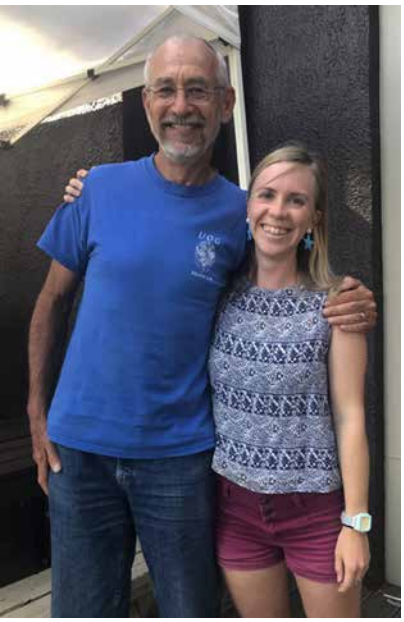
***Bottom right**: A student in our Ecology course checks on the* Pycnopodia *she helped collect while diving.* Photo: Abby Goudey

***Bottom left**: Ochre sea stars (*Pisaster ochraceus*) are a prized catch for experiments.* ■

FHL Adopt-a-Student Program

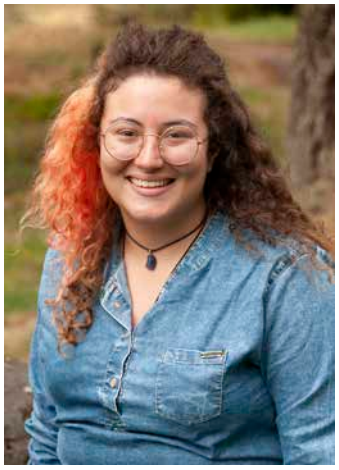
The FHL Adopt-a-Student Program continues to be our largest source of financial aid for students participating in our summer courses. Created by the FHL Advancement Board in the early 2000s, this program has changed the lives of so many students. Students and sponsors alike have the opportunity to meet – truly a win / win interaction.

We are always delighted to welcome new sponsors to the Adopt-a-Student Program. Would you be interested in contributing (full / partial support) and making a huge difference in a student's path forward?



The FHL Adopt-a-Student Program made coming to Friday Harbor a possibility for me. Because of it, I was able to study biodiversity and taxonomy from some of the best marine invertebrate zoologists in the world. I am incredibly grateful to my sponsor for his generous support and the ability to grant me this once-in-a-lifetime opportunity. This is an experience that has changed my life! It inspires me to also be generous with my resources to those who need them.

Therese Miller
University of Guam



The experience at FHL deeply impacted my career. It gave me new perspectives and ideas to work on my PhD program. Also, I am still in contact with all the friends I made in the course (students and faculty).

Raisa Campos Rizzieri
Stonybrook University

Doug and Maureen Miller have generously supported FHL students through the Adopt-a-Student Program for a number of years now. After participating in a group Zoom Adopt-a-Student introduction, Doug shared some impressions:

This year's class seemed exceptional in many respects, with diverse areas of scientific interests, different backgrounds and geographical diversity, and impressive ambitions and plans for the future. This all contrasts with the overwhelmingly academic-tracked students in my time there. There are so many more options and a variety of paths that come together now, and that is a very good thing.

The molecular and genomic approaches available now have amazing potential and are definitely the way forward. There's still so much of the basics to sort out (like which gene to use). Of course, cramming sample collection, remote sample analysis and data interpretation into a five-week session will always be a good challenge. It was so gratifying to see that the first step is (still) sitting on the dock, sorting a bucket of critters and puzzling over just what you've found.

Doug Miller, Professor (Retired) U Delaware, Adopt-a-Student Sponsor and FHL Grad Student, RA and TA, 1980–1984

You can help us support future students by giving to the Adopt-a-Student Program or its Endowment at fhl.uw.edu/about/community/

2023 COURSES

Spring Quarter (March 27 - June 2)

The ZOO-BOT PROGRAM
Students participate in all 3:

1. Marine Invertebrate Zoology
2. Marine Botany
3. Research in Marine Biology

SPRING MARINE STUDIES
Students select a combo of courses for a minimum of 12 credits:

1. Marine Mammals of the Salish Sea
2. Science Writing for Diverse Audiences
3. Indigenous Salish Sea History
4. Introductory Biology
5. Natural History of the Salish Sea
6. Marine Sciences Seminar

Blinks – NSF Research Internship Program for Undergraduates (mid June - early Aug)

Summer Session A (June 12 - July 14)

- Marine Botany: Diversity & Ecology
- Changing Coastlines: Ecological Principles, Historical Perspectives, and Indigenous Resource Management
- Larval Ecology

Summer Session B (July 17 - August 18)

- Fish Swimming: Kinematics, Eco-morphology, Behavior & Environmental Physiology
- Marine Invertebrate Zoology
- Ecology & Conservation of Marine Birds & Mammals

Early Autumn (2-3 weeks in Sept)

- Marine Biology in the Field

Autumn Quarter (Sept 27 - Dec 8)

AUTUMN MARINE STUDIES
Courses TBD

RESEARCH APPRENTICESHIP

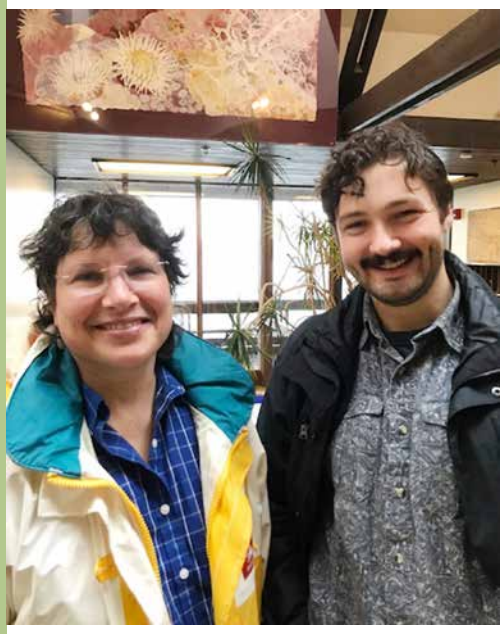
- Pelagic Ecosystem Function in the San Juan Archipelago

Please check for updated listings at *fhl.uw.edu/courses/course-descriptions/*

K-12 Program

We are so proud to share the good news that the FHL K-12 Science Outreach Program (FHLSOP) is going strong. Now in its 22nd year, the Program's outreach continues to bring the wonder of science to hundreds of Friday Harbor students every year. Beginning in kindergarten and continuing through high school, our outreach supplements the local teachers' curricula and offers amazing opportunities for hands-on experience!

This past year, Program Director Michelle Herko was thrilled to welcome Adam Rogowski as Program Assistant. Adam received his undergraduate degree from Macalester College in 2019 with minors in Biology and Environmental Studies. He has also been a kayak tour guide for 4 years, educating groups about the ecology, geography, history, and conservation efforts in the San Juan Islands.



This past year, we benefitted from generous funding from individual donors, as well as the Stocker Foundation and The Dean Witter Foundation. This fund is helping us in many ways including the purchase of much-needed plankton nets for the high school Oceanography project. In addition, we were able to upgrade essential equipment for the 5th grade water sampling program and have Adam modify it to our specific needs. Improvements like these strengthen the program, allowing students access to the latest equipment and techniques. We will also be able to purchase DNA extraction and clean up kits for the Invasive Mussel Project that we plan to do with the high school this winter. It is very satisfying to have the funds to be able to purchase the exact equipment needed for a project.

In addition to our September through June programming, every summer the FHLSOP offers a Young Investigator Prize to a talented local high school student. The "prize" is a paid internship working with an FHL researcher. This past summer, Eleanor Rollins was welcomed and appreciated by the FHL Carrington Lab.

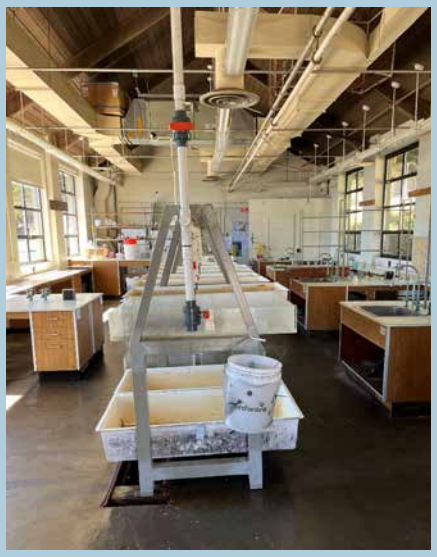
We are always looking for financial support for this program and are so grateful to the individual donors and family foundations that help us reach our students! To read more about the individual programs (by grade level) or to join in supporting our science outreach in the San Juan Island Community, please visit our website: **https://fhl.uw.edu/about/outreach/**

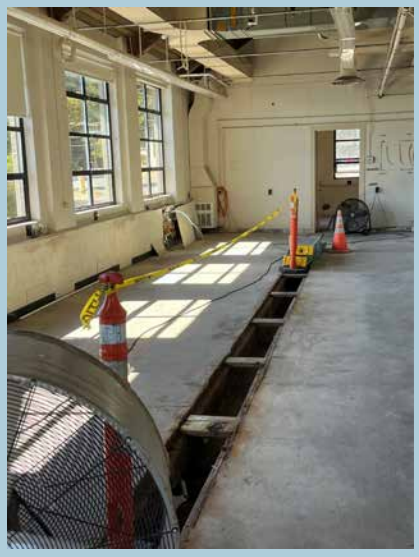
LAB 2 RENOVATION!

CREATING A MARINE GENOMICS CENTER

Many of FHL's buildings are almost 100 years old, including wet labs that were built in the 1920s and partially remodeled in the 1980s with new windows and wallboard – but even those 'new' features are now 40 years old, and are pretty tired! It is challenging to get funding for renovations, since UW Facilities must deal with hundreds of old structures on the Seattle campus, and renovations don't carry the donor appeal that new construction may have. Enter the National Science Foundation's (NSF) Field Stations and Marine Labs program! This branch of NSF will supply funds for infrastructure if the work will "expand capacity" – i.e. just renovating an old building and using it in the same way doesn't qualify for funding.

So, Adam Summers, Billie Swalla and Megan Dethier wrote a proposal to renovate Lab 2 and create a "Marine Genomics Center" with new genomics equipment, adding to the related equipment already in Billie's lab. Bernadette Holthuis, Maintenance supervisor Doug Engel and Megan Dethier worked extensively coming up with a plan for renovation that will allow the main room to be clean and dry (and suitable for sensitive equipment), put sea tables in the side room which used to hold the magnetic coil for neurophysiology work, replace the heat pump, tear out the 'nasty' rusty cabinetry, and buy mobile lab benches that can be moved around so that the building can be reconfigured for workshops, classes, or independent researchers. To our delight, last summer NSF awarded us almost $400k for this project, about half for the renovation and half for new equipment. Most of the renovation will be done by our own crew, and we will hire a postdoc who can help with choosing and setting up new equipment. The crew jumped right into the project; here are 'before' and 'during' pictures, but you'll have to wait until our 2023 newsletter to see the 'after'! ■





Research Funding

Carrington, Emily, PI; Co-PI: Matthew George, 2021 PSMFC/NOAA Marine Aquaculture Pilot Competition. Development of genomic markers for environmental resilience in mussels. 2021-2024.

Carrington, Emily, PI; Co-PIs: Matt Reidenbach, Mike Nishizaki, NSF, Biological Oceanography. Collaborative Proposal: Microscale interactions of foundation species with their fluid environment: biological feedbacks alter ecological interactions of mussels. 2021-2024.

Cramer, Allison, NSF. Understanding Substrate Mobility as a Disturbance in Hard Rock Marine Communities. 2021-2023.

Dethier, Megan, PI; Co-Pis: Adam Summers, Billie Swalla, NSF FSML. Genomics at the Shoreline. 2022-2024.

Dethier, Megan, Washington State Legislature. Kelp Recovery. 2021-2023.

Dethier, Megan, PI; Co-PIs: Jason Toft, Andrea Ogston, Estuary and Salmon Recovery Program. Quantifying a Scale Bar of Beach Functions at Target Sites identified by the Beach Strategies Project. 2021-2023.

Foe, Victoria, PI, The Seaver Institute. FHLTEM. 2022-2023.

Harvell, Drew, PI; Co-PIs: Maya Groner, Colleen Burge, Eileen Hofmann, NSF, EEID. Transmission Pathways of Seagrass Wasting Disease in Coastal Meadows. 2022-2025.

Harvell, Drew, The Nature Conservancy. *Pycnopodia* Epidemiology. 2022-2023.

Hodin, Jason, NSF EDGE program. Tools to advance genomic studies in sea urchins. 2019-2023.

Hodin, Jason, Nature Conservancy. Captive star rearing. 2021-2023.

Hodin, Jason, Co-PI; other Co-PIs: Matt Edwards, Brian Gaylord, Brent Hughes, Sean Place, Aurora Ricart, Mackenzie Zippay, California Seagrant. A multi-pronged approach to kelp recovery along California's north coast. 2020-2022.

Mumford, Tom, PI; Co-PI: Megan Dethier, University of Washington. UNrealized Critical Lanthanide Extraction via Sea Algae Mining (UNCLE-SAM). ARPA-E and Battelle PNNL. 2021-2023.

Ninokawa, Aaron, NSF. Ecological Consequences of Seawater Chemistry Modification by Ecosystem Engineers. 2021-2023.

Raymond, Wendell, PI, Jamestown S'Kallam Tribe. Effects of 2021 Heat Wave on Co-Managed Clam and Oyster Populations in Washington State. 2022-2023.

Summers, Adam, NSF. Research Experience for Undergraduates. 2022-2024.

Summers, Adam, University of Oslo. Fossil Temporal Dynamics of Phenotypic Selection & Life History Evolution. 2022-2024.

Summers, Adam, Co-PI, NSF. oVert: Open exploration of vertebrate diversity in 3D. 2017-2023.

Summers, Adam, NSF. 3D Morphology. 2018-2023.

Swalla, Billie, Evolution and Development of Marine Invertebrates. Funds Swalla Lab Research. 2022-2025.

Swalla, Billie, Seeley Fund. Funds hemichordate research done on Tetiaroa, Tahiti on whole body regeneration. 2014–2023.

Truman, Jim, PI; Co-PI: Lynn Riddiford, Howard Hughes Medical Institute. Crustacean Neurobiology. 2016-2025.

Wyllie-Echeverria, Sandy, Mike Ramsey, Paul Andersson Co-PIs, Washington State Recreation and Conservation Office. San Juan Islands Eelgrass Recovery Pilot. 2019-2023.

Wyllie-Echeverria, Sandy, Seacology. Reseed the Bell Point area of Westcott Bay with eelgrass seeds. 2021-2023. ■

THE Whiteley Center

The Whiteley Center has seen year-round use in 2022, especially during the summer, and we hope to run it again at full capacity in 2023! We were cautiously open during the early days of the pandemic but are now fully open and eagerly accepting applications. We encourage all past users to talk to your colleagues about how remarkable this space is for creativity of all kinds! We would love to see new users discovering this peaceful and productive center. This year we started offering limited numbers of fellowships to help defer costs. As our website says, "**Scholars wishing to work at the Whiteley Center but needing financial aid to make a visit possible are invited to apply for a Whiteley Fellowship, funded by the Arthur & Helen Whiteley Distinguished Fellow Endowment. We strongly encourage applications from individuals whose demographic is underrepresented in their field**." Below we include our 2022 fellowship recipients.

In addition, we are working on clarifying issues of availability and funding (including fellowships) for the Macfarlane Artist Studio. Keep an eye on the FHL website for updates! ■

Some of the Whiteley Scholars and their Projects:

Karen Anderson, Professor, School of Life Sciences, Arizona State University. **Prioritization of NeoEpitopes for Vaccine Delivery**.

Karma Dana, Associate Professor, School of Interdisciplinary Art & Sciences, University of Washington. **Book Project: Transnational Palestine**.

Joe Lott, Associate Professor, College of Education, University of Washington. **The Positive Social Change Challenge**.

Yu Luo, Assistant Professor and Barnett Chair in China Studies, University of Puget Sound. **Poverty Alleviation and the Forms and Futures of Ethnic Minority Culture in Guizhou, Southwest China**.

Nalini Nadkarni, University of Utah and UW, with **Michelle Frank**, Consortium for History of Science, Technology and Medicine. **The Tapestry Thinking Project: Connective Collaborations in Science and Diverse Societal Sectors**.

Jeff Vervoort, Professor, School of the Environment, Washington State University. **Isotope Evolution of the Depleted Mantle**.

Noah Whiteman, Professor of Integrative Biology and of Molecular & Cell Biology, University of California-Berkeley. **Book project: Most Delicious Poison: How nature's toxins change the world**. ■

2022 Whiteley Fellowship Recipients:

Michelle Frank, Consortium for History of Science, Technology and Medicine. Joined Whiteley scholar **Nalini Nadkarni** on the project described at left.

Kate Hopper, Ashland University adjunct. Worked on finishing her book proposal and revising short essays.

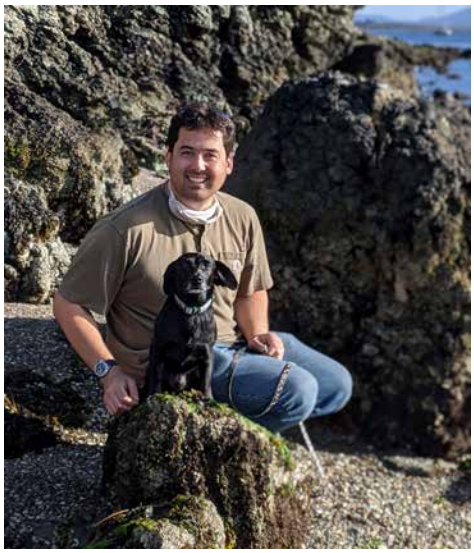
Kathyrn Hunt, Poet/Writer. Wrote poems to be included in her third collection.

Anne Kellor. Worked on "In Love": a lyrical, collage memoir that explores a woman's desire to know her full self.

Alicia Wassink, University of Washington, Linguistics. Labored on her book project: Social Networks and the Evolution of Pacific Northwest English. ■

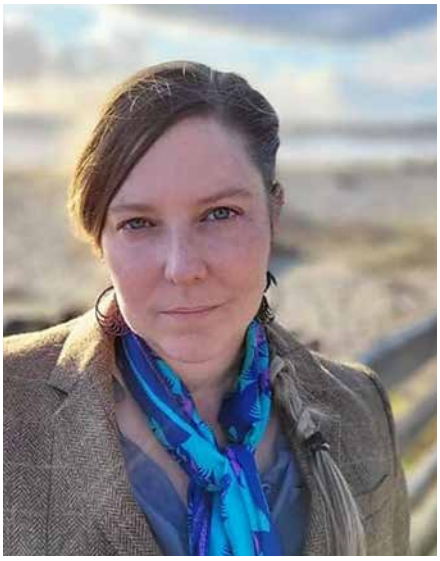
To learn more about the Whiteley Center and the Macfarlane Art Studio please visit **fhl.uw.edu/whiteley-center/**

FHL Postdocs



Aaron Ninokawa

Aaron is a global change scientist exploring the relationship between aquatic organisms and the chemistry of their environment. He received a bachelor's degree in Biology and Chemistry from California State University, Fullerton and a PhD in Ecology from the University of California, Davis working at the Bodega Marine Laboratory. During grad school, he examined the capabilities of foundation species to alter chemistry and the ways in which chemical perturbations impact both marine and freshwater organisms. By assembling aggregations of mussels, oysters, and sea urchins in the laboratory, he characterized the extent to which those species exacerbate ocean acidification within the interstices of the aggregations. Because ocean acidification modifies many chemical parameters, he also investigated which of those parameters are responsible for impacting organisms. He is currently an NSF Postdoctoral Fellow and testing whether different chemical modifications by foundation species change how species respond to ocean acidification. He and his wife are enjoying exploring the island and all the habitats it has to offer. ▪



Alli Cramer

Alli is a marine ecologist specializing in ecoinformatics. She studies how environmental variation impacts marine animals and communities by integrating ecological inferences across multiple scales. She received her bachelor's degree in Biology from the University of Oregon, a Masters in Applied Marine and Watershed Science from California State University Monterey Bay, and a PhD in Environmental and Natural Resource Science from Washington State University. Her first postdoctoral position was with the NOAA Southwest Fisheries Science Center and the University of Santa Cruz predicting the year to year abundance of spawning Green Sturgeon. Her research involves merging quantitative and computational techniques with traditional field work and experimentation. As an NSF Ocean Sciences Postdoctoral Research Fellow, Alli is studying the role of substrate mobility in intertidal communities, connecting the realized outcome of disturbance via wave forces on rocky substrates to community composition. Her teaching experience includes courses in ecology, oceanography, and data analysis and synthesis. Alli is pleased to be joining the Friday Harbor Laboratory community. ▪

POSTDOC PROGRESS

While successfully "launching" postdocs into successful careers is part of our mission as an academic facility, we do hate to see them go! All 4 postdocs described in our last 2 Intertidal Tidings are launching in the near future: Eliza Heery to a tenure-track job at University of Washington Tacoma; Lauren Simonitis to an NSF-funded postdoc at Florida Atlantic University; Brooke Weigel to an NSF-funded postdoc at Western Washington University (to study snow algae!); and Carla Narvaez to a tenure-track position at Rhode Island College. We hope, of course, that all will return here to do research or teach at some future date! There is a long tradition of FHL postdocs returning to the Labs with their own students.

Meantime, we are actively searching for a new postdoc who can take advantage of our under-construction Marine Genomics Center (see page 5). As we go to press, Billie Swalla and a search committee are looking over the materials of many enthusiastic applicants. We are excited to be able to increase our postdoc population again, since they are such a key element of the FHL community! ▪

THE FHL Advancement Board Celebrates its 25th Anniversary

We are so very grateful to this Board — an incredible group of individuals who support FHL's fundraising efforts.

The FHL Advancement Board (AB) was established in 1997 by FHL Director Dr. Dennis Willows. Its earliest members included Megumi Strathmann, Trish Morse, Bob Lundeen, Barbara Cable, Rick Vosberg, and Arthur Whiteley. Over its 25 years, fantastic Board Chairs have guided the Board's efforts including Chairs Barbara Cable, Don Peak, Trish Morse, Kevin Schofield, and Flo McAlary together with Vice Chairs Barbara Von Gehr, Carolyn Haugen, and Lesley Nilsson. Currently, the Board consists of 30 members from the diverse worlds of business, the arts, science, education and philanthropy! Their collective understanding and steadfast pursuit of new and traditional opportunities to support the FHL mission are reflected in the long list of FHL funds and endowments and, especially, the Adopt-A-Student Program. Their challenge for the future remains. As government funding to the University at all levels has diminished, private contributions are increasingly critical in providing funding for undergraduate and graduate students, postdocs, researchers, FHL-based faculty, and long-term support for an FHL Director.

We extend our heartfelt appreciation to the Advancement Board! We could not accomplish what we do without their commitment and dedication. ■

FUNDS & ENDOWMENTS

Adopt-A-Student Program Endowed Fund
Adopt-A-Student Program Fund
Comparative **Biomechanics** Fund
Anne Hof **Blinks** Fellowship in Marine Biology
Bloom, Shimek, and Raymore Endowed Fellowship
Beatrice Crosby **Booth** Endowed Scholarship
Calvin Postdoc Term Fellowship
Emily **Carrington** Endowed Student Travel Support Fund
FHL **Cycles of Ocean Life** Fund
FHL **Diversity, Equity and Inclusion** Initiatives Fund
FHL **Discretionary** Fund for Excellence
Ellie **Dorsey** Memorial Fund
Patricia L. **Dudley** Endowment
Janet L. **Fahey** & Richard R. **Vance** Endowed Graduate Fellowship in Marine Ecology
Robert L. **Fernald** Endowment Fellowship
Alexander **Fodor** Graduate Student Endowed Fellowship
FHL Ph.D. **Graduate** Support & TA Fellowship
Graubard Ph.D. Term Fellowship
Harvell/Greene Endowed Scholarship
Paul **Illg** Distinguished Lectureship
Paul L. **Illg** Scholarship Fund
Dynamic **Imaging** Maintenance Fund
K-12 Science Outreach Program Fund
FHL Science Outreach Program **K-12** Endowed Fund
Alan J. **Kohn** Endowed Fellowship
Eugene N. **Kozloff** Endowed Scholarship
Charles **Lambert** Memorial Endowment
Karel F. **Liem Fish Biology** Endowment
Macfarlane Artist Fellowship
Macfarlane Art Studio Endowment
Marine Life Endowed Faculty Fellowship
Marine Life Endowment
Marine Science Fund
William & Florence **McAlary-McFarland** Family Endowment for Student Support
Larry **McEdward** Memorial Fund
Mellon Research Training Faculty Scholarship
Trish **Morse Endowed Scholarship** – Japan / U.S. Exchange
Edward Sylvester **Morse Institute**
Frederic H. and Kirstin C. **Nichols** Endowed Graduate Fellowship
Nuts and Bolts Endowed Fund
Octopus Fund
Brooks and Suzanne **Ragen** Endowed Scholarship
Christopher G. **Reed** Endowed Fund
Research Apprenticeship Program Endowment
Graduate **Research Fellowship Endowment**
Mary E. Rice Endowment at FHL
Riddiford/Truman Endowed Professorship
Gordon and Helen **Robilliard** Marine Field Equipment Endowment
Pamela **Roe** Graduate Student Endowed Fund
Salish Sea Solutions Fund
Seagrass Conservation Project
FHL Research Fund: **Seastar** Wasting Disease
Kenneth P. **Sebens** Endowed Student Support Fund
Richard R. and Megumi F. **Strathmann** Endowed Fellowship
Turn Point Endowed Faculty Fellowship
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The Willows Professorship

The purpose of the FHL Dennis Willows Director's Endowed Professorship is to enhance the University's ability to hire and retain a distinguished director who will sustain FHL's international reputation for excellence in marine science. I am currently prioritizing this as my top fundraising effort. A substantial endowment will help us recruit an exceptional individual who can expand FHL's research expertise, attract new researchers and graduate students, and broaden FHL's teaching capacity. Down the road when I step down as director, FHL will be seeking a resident Director whose teaching and research are entirely at FHL. We're inviting friends and supporters to help grow the Dennis Willows Director's Endowed Professorship to make it an effective tool to support FHL in this critical fashion. You can help by making a contribution to the Dennis Willows Director's Endowed Professorship online via UW Giving.

- Dr. Megan Dethier, Director ■

Director's Message...

Out With the Old, In With the New!

There are limits to how much I believe in that call for action – I love the antiques inherited from my grandmother, and do tend to hoard field gear "that might be useful again sometime"…but FHL staff has become aware that we must clear out research and storage spaces to have enough room for our increasing numbers of researchers. Peggy started this process as soon as she took over the stockroom, investigating and eventually tossing or surplussing equipment that was permanently broken or hadn't been used in decades. This was so inspiring that we are attempting a parallel effort campus-wide: the Fall Purge Splurge. We are finding many old "treasures" in the process – jars of pickled critters from the 1960s, costumes from past Invertebrate Balls, and of course a ton of abandoned glassware, boxes of supplies stored by researchers who haven't been here in decades, etc. Out with the old!

An 'in with the new' activity that doesn't involve shoving out anyone or anything (but also requiring space) is an exciting planned addition to our local staff; the UW Provost is supplying funds for us to hire a Teaching Faculty member to be here at least 9 months a year and help us teach enough courses to support the rapidly increasing population of UW Marine Biology majors who need to come to FHL to fulfill course requirements. We hope to find someone who also wants to do research here and becomes truly resident!

Running parallel with this search is a brainstorming effort about how best to modify and expand our curriculum to increase the FHL undergraduate population during the academic year (especially spring and fall quarters), since "butts in the seats" (technically, student credit-hours) form the basis of much resource allocation at the University. This curriculum work, in turn, will be part of a larger strategic planning effort for all FHL, since we haven't had a new strategic plan since 2010. It's a good time, as part of "in with the new," to ponder where we are and where we are going.

Finally, a very sad (for us) but happy (for her) change that is coming; our amazing Advancement Officer Rachel Anderson is leaving FHL in February – this will be her last Intertidal Tidings! Rachel has done an incalculable amount for FHL since she started in this role almost 20 years ago – working with 4 different Directors, she has built up a tremendous, well-stewarded donor base. She has worked closely with the Advancement Board to greatly amplify student support – the majority of both our graduate and undergraduate students rely on donor-funded scholarships – and likewise our graduate student researchers rely on donor funds to help cover their expenses. Rachel's warm personality, remarkable empathy, and ability to communicate with people from many walks of life will be almost impossible to replace. But she is looking forward to more travel and being able to spend quality time with her family. We will miss her terribly! ■

Professor Megan Dethier, FHL Director

Photo: Kathleen Ballard

Current Administrative and Support Staff

Director: Dr. Megan Dethier
Operations Manager: Dr. Bernadette Holthuis
Business Manager: Alisa Schoultz
Advancement: Rachel Anderson
Student Services Manager: Mason Wiley
Office Manager & Whiteley Coordinator: Stephanie Zamora
Visitors Coordinator: Morgan Johnston
Fiscal Specialist: Diana Pieples
IT Specialists: Dylan Crosby and Don Ruffner
Maintenance Supervisor: Doug Engel
Custodial Supervisor: Lee Ann Walch
Marine Operations Manager: Eric Loss
Dive Safety Officer: Pema Kitaeff
Boat Safety Officer: Kristy Kull
Stockroom Manager: Peggy Combs
Dining Hall Manager: Laurie Spaulding
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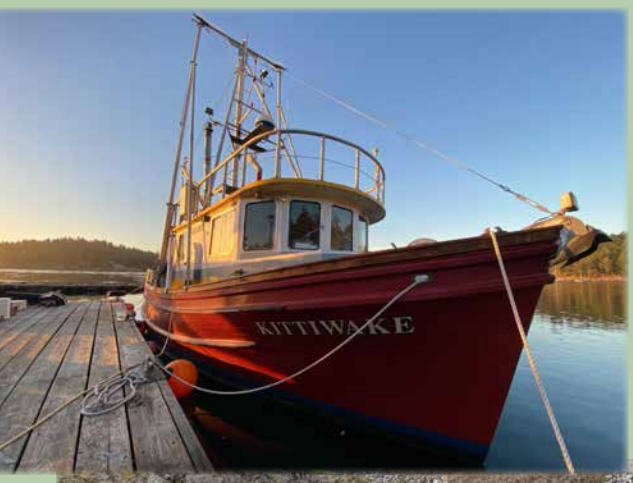

Clockwise from right:

The **Biodiversity & Integrative Taxonomy of Invertebrates** course in the field. Photo: Kevin Kocot

The **Pelagic Ecosystem Function in the San Juan Archipelago** apprenticeship sampling on R/V *Kittiwake*'s aft deck.

A practice dive rescue session during summer's **Marine Subtidal Ecology** course.

R/V *Kittiwake* early morning before a trip. Photo: Sadie Youngstrom