

### OBFS: A FULL PLATE—President's Corner

### - BY LARA ROKETENETZ

I had the opportunity to present at The Society of Integrative and Comparative Biology (SICB) Annual Meeting in Austin, TX in January. The topic of the presentation was "IDEA+ and OBFS: Using transdisciplinary strategies to create more inclusive spaces" and was a collaboration between myself, Drs. Tori McDermott, Phoebe Jekielek, and Rhonda Struminger. It was part of a symposium titled "Envisioning a Diverse, Inclusive & Safe Future for Field Biology" organized by Drs. Vanessa Hilliard Young, Robin Verble, and Corinne Richards Zawacki.

Topics for the day varied widely but also complemented each other in affirming and cohesive ways. I told the organizers that to me, the talks felt like the perfect potluck dinner where no one knows exactly what the others are bringing but the final meal is perfectly balanced. The

introduction was by Nia Morales, plenary speaker for OBFS's Annual Meeting in 2020.

Talks that followed included ones specific to LGBTQ+, women, and Black experiences in the field, as well as talks about increasing accessibility for other marginalized groups with both visible and nonvisible disabilities.

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ANNUAL MEETING 2023: COSTA RICA!

Banner photo: University of Wyoming NPS Research Station



### OBFS: A FULL PLATE — CONTINUED FROM PAGE 1

I was so impressed with the wealth of knowledge and experience in the room, and was particularly inspired by the student presenters who, quite frankly, sounded like total professional speakers!

I know I never sounded that confident and full of expertise when I was a student. It makes me hopeful for the future of our field, where everyone can feel included and seen and represented in nature and scientific research.

Presenting at the end of the day on the IDEA+ initiatives happening at OBFS made me all the prouder to be a part of this organization. From the Advancing Equity and IDEA+ Innovation awards, to the multi-faceted inclusive approach happening in the International Committee, to our Strategic Planning, membership survey, website redesign, collaborations, federal initiatives for advocacy, etc., OBFS has continued to step up to be a leader in creating a sense of belonging in the field. I look forward to our continued growth in this area and welcome your expertise and insights as we navigate this together.

Photo: Lodge fireplace at UW-NPS Research Station.

# UNIVERSITY OF WYOMING NATIONAL PARK SERVICE RESEARCH STATION—BY MICHAEL DILLON

Nestled on the shore of Jackson Lake at the historic AMK Ranch, the UW-NPS Research Station sits at the heart of Grand Teton National Park. Surrounded by distinctive natural features, vibrant histories, and diverse cultures, we aim to inspire discoveries, elevate experiences, and connect communities in the Greater Yellowstone Ecosystem. Established in 1946, UW-NPS is the oldest station operating within US national parks (https://doi.org/10.1093/biosci/biwo53).

Maintaining a research facility housed within a historic landmark presents special challenges. Recent renovations are preserving ranch history while updating amenities for researchers. The station will reopen this summer with updated infrastructure, including a new drinking water and wastewater system, renewed building exteriors, new roofs, and beautifully refinished floors in the Berol Lodge. We are also delighted to announce that fiber optic internet will be available in most buildings.

The UW-NPS team is excited to enter 2023 with Dr. Michael Dillon acting as the new interim director. Dr. Dillon will oversee station activities as we initiate a search for a new Director this year. We are preparing to reopen for the first time since 2019 and look forward to housing researchers and hosting the <a href="Harlow Sum-mer Seminar Series">Harlow Sum-mer Seminar Series</a>.

Exciting new research is already underway. UW-NPS is a key partner in <u>WyACT</u> – a 5-year \$20 million NSF EPSCoR project to understand and prepare for effects of climate change on water availability. UW-NPS will support and promote cutting-edge hydrological research with applications built from collaborative decision making by diverse stakeholders. Additionally, UW-NPS will house Terrestrial Ecosystems and Aquatic Technicians to evaluate changes in water flow and the consequences that follow.

Researchers can <u>apply for small grants</u> to jumpstart work at the station, <u>request housing</u>, familiarize themselves via online <u>annual reports</u>, or just stop by if you are in the park – see our website (<u>uwnps.org</u>) for more information.



# VIDEO TRAILERS DEMYSTIFY THE FIELD AND REDUCE STUDENTS' "FEAR OF THE UNKNOWN"

### —BY CONNER PHILSON

In the February 2022 OBFS Newsletter, Drs. Cora Baird (UVA Coastal Research Center) and Angie Patterson (Mt. Holyoke College), authored a story titled "Creating common ground to resolve misconceptions and prepare students for field experiences". Cora and Angie outlined how field stations can, and should, create short videos highlighting what field station work and life is like. These short video trailers can help bridge the differences found amongst students' prior outdoor experiences, situational knowledge, and cultural backgrounds...in other words, what to expect when living and working at your field station!

The Community Diversity Committee at the Rocky Mountain Biological Laboratory (RMBL) took this to heart, funding a student, Abi Zuber, in RMBL's Summer Education Program to co-create a trailer about the program. We focused on housing, dining, and life while spending a summer at RMBL. The video includes a drone tour of the station and videos of the sleeping accommodations, meals, shower and restroom facilities, research happening at the station, and recreation opportunities. A special thank you to Abi for all their hard work, the RMBL Community Diversity Committee for funding, RMBL staff for their support, and Cora and Angie for their suggestion. Find the RMBL video here!

Following Cora and Angie's call to action, we too advocate that OBFS member stations, and all FSMLs, create a video trailer unique to their station, ecosystems, and experience to help inform new students who may have never been to the field before. If you want to learn more about creating your own site trailer, visit these support links from The Virtual Field (OBFS) on video creation best practices and postproduction, LTER's video storytelling and production guides, and another example video.

Conner Philson (photo, right) is the Communications Chair for OBFS.

### Photos for Web Site Wanted

OBFS is revamping its web site! Share some of your best photos of people, highlights, activities and scenes from all types of stations. Send pictures via this form: https://forms.gle/KdiNKAEAUG4TM8iLA

- Paul Wetzel, Treasurer



# EMPOWERING UNDERGRADUATES: UC MERCED'S '¿FIELD CURIOUS?' PROGRAM—BY CITLALI PEREZ MORALES

Imagine being an undergraduate student and getting the transformative experience of delving into pristine wildlands accompanied by experienced researchers. Would that experience have encouraged you to explore careers in field research? The goal of ¿field curious? is to enhance undergraduate students' sense of belonging in the field and encourage them to ask questions about the natural world.

When Dr. Jessica Malisch, Associate Director of the UC Merced Natural Reserve System (UCM NRS), noticed strong student interest in field research but also a lack of applicants for the Swarth Fogel Undergraduate Research Fellowship, she knew something needed to be done. With the help of the UCM NRS team, she crafted a weekend-long immersion experience that included a "starter pack" of research tools, visits to two UCM NRS sites, and interaction with natural science professors, writers, and artists.

Malisch recalled that in early discussions with the concept team they all remembered their first field backpack and field notebook. "We want students to feel like they have the basic tools to feel comfortable applying for opportunities in the outdoor arena," she stated. Thanks to generous donations from Patagonia and Rite-in-the-Rain, students were outfitted with a backpack and field notebook along with items from UCM NRS including a knit hat, bucket hat, water bottle, sunglasses and sunscreen.

The weekend began with a visit to the Merced Vernal Pools and Grassland Reserve, where participants received guidance on field journaling from Dr. Tom Hothem and gained a deeper understanding of grassland ecology from Dr. Jay Sexton and Reserve Director Joy Baccei. They received hands-on training in skills such as data collection, observation, and hypothesis generation. The group were then greeted by the Yosemite Field Station Director, Dr. Breezy Jackson. They enjoyed a collegial dinner of veggie chili and cornbread, fostering friendships and teamwork among participants. (Continued on page 6)

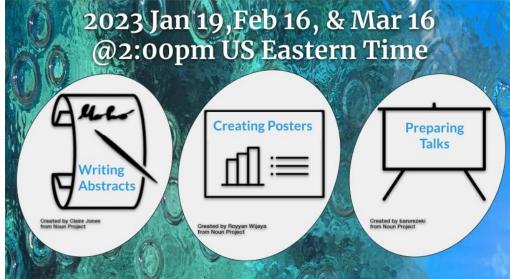




Photos: The group visits the giant sequoia (left) and the Vernal Pools and Grassland Reserve (right). Credit: Citlali Perez Morales

# Communicating Scientific Knowledge

Workshops\* on presenting scientific research to your peers



Live Zoom sessions with Aaron Ellison & Manisha Patel
Details at <a href="https://ssforss.com/workshops">https://ssforss.com/workshops</a>

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\*Each workshop = 0.5 CEU for Professional Certification @ESA\_org



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https://ssforss.com

## INTERNATIONAL COMMITTEE

### Virtual Café

February 24, 2023 13.30 ET Dr. Kelly Swing will discuss conservation opportunities at the Tiputini Biodiversity Station in Amazonian Ecuador.

Log in to join us:

https://uso6web.zoom.us/ j/85383718705? pwd=Vzg5bEpXN3J5Q044b nIoQXVocFFWUToq



### **Coming Virtual Events**

- ◆ Africa/Europe meeting about collaborations Friday, March 3
- ♦ Latin America Friday, March 17
- ♦ Canada TBD

Continued p. 6

Dr. Aaron Ellison, who recently retired as Deputy Director of the Harvard Forest in 2021, and collaborator Manisha Patel, have created a consulting company, Sound Solutions for Sustainable Science. S4 provides programmatic support and professional development workshops to field stations, undergraduate and graduate students, and individual researchers.

S4 is offering a series of online professional development workshops aimed at graduate students, postdocs, and others interested in gaining key skills needed for successful scientific careers. For more details, visit <a href="https://ssforss.com/workshops/">https://ssforss.com/workshops/</a> and register on Eventbrite.

Disclaimer: OBFS does not endorse particular products or organizations but does promote the voices and work of OBFS members, past or present.

# INTERNATIONAL COMMITTEE (CONT.)

We are accepting registrants for the **2023 Matching Program**.

Partner with other stations to share knowledge, establish a mentorship, or anything you like!

We provide some funding to help your vision come to fruition.

Must be an OBFS member in good standing and complete this form by Friday, February, 17, 2023: <a href="https://forms.gle/4XUEiYcnACegoCW18">https://forms.gle/4XUEiYcnACegoCW18</a>

Photo: Marisol Anzurez and Enkhtuvshin Amarbal journaling about their surroundings during the mariposa grove tour.

Credit: Citlali Perez Morales



### STRATEGIC PLAN UPDATE—BY CHRIS LORENTZ

The Board Committees recently assessed progress for Year 1 of the OBFS Strategic Plan (2021-2026), set priorities for Year 2, and are continuing to implement initiatives, including an overhaul of the website (Membership Committee), a Matching Program for International Field Stations (International Committee), and a Station Exchange program (Collaborations Committee).

The Outreach & Communications Committee will continue the work of the Ad-Hoc Advocacy Committee to finalize an infographic fact sheet to inform policymakers about field stations and a communications toolkit to empower and support field stations to engage policymakers on their local and state levels. A spring webinar will be scheduled soon to roll out these deliverables and offer training on how best to utilize them. The Annual Meeting Planning, IDEA+, Development, and the Governance & Sustainability Committees are also implementing actions items to achieve the goals and reach our vision to be an indispensable resource for the field station community, enhancing the value and sustainability of its members with fairness, integrity, transparency, and inclusivity.

If you would like to learn more about the Strategic Plan or get involved with one of the Committees, please contact the respective chairs at: https://www.obfs.org/governance. Thank you.

### '¿FIELD CURIOUS?' — CONTINUED FROM PAGE 4

Day two was spent exploring Yosemite National Park. After breakfast, the group traveled to the Mariposa Grove of Giant Sequoias and met artist Andie Thram and wellness expert Dennis Eagan. Andie and Dennis led a slow meander of the forest as they shared how they use the outdoors for wellness through painting, meditating, and sketching. The tour included natural history and research information by Dr. Jackson. The students were able to gain new perspectives, learn from experienced researchers and connect with nature in a way that they may have not had the chance to do otherwise.

Second-year chemistry student Mauricio Hernandez said, "My experience at the research experience weekend, ¿field curious?, was exuberating and insightful on the possible routes of research I can take." The weekend was summarized in a digital publication that participants could use as a reference to reach out to possible research mentors and to highlight next steps in their field research careers.

Dr. Malisch and the Natural Reserve System recently secured funds for an additional eight cohorts and are excited to move UC Merced toward the goal of becoming a Research 1 level university. "We want to empower students from diverse backgrounds and remove barriers that impede student success" said Malisch, "¿field curious? is more than just a weekend trip – it's the beginning of a new career trajectory".

### IDEA + SPOTLIGHT

Often, Black and African American scholars face discrimination and racialized violence when conducting scientific fieldwork. From cultural isolation due to a lack of representation and repeated microaggressions to hostile threats and physical violence, the consequences of these experiences don't just have lasting negative effects on one's career, but can be life-threatening. Moreover, societal injustices against the Black community, including disproportionate effects of COVID-19, have compounded the effects of racism that underlie the academy.

It's time we expand our collective approach to field safety to include mechanisms to prevent and respond to racism. This includes undergoing a culture shift to create more inclusive spaces at field stations. Conduct an annual racial risk assessment to better understand how your field station can prevent some of these barriers before they occur. We need to learn from and listen to the scholarship and calls for change authored by Black and African American colleagues to work to dismantle systems of oppression in field-based institutions. Celebrate and support the community efforts of scientists such as <u>Fieldwork Inclusive</u>, <u>Inc.</u> or <u>Black in Marine Science</u>.

"As stated by ecologist Christopher Schell, 'Our non-Black colleagues must fight anti-Black racism and white supremacy within the academy to authentically promote Black excellence. Amplifying Black excellence in ecology and evolution is the antidote for white supremacy in the academy.'"

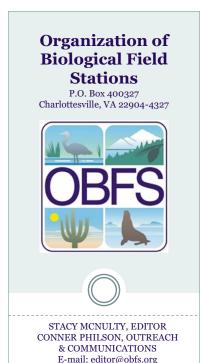
Photo: Students enjoy the field. Credit National Park Service, Fort Dupont 208. CC BY 2.0



If you are interested in additional resources, have content that to submit for the IDEA+ Spotlight, or are interested in joining the IDEA+ committee please email <u>diversity@obfs.org</u> or reach out to Tori McDermott (<u>vmmcdermott@alaska.edu</u>), or Phoebe Jekielek (<u>phoebe@hurricaneisland.net</u>).

# HOW TO FIND US www.obfs.org/ @joinobfs @OBFSFieldBio YouTube The Virtual Field





### IDEA + SPOTLIGHT — CONTINUED FROM PAGE 7

To learn more about Black and African American experiences in the field and the way forward forward, read the following articles and share them with your staff, students, and peers.

- Ali, H. N., Sheffield, S. L., Bauer, J. E., Caballero-Gill, R. P., Gasparini, N. M., Libarkin, J., ... & Schneider, B. (2021). An actionable anti-racism plan for geoscience organizations. *Nature Communications*, 12(1), 1-6.
- ◆ Anadu, J., Ali, H., & Jackson, C. (2020). Ten steps to protect BIPOC scholars in the field. *Eos*, 101(10.1029).
- Halsey, S. J., Strickland, L. R., Scott-Richardson, M., Perrin-Stowe, T., & Massenburg, L. (2020). Elevate, don't assimilate, to revolutionize the experience of scientists who are Black, Indigenous and people of colour. *Nature Ecology & Evolution*, 4(10), 1291-1293.
- Ramírez-Castañeda, V., Westeen, E. P., Frederick, J., Amini, S., Wait, D. R., Achmadi, A. S., ... & Tarvin, R. D. (2022). A set of principles and practical suggestions for equitable fieldwork in biology. Proceedings of the National Academy of Sciences, 119(34).
- Schell, C. J., Guy, C., Shelton, D. S., Campbell-Staton, S. C., Sealey, B. A., Lee, D. N., & Harris, N. C. (2020). Recreating Wakanda by promoting Black excellence in ecology and evolution. *Nature Ecology & Evolution*, 4(10), 1285-1287.

### RECENT PUBLICATIONS

Click the link to access

A Tool for Designing and Studying Student-Centered Undergraduate Field Experiences: The UFERN Model

We are excited to announce that our paper about designing and studying student-centered undergraduate field education is now fully available on the Bioscience website.

In addition to guidance for fostering effective undergraduate field education, the paper includes a comprehensive literature review about the distinctive aspects of field education that OBFS members will likely find useful. Access to complete article is available in Bioscience.

See also the <u>UFERN website</u> for examples of how OBFS members applied the UFERN model to reflect on their undergraduate field courses.

Please contact Dr. Kari O'Connell at <u>kari.oconnell@oregonstate.edu</u> or see <u>https://ufern.net/</u> for more information.



### **OBFS** President's Note

### BY LARA ROKETENETZ, OBFS PRESIDENT

There has been lots going on "behind the scenes" so to speak at OBFS. You can reveal the mysteries beyond the curtain by getting involved with any or all of the incredible initiatives being organized by our hardworking committees.

Of note, the Governance Committee chose our inaugural recipients of the Mini-grants; the IDEA+ Committee created a new rubric for the Advancing Equity Award and put out the call for nominations (please nominate your own station or another worthy colleague!); the Communications and Outreach and Collaborations Committees sent a delegation to Washington, DC to share the importance of Field Stations and Marine Labs (FSMLs) with US congressional leaders; and the International Committee put on not one, but TWO, regional meet-ups for Latin American and African/European stations over the last two months.

I encourage you to learn more about OBFS' work, participate in these initiatives in the future, and join our enthusiastic team of volunteers on the Board of Directors and Committees to continue to advance our collective goals at OBFS. Being actively involved in OBFS over the last several years has enhanced my own experience with the organization; I hope that you find this to be true as well when you join in the fun with the OBFS crew!

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Banner: Detail of Scott Adams' painting Map No. 2 (see page 7), courtesy The Schoolhouse Gallery galleryschoolhouse.com

### SALMON MAKES GOOD "CENTS" AT FIELD STATION -BY LISA BUSCH

Sitka Sound Science Center had a wonderful surprise this year that came in an uncanny way.

Silver Bay Seafoods, a locally owned fish processing company with plants all around Alaska, donates to the Science Center, one penny for every can of salmon it produces. This year there was a dip in the canned market, but Silver Bay had a good year with salmon catches statewide exceeding expectations. The company decided to donate generously to an organization it believes in – Sitka Sound Science Center. Owner Rich Riggs designed a scavenger hunt for SSSC Director Lisa Busch to locate the check – over \$450,000!! – found at the weighing station at the playground next door to the field station. The funds are the rarest of donations – unencumbered dollars for operations. This contribution will support a plethora of research and science education activities.



# A scavenger hunt results in netting a big catch

The One Cent for Science Program was developed shortly after a board of directors training in which board members were taught that they don't have to ask their friends for money they can simply introduce the director to their friends, and she can make the official ask. One board member, a local contractor, asked, "So all I have to do is introduce you to people?"

During a break from the training, he ran into the owner of Silver Bay and set up a meeting with the director. The meeting entailed a proposal for this One Cent for Science program. Since that time the company has donated between \$40-140,000 annually. This year was a lot more!

Left: SSSC Director Lisa Busch receives a check from Silver Bay Seafoods.

### OBFS GOES TO WASHINGTON —BY CONNER PHILSON & SHANE WADDELL

"Change doesn't come from Washington. Change comes to Washington." Taking this quote from former President Barack Obama to heart, four OBFS members went to Washington DC in late April for Congressional Visits Day (CVD) to bring about change in the form of increased research funding for the National Science Foundation (NSF). NSF has long supported field stations directly via the Division Biological Infrastructure and via grants to the users of field stations.

Last year's CHIPS and Science Act specifically points to Field Stations and Marine Laboratories (FSMLs) as a critical piece of national infrastructure and mandates federal support. The Act resulted in \$9.9 Billion of NSF funding in 2023, the largest NSF budget in history. However, with rapidly rising inflation, the buying power of NSF funding is not keeping pace. The looming US debt limit crisis and subsequent legislation passed in the US House of Representatives proposing to decrease U.S. federal spending by 8.1% in 2024 threatens NSF funding. Now, more than ever, it is important for OBFS to advocate for science and field stations.

Partnering with the American Institute of Biological Sciences (AIBS), Jennifer Seavey (Shoals Marine Laboratory), Shane Waddell (University of California-Davis NRS), Rebecca Kauten (Iowa Lakeside Laboratory Regents Resource Center) and Conner Philson (UCLA & Rocky Mountain Biological Laboratory) participated in three days of science policy and communications training and visits with US Senators, Representatives, and their staffs. As part of these meetings with over 20 congressional offices across seven states, we asked for \$11.9 billion US for the NSF in 2024.

The meetings were successful, with offices on both sides of the aisle acknowledging the important role of research funding for the US's strategic agenda. In these meetings, we highlighted how FSMLs facilitate effective and efficient use of taxpayer dollars, advance the next generation of scientists, foster trust between scientists and local communities, and enable US leadership in global challenges such as climate change, wildfires, flooding, conservation, and public health.

OBFS partners with AIBS annually to make these CVD meetings possible and a great success. It is a great opportunity to learn new skills, hone your messaging, and participate in democracy. Consider participating next year. In the meantime, get involved with OBFS' Outreach & Communications Committee, which works on field station advocacy year-round!

Conner Philson (cphilson@ucla.edu) is a PhD candidate at UCLA; Shane Waddell (smwaddell@ucdavis.edu) is Associate Director at UC Davis.

### In Brief

Bodega Marine Reserve in California was featured in a short radio interview recently about renewing a long-term lease with Sonoma County to allow for research and class use of tidelands habitat adjacent to their site.

# OBFS Advancing Equity Award

Please consider nominating your peer field stations for the OBFS **Advancing Equity** Award (formerly the **Human Diversity** Award), which provides recognition for unique activities, programs, or approaches (funded or unfunded) that increases the involvement, engagement, and sustainability of underrepresented groups in field science.

For more details, please see: <a href="https://www.obfs.org/human-diversity-committee">https://www.obfs.org/human-diversity-committee</a>



# IDEA+ SPOTLIGHT: CREATING RESPECTFUL COMMUNITIES WITH CODES OF CONDUCT —BY HALEY DUNLEAVY

It can happen in the blink of an eye. Someone says an offensive comment around a bonfire, makes a racial microaggression in the lunch line, or worse. When someone's behavior causes harm at your field station or marine lab, it's critical to respond quickly and appropriately.

Codes of conduct can help. They create a shared understanding of expected behavior for your station's community while simultaneously providing resources and clear reporting pathways for those who are targets of misconduct. In the best case scenario, they prevent misconduct from occurring. In the worst case, they provide a pathway to action to ensure someone's bad behavior stops. But what makes for an effective code of conduct and how do you draft it?

The first step is to consider how you hope visitors and staff behave at your station. This can cover a wide range, including interactions with one another and local communities, expectations for operating vehicles, or ethical considerations for research. When drafting these behaviors, ADVANCEGeo recommends breaking them into two categories: expected and prohibited behaviors.

Next, prepare for when someone behaves inappropriately by identifying reporting pathways. As much as we hope incidents won't occur, chances are they will. When your station's staff or visitors are targets of misconduct, they need to know what options are available to them.

Clearly state to whom and when people can report. Provide essential contact in-

formation for multiple reporting options, both on and off-site. Include who is notified of reports and what information is shared. Additionally, if you or your staff are mandatory reporters to your home institution, offer alternative confidential options, such as <a href="https://doi.org/10.1001/jhep.2015/">The Fieldwork Initiative</a> or <a href="https://doi.org/10.1001/jhep.2015/">THRIVE Lifeline</a>, a Trans-led crisis text line, staffed by people in STEM.

Then, give insight into what happens after a report is made. List both supportive actions that people can request and disciplinary actions that may be taken against perpetrators. Briefly describe potential options for investigations.

Finally, enforce it. Refer to your code of conduct in station orientations and informational handouts. Post it in common use and privately-accessed areas, like toilets and showerhouses. And be ready to respond when a report is made.

For more guidance on drafting or revising your station's code of conduct, check out resources from <u>FieldFutures</u> and <u>AD-VANCEGeo</u> or refer to this <u>example outline</u> from Anne Kelly's session on field safety and inclusion at the 2021 OBFS annual meeting. Use Toolik Field Station <u>code of conduct</u>, revised in 2022, as a sample to get started on your own.

Contact Haley Dunleavy: hdunleavy@alaska.edu

If you are interested in additional resources, have content to submit for the IDEA+ Spotlight, or are interested in joining the IDEA+ committee please reach out to Tori McDermott (<a href="wmmcdermott@alaska.edu">wmmcdermott@alaska.edu</a>), Phoebe Jekielek (<a href="mailto:phoebe@hurricaneisland.net">phoebe@hurricaneisland.net</a>) or email <a href="mailto:diversity@obfs.org">diversity@obfs.org</a>



Photo: Dr. Jorge Ramos of Jasper Ridge Biological Preserve, California

### **Transitions**

Peter McCartney, National Science Foundation Program Officer, retired after working with the Field Station and Marine Lab community, the Long-Term **Ecological Research** (LTER) team and other NSF programs. The Capacity: Field Stations contacts are now Reed Beaman (rsbeaman@nsf.gov) and Matt Herron (mherron@nsf.gov).

OBFS thanks Peter for years of support and good humor.

# JORGE RAMOS—ESA EDUCATION AWARDEE – BY PHILIPPE COHEN

Odum Award recipients demonstrate their ability to relate basic ecological principles to human affairs through teaching, outreach, and mentoring activities. This year's Odum Award for Excellence in Ecology Education was presented to Jorge Ramos, instructor in the Department of Biology at Stanford University and executive director of the Jasper Ridge Biological Preserve.

Ramos manages the preserve's day-to-day operations, research grants and supervises a team of scientists, educators, technology specialists and operations personnel to accomplish the mission of understanding the Earth's ecosystems through research, education, and protection of natural resources. Prior to taking the role of executive director, Ramos served as the preserve's associate director for environmental education and was the co-instructor of the keystone course "Ecology and Natural History of Jasper Ridge," which has trained students and community members to become docents of the preserve since 1975.

### Jorge Ramos received the 2023 ESA Odum Award for Excellence in Ecology Education

Ramos is an engaging educator with a passionate dedication to science outreach. Before working at JRBP, Ramos worked at Conservation International as a science advisor and manager to develop community conservation carbon projects for the organization's Blue Carbon Initiative. He has served in leadership and outreach roles for many nonprofit organizations, educational programs, and community groups, including Latino Outdoors, Save the Redwoods League, the National Science Foundation's GK-12 Sustainability Schools Program, the American Geophysical Union's Mentoring365 program, Organization of Biological Field Studies and the Society for Advancement of Chicanos/Hispanics and Native Americans in Science.

He has advanced educational initiatives and provided mentorship within ESA. He has been an inspiring mentor in the SEEDS program for over 16 years, including as a national advisory board member; past chair of the ESA Student Section and Environmental Justice sections; and was a steering committee member for EcologyPlus, a pilot program supporting career pathways for diverse college students and early career scientists.

Ramos is an active leader and communicator within the profession. Working at the intersection of ecology and education has allowed Ramos to uniquely advance the field of ecology through hands-on research and educational experiences with a focus on diversity, equity and inclusion.

# FROM FLORIDA TO ALASKA: A STATION EXCHANGE EXPERIENCE —BY DUSTIN ANGELL



Above, left: Dustin Angell during his station exchange; Right: SSSC's Emily Klawitter feeds salmon in the saltwater pens. Credit: Dustin Angell

"Aren't you worried a bear will eat you? You know it is going to be cold, right? Will you really do a polar plunge with the staff?" These are the questions your family asks if you are a Floridian heading to an Alaskan field station. My answers: no, yes, and maybe.

This spring I had the good fortune to participate in OBFS's inaugural Station Exchange Program (SXP), available for researchers and educators. This meant two weeks as a de facto member of the Sitka Sound Science Center's education team. This opportunity was well-timed, because at Archbold Biological Station in Venus, Florida we were currently re-envisioning our educational outreach programs. The Center is the gold standard in educational outreach and - although intimidated - I wanted to know their alchemical formula. How did they manage to provide so many different K-12 programs, what did their programs look like in action, and how did their place-based research inform their education activities?

The Center staff was so welcoming that I soon felt like a long-time employee. I participated in 6 staff meetings, 7 orientations, 3 field work excursions, and a variety of educational activities. It was a heady two-weeks, but I eventually figured out the Center's formula. Yes, they had an educational outreach staff several times larger than ours, but focusing on that metric alone would be to miss the mark. That these staff were well-trained, mentored, and exhibited a "can-do" attitude gets closer. Their secret ingredient wasn't even their place-based science. Instead, it was a total commitment to community need, constantly asking: what do the local people need, how can we help, and who can we work with to meet this need? From this all else grew and flourished.

It was either that or the weekly polar plunge.

I've returned to Archbold with inspiration and ideas, and the hope that we can host one of their staff in the future. When the SXP opportunity comes around again, I recommend you consider taking the plunge and applying. Say "yes" and jump on in. If you're like me, you won't regret it.

Above: Mark Adams (photo credit coastalstudies.org) Below: Swimmer, 2017



Art courtesy The Schoolhouse Gallery <u>galleryschool-</u> house.com

Contact: ajenness@coastalstudies.org

# CCS SCIENTIST/ARTIST-IN-RESIDENCE —BY AMY JENNESS

The Center for Coastal Studies has named Mark Adams as the first Scientist/Artist-In-Residence. Employed by the Cape Cod National Seashore as a cartographer for 30 years, Adams has collaborated frequently on CCS projects as a scientist. Now the Center is thrilled to establish a new chapter in the partnership and Adams will create public programs that merge the Center's scientific work with the creative arts.

Adams' first CCS program will be with the Fine Arts Work Center on Feb. 3 as part of the FAWC First Friday series where he will create a map of the land and sea that highlights areas of our research and invite participants to add their own words or artwork.

"I love the idea of creating new knowledge by combining art and science," said Sarah Oktay, former Center for Coastal Studies Executive Director. "Uniting the creative processes with science has been part of the Organization of Biological Field Stations initiatives and is regaining momentum with Nancy Lowe leading a new group of interested FSMLs to build upon the prior work of the #ArtSciConverge collaborative Faerthen Felix and Jeff Brown, formerly of Sagehen Creek Field Station, led for OBFS (artsciconverge.blogspot.com/). Given that we are in Provincetown, Massachusetts where art is part of the fabric of the community makes perfect sense for the Center."

Adams, based on Cape Cod and Martha's Vineyard since 1987, said his experience in ecology, coastal geology, scientific illustration, and field sketchbooks was evident in the 2017 solo museum exhibition at the Provincetown Art Association Museum, "Expedition" and a 2021 installation at the Cape Cod Museum of Art: "11,000 years of Landscapes and People of the First Light."

After leaving the National Park Service last year, his focus is on using painting, printmaking, and public art installations to instigate an immersive experience of the marine environment. Adams' art features layered images of maps, personal notebook pages, text, data and images of animals and friends. Adams' volunteer work with refugee relief organizations has spurred his interest in the intersection of climate change and human ecology. He studied biology, landscape architecture, printmaking and photography at the University of California, Berkeley, the California College of the Arts, and he frequently workshops with artists at the Fine Arts Work Center in Provincetown. Adams also teaches at the Castle Hill Center for the Arts (Truro MA), the Fine Artwork Center, the Provincetown Art & Artist's Museum and the Provincetown School.

# PIERCE CEDAR CREEK INSTITUTE OFFERS NEW RESIDENCIES FOR ARTISTS — BY SARA EDELMAN

Imagine a place where the quiet solitude of nature awakens your creative spirit. A place with that "up north" feel located close to home. A place with access to hundreds of acres of flora and fauna, individuals with expert knowledge about nature, and a supportive atmosphere to nourish your inner artist. That special place is Residencies at Batts Cottage located at Pierce Cedar Creek Institute, a nature center, environmental education center, and biological field station. Tucked away in the idyllic small town of Hastings, MI, the newly renovated Batts Cottage is open to writers, artists, photographers, and musicians of all backgrounds and genres. In the past it was used by researchers, artists, and writers. Retreats are available April – September on a one-, two-, or three-week schedule.

Batts Cottage is the only original building on the Institute's property. Located a half-mile east of the main campus, which includes an earth-bermed visitor center, education building, maintenance facility, and additional rental housing. Since the Institute's opening in 2001, the property has grown to 850 acres of wetlands, forests, marshes, streams, lakes, and prairies with almost 10 miles of trails.

Residents are not required to provide programs or displays for the Institute's members and guests but are welcome to speak to staff about being involved. The small towns of Hastings and Delton are approximately 12 miles away and the Grand Rapids International Airport is 35 miles away. For more information and how to apply, go to https://www.cedarcreekinstitute.org/batts\_rental.html.

Contact <a href="mailto:sedelman@cedarcreekinstitute.org">sedelman@cedarcreekinstitute.org</a>

### HIRAM COLLEGE'S SECRET STATION, NORTHWOODS — BY JIM TOLAN

Among our collegiate OBFS friends, Hiram College is lucky to have its 550-acre James H. Barrow Biological Field Station just 2 miles away from main campus in northeast Ohio.

I'm sure many of you are envious of such a close proximity. However, we know sometimes you can't be far enough away! To offset that convenience and to diversify research and learning opportunities, Hiram thought why not go big and establish a second field station 600 miles off campus in Michigan's Upper Peninsula (UP)? And so it was done in 1976, when a group of Hiram students, under the leadership of Professor Rea Knight, began construction on what would become a grouping of six sleeping cabins and a lodge on the shore of Cherry Lake just south of Munising, MI (see photo, page 9).

Almost 50 years later, this 14-acre off-grid outpost, known as the Northwoods Field Station, serves as a Waldenesque classroom for immersive courses of study in any discipline, as well as a diversely-unique field station surrounded by Hiawatha National Forest and Pictured Rocks National Lakeshore. *(continued p. 9)* 



Above: Hiram College's Northwoods Field Station, Michigan

### **HOW TO FIND US**

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**YouTube** 



The Virtual Field



### Organization of Biological Field Stations

P.O. Box 400327 Charlottesville, VA 22904-4327





STACY MCNULTY, EDITOR E-mail: editor@obfs.org

### HIRAM NORTWHOODS, CONTINUED

Many Hiram students can't get enough of Northwoods, and we recently made the trek for a spring break get-away to play in the snow. The UP did not disappoint with over 2 feet on the ground. Plenty of cross-country skiing and cold-weather primitive living was enjoyed by all. We also proved that every season in the UP is bug season as millions of snow fleas dotted the white canvas, and we all agreed that we prefer these to the usual biting suspects!

Hiram College is open to collaboration and to sharing our field station resources for the mutual benefit of Hiram students and yours as well!

Contact: Jim Tolan (tolanje@hiram.edu)

### RECENT PUBLICATIONS

port of instructor(s).

Click the links to access; journal subscription may be required

Treibergs, K. A., D. Esparza, J. A. Yamazaki, and M. K. Smith. 2023. Journal reflections shed light on challenges students face in an introductory field biology course. Ecosphere 14:e4509. DOI: 10.1002/ecs2.4509

The authors analyzed journal reflections from undergraduates in an introductory field biology course, identifying four categories of challenges:

- 1. Scientific (concepts, field methods, and data)
- 2. Logistic (e.g., timing of the course and equipment)
- 3. Conditions (difficulties with organisms, inclement weather) and
- 4. Additional challenges across an array of student difficulties. Students with the least prior outdoors experience were more likely to report a logistic challenge. Recommendations to support students include: discuss the purpose, context, and value of the scientific practices that students perform prior to the field lab; consider location and duration of the lab to adjust logistical challenges; outline expectations and prepare students for activities; destignatize fear of failure via social sup-

"What students were doing in the field lab was more important than student gender, race/ethnicity, or prior outdoors experience in influencing the type of challenge a student might experience."

Harvey Lillywhite, former Director of Seahorse Key Marine Laboratory (FL), has a new book "Discovering Snakes in Wild Places: Stories of Passion, Adventure & Science" highlights the wonder and excitement of field work and field stations.





### **OBFS** President's Note

### BY LARA ROKETENETZ, OBFS PRESIDENT

I hope that you are all getting excited about our upcoming Annual Meeting at the Organization of Tropical Studies' La Selva Research Station. I certainly am! I am excited to visit a new country, explore new habitats, to see old friends and to make new ones, but mostly I am excited to \*just\* visit another field station.

Over the years, I have been lucky enough to visit several other FSMLs – some local, through regional meetups, some more distant through our amazing Annual Meetings. It is through these visits that I have found mentors and supportive colleagues, gotten fundraising and curriculum ideas, and have been inspired to try new and creative ways to problem solve at my own station.

This summer I took advantage of the field station network to visit Hiram College's Northwoods Field Station in the Upper Peninsula of Michigan and was rewarded with a bog walk to see pitcher plants, lots of mosquito bites, and a pink lady slipper orchid blooming just outside my cabin door.

Soon, I will be traveling with a class of undergraduates to a field station in Maine for a coastal ecology class and I am eagerly awaiting the experience of exploring a vastly different ecosystem than my own. I have discovered that being IN the place really allows for gaining a deep understanding of what it means to be OF the place if you are willing and open to slowing down, listening, and observing.

With attention and intention, we can build stronger connections between people and places making our network stronger in the process. I hope you'll find time to visit and learn from other FSMLs in your corner of the world, too.

P.S. I haven't even come close to Philippe Cohen's monumental achievement of visiting over 100 stations, but I'll keep trying!



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Photo: Pink lady's slipper (Cypripedium acaule), credit Lara Roketenetz



### NET CARBON NEGATIVE FIELD STATION —BY TARA ELLIOTT

Hurricane Island Center for Science and Leadership is poised to complete construction on the Hurricane Island Field Research Station, a net carbon negative facility that will be a new home for marine science in Penobscot Bay in the Gulf of Maine's waters. It is a well-documented fact that Gulf of Maine waters are warming faster than 99% of ocean's worldwide, but there is little data to shed light on the causes and consequences of these changing ocean temperatures. The Field Research Station will serve as a state-of-the art science facility and a hub to connect local students, teachers, scientists, community leaders, and fishermen in shared efforts to better understand our marine environment.

Uniquely situated at the confluence of the Eastern Maine and Western Maine Coastal Currents, as well as the discharge from the Penobscot River, Hurricane Island's site is on a gradient of estuarine and marine habitat and is perfectly positioned to establish and participate in monitoring studies and research on climate change, fisheries biology, fisheries management, alterations in Penobscot Bay, and the wider Gulf of Maine ecosystem.

The project is helmed by OPAL Architects, OPAL Build, and Timber HP, Maine-based partnered organizations that are leaders in the field for sustainable construction and design. The building will be constructed using Timber HP's wood fiber panels and will be equipped with sensors that will monitor the building's moisture, temperature, and insulation values, providing valuable data on these sustainable building technologies in extreme weather conditions.

Hurricane Island connects students and teachers to hands-on environmental learning opportunities, bringing research into the classroom and bringing learners into the field. It is our mission to integrate scientific research and education on a Maine coastal island to develop leaders prepared to address environmental issues in a rapidly changing world. Once completed, this new facility will be equipped with a flowing seawater lab, a dry lab, and a classroom space, allowing for higher education institutions, independent researchers, and middle and high school students and teachers to engage in hands-on marine research in an ecologically rich setting.

In celebration of this new science facility, <u>Hurricane Island Field Research Station</u> will host a Ribbon Cutting Ceremony on Saturday August 5th, 2023 at 11am EST. The new Director of Research, Anya Hopple, will provide remarks. For information, or if interested in attending, please contact <u>telliott@hurricaneisland.net</u>. *Tara is Grants & Events Manager for Hurricane Island*.

### JASPER RIDGE BIOLOGICAL PRESERVE WEL-COMES EDUCATOR —BY JORGE RAMOS

Stanford University's Jasper Ridge Biological Preserve recently hired Dr. Katherine Glover as its Associate Director for Environmental Education. Dr. Glover has over 15 years of experience in environmental education and outreach, ranging from her most recent position at the University of Maine as Research Associate in the Climate Change Institute.

Dr. Glover has extensive experience in developing programs for K-12, public and undergraduate audiences, including as an instructor in U. Maine's Women, Gender and Sexuality Studies department where she centered the intersection of gender, climate and nature in her college-level courses. Dr. Glover received a PhD. in Geography from UCLA.

Dr. Glover sees Jasper Ridge "as an ideal setting to deepen our understanding of how to best manage landscapes today so that they are resilient to future change." Her experience with field research, outdoor experiences, natural collections, and outreach programs in topics including paleoecology and fire, will allow her to lead Jasper Ridge's education activities and integrate those activities into research and stewardship.

Dr. Glover also looks forward to empowering students to apply knowledge of the physical world around them to their work and lived experiences. She will contribute her expertise to build multidisciplinary curricula with faculty, advising student research projects, and work with docents who will go on to have long relationships with the preserve.

To read more about Dr. Glover, please visit the Jasper <u>Ridge</u> <u>blog and news space</u>.



Jorge Ramos is Executive Director at JRBP.

### **Help Wanted:**

### Finance / Investment Committee Members

The Finance Committee and the Investment subcommittee meet periodically to make recommendations on how OBFS funds should be invested and handled.

We are looking for new members: could that be you?

If you have an interest in or knowledge of investment portfolios including Environmental, Social, and Corporate Governance (ESG) considerations, or want to learn about nonprofit budgetary processes and endowment fund creation and management, please apply by sending your name and email to our Treasurer, Paul Wetzel, at treasurer@obfs.org.

No prior experience is necessary.

Environmental, social, and corporate governance (ESG) is an approach to investing that takes environmental issues, social issues and governance issues into account when deciding which companies to invest in.

### IDEA+ SPOTLIGHT: DIVERSITY STATEMENT

We are excited to present the diversity statement developed by the IDEA+ committee. We present this statement to the organization at large to create the space to provide feedback on this statement before we adopt and publish it on our website. Please share feedback via <u>our survey</u> or email us. The committee will discuss all feedback and make the final decision on what is implemented.

Please note: This is a living, breathing statement. OBFS recognizes that continued evaluation of its efforts related to diversity, equity, inclusion, and access is crucial for dismantling oppressive systems in FSMLs.

OBFS Mission: The mission of the Organization of Biological Field Stations (OBFS) is to help member stations increase their effectiveness in supporting critical research, education, and outreach programs. We pursue this goal in a manner that maximizes diversity, inclusiveness, sustainability, and transparency.

To achieve the OBFS and strategic plan goals to prioritize diversity, inclusiveness, belonging and transparency, the IDEA+ committee has adopted the following statement.

Field stations and marine labs (FSMLs) must be truly inclusive and embrace and advance diversity everywhere – in every program, every class, and every area of operation. Despite our current commitments to equity and access, our collective history is built on the efforts of populations that have been historically marginalized

and denied equal access to Science, Technology, Engineering, and Mathematics (STEM) fields and FSMLs. For many FSMLs, their existence and resources are predicated upon colonial and oppressive practices that continue traditions and implicit activities that make true equity difficult to achieve. In the present day, marginalization, systemic oppression, and inequity of opportunity persist within society at large.

FSMLs must understand and acknowledge our history and the current cultural context in which we live while focusing on helping shape a future where individuals of all backgrounds and identities have access to and feel they belong within the opportunities provided by FSMLs.

In order to achieve our goals, we must:

- (1) ensure that a diversity of thought, experience, and approach are represented in all facets of FSML enterprises;
- (2) create inclusive spaces at FSMLs to uplift and support participation and financial stability of currently underrepresented groups;
- (3) ensure opportunities and benefits provided by the education, research, and conservation activities associated with FSMLs represent the demographic diversity, diversity of thought, and diversity of experiences in the societies in which we operate.

Recognizing this, our statement seeks to clearly articulate why diversity and inclusion are important, explain how these

(Continued on p. 5)



Top: Advanced Training Program member at The Dawes Arboretum planting a tree in the 2023 reforestation site.

(Continued from page 4)

values support the mission of FSMLs, and illustrate our commitment to prioritize diversity, inclusiveness, belonging and transparency. To see the goals we have set to advance our commitment to furthering diversity, equity, inclusion, and belonging refer to the OBFS strategic plan.

To submit content or join the IDEA+ committee, contact Tori McDermott (vmmcdermott@alaska.edu), Phoebe Jekielek (phoebe@hurricaneisland.net) or email diversity@obfs.org.

# PLANTING COMMUNITIES FOR THE FUTURE — HOLLY LATTEMAN

The Dawes Arboretum, established in 1929, has seen many changes in almost 100 years. Our mission has remained consistent, enriching lives through the conservation of trees, nature, and history. The Dawes Arboretum has a deep history rooted in research, conservation, and wise management of natural resources. Our founders focused on plants suitable for Ohio's climate, experimentation with forestry techniques and a mission to share outcomes with the public.

Today, the original focus remains with added relevance for the most pressing environmental issues of our day: researching plants that are suitable for a changing climate. Research shows that one of the most influential ways to combat climate change is through reforestation. Planting diverse communities is the answer, and The Dawes Arboretum is doing just that. Our restoration planning process includes annual large-scale reforestation plantings to convert exhausted agricultural lands into healthy forests of the future. Since 2015, The Arboretum has restored over 100 acres to prairie habitat and forested wetlands with vernal pools.

Planning for restoration begins 2-3 years in advance. Species are collected as seed from wild populations and grown to planting stage in our greenhouses. Seeds are collected from southern ecoregions of their range as a strategy to "climate match" future conditions, enhancing survival. Next, soil surveys are conducted at the site of restoration to determine the species most suited to thrive. Trees are then selected for the proper environment.

To plan for a holistic future forest, herbaceous seeds are hand-collected and sown within the entire site to provide a thriving ground cover. The prairie species complement the young forest by minimizing competition from invasive species. Prairie also retains soil moisture and reduces erosion, while capturing carbon in extensive root systems. Trees are then protected in tubing for the first three years to protect from wildlife browsing. The site is maintained by mow management and survival data is collected on each tree annually.

Researchers look to answer a new question with each reforestation site, knowing that the process will take years to answer. This research has demonstrated that planting design is equally as important for survival as effective management. Annual management of vegetation and monitoring is key to reforestation.

The Dawes Arboretum is rooted in securing trees for the future and serves as a living laboratory to learn the best approaches to reforestation. Supporting these research projects are teams of conservation scientists and early-career professionals, learning the essentials of ecological restoration. Please visit our field station at to learn more about how we are preserving rare species and collections for the future.

Holly Latteman is the Science & Conservation Manager.

### OBFS LIFETIME MEMBERSHIP

An OBFS Individual Lifetime Membership is now available.

OBFS now offers a Lifetime Membership for <u>individuals only</u> for a \$1,000 USD payment. That amount can be made in one payment or a series of ten consecutive, monthly \$100 payments. Individual lifetime members will continue to receive all the benefits of membership with no additional payment. In addition, they will be recognized on the OBFS web site and in the OBFS annual meeting program (unless Lifetime Members prefer to remain anonymous).

Our inaugural Lifetime Member is Dr. Eric Nagy from the University of Virginia's Mountain Lake Biological Station. Eric suggested this as a way to support the organization that we all love. We thank Eric for his foresight and generosity and encourage other members to consider a lifetime membership.

All Individual Lifetime Membership funds will be invested in an OBFS endowment account that supports the long-term sustainability of OBFS. Your donation is tax deductible to the fullest extent allowed by law. OBFS has membership options for both stations and individuals.

### OBFS Individual Lifetime Membership for individuals now available

Yearly station membership dues are based on a progressive fee structure aligned with the field station budget. Individual membership for those not associated with a field station is \$50 per year.

To initiate your OBFS Individual Lifetime Membership, please contact Treasurer Paul Wetzel (<a href="mailto:treasurer@obfs.org">treasurer@obfs.org</a>) and make payment on our <a href="mailto:OBFS Donation Page">OBFS Donation Page</a>. The cost of Lifetime Membership will be periodically reviewed by the Board of Directors.

OBFS reserves the right to discontinue lifetime membership if an individual does not abide by the OBFS Code of Conduct. Reviewed and Approved by the OBFS Board on 30 May 2023.

Submitted by OBFS Development Committee Co-Chairs Brian Kloeppel and Sarah Oktay.



Map base

Map of UNEC Field Stations.

Mazat

### FIELD STATION NETWORK IN MEXICO FORMS —BY SULA VANDERPLANK

During July 28<sup>th</sup> and 29<sup>th</sup> 2023, ten representatives from regional field stations in northwest Mexico met in Loreto, Baja California Sur, hosted by the Center for Environmental Studies (CEMA), Eco-Alianza de Loreto. Participants traveled from the states of Sonora, Baja California and Baja California Sur and spent two full days together discussing research and outreach priorities. There were an additional three virtual participants from Bahia de Los Angeles and Sonora who presented their field stations during the zoom session.

On the second day we met with OBFS President Lara Roketenetz; Rhonda Struminger, cochair of OBFS International Committee and co-director of CICHAZ, A.C. Centro de Investigaciones Científicas de las Huastecas "Aguazarca"; and Suzanne Olyanik of UC Davis who has been CEMA's bridge to OBFS. The meeting resulted in the formation of a regional network "UNEC" Union Noroeste de Estaciones de Campo or Northwestern Union of Field Stations, with the mission: "UNEC exists to unite efforts and amplify the voice of environmental conservation and research in the northwest of Mexico through scientific communication and community participation."

# All participants who were physically present signed up to become individual members of OBFS!

Several agreements were reached and the group plans to meet again virtually in August and in person at the Next Generation of Sonoran Desert Researchers summit in Alamos 2024.

: Gila National Map of UNEC participants Forest Alar 2 vistas L El ultimo cambio se hizo hace 9 días Tucson Las Cruce: Tijuana Ensenada Ciudad Juárezo Add capa + Sharing • Get a preview Sierra Vista BAJA ✓ UNEC stations.xlsx LIFORNIA T Stylish individual SONORA No se pueden mostrar 2 filas en el CHI mapa. Correct the errors marked in red Hermosillo in the data table. Open tabla de datos Close Rancho Ancon Reserva de Centro de Estudios del Medi... la Biosfera Navojoa El Vizcaíno Rancho Cacachilas Rancho Encinalito Prescott College Kino Bay Ce... Los Mochis Center for Marine Biodiversit.. **OGuamúchil** Terra Peninsular CALIFORNIA SUR 💡 Siempre Viva

 $Sula\ Van derplank: sula.van derplank @ecoalianzaloreto.net.$ 

# AGU SESSION: LONG TERM ENVIRONMENTAL SCIENCE FOR LONG TERM SUSTAINABILITY

Please consider submitting AGU abstracts to the session: Long Term Environmental Science for Long Term Sustainability before the abstract submission deadline of August 2.

Session Abstract: Long term research programs, such as the Long Term Ecological Research Network, Critical Zone Collaborative Network, field stations, and ecological observatories enable sustained relationships between researchers, ecosystem managers, planners and engineers with the potential to improve both ecosystem management and environmental science. This session will focus on surfacing examples where such relationships have altered management practices or research questions. We aim to focus discussion on the factors that lead to rapid and effective development and implementation of evidence-based tools, practices, and nature-based solutions to environmental challenges.

While long term programs are a fertile ground for developing these relationships, submissions from all sources are welcome.

Convenors: Diane McKnight, CU Boulder; Marty Downs, LTER Network Office; Nick Haddad, Michigan State University, Kellogg Biological Station LTER and LTAR; Sarah McCord, USDA ARS Jornada; and Hillary Swain, Archbold Biological Station

Marty Downs, downs@nceas.ucsb.edu



Register now for the
OBFS Annual Meeting
La Selva Biological Station,
Costa Rica
September 11-16, 2023

Attending in person?
Register by August 6!

Virtual attendees:
register by September 1

We'll see you there!

Left: Prairie strips are an innovative water, soil, and biodiversity conservation practice that is being studied by LTER and LTAR investigators while being implemented on active farms, such as these on Tim Smith farm in Eagle Grove, IA.

Photo credit: NRCS/SWCS photo by Lynn Betts via Flickr (https://flic.kr/p/ Vk9nfG) CC BY 2.0



### THE VIRTUAL FIELD—NEW AWARD

A new RCN-UBE award from National Science Foundation was awarded to The Virtual Field team. The project, funded from 2023-2027, is titled *Undergraduate Virtual Experiences as a Recruitment Tool for Underrepresented Students in STEM.* 

The Principal Investigators are: Dr. Angelica Patterson of Mount Holyoke College, Itchung Cheung of Oregon State University Hatfield Marine Science Center, Dr. Chris Mead of Arizona State University and Dr. Sara Kassis of Sonoma State University at the California State University.

<u>The Virtual Field</u> is a collaborative with OBFS that brings educational experiences at field stations and marine laboratories around the world.



# PLYMOUTH MULTIMEDIA PRESENTATION — BY SARA EDELMAN

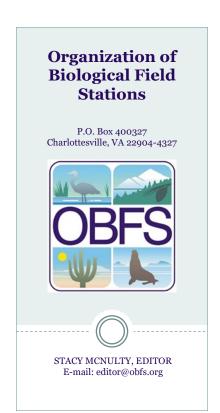
The Museum of the White Mountains at Plymouth State University in Plymouth, New Hampshire is excited to announce our upcoming exhibition, "Extending Ecology: Meaning Making with the White Mountains," on view October 7 – December 15, 2023.

This exhibition features multimedia interpretations and visual artwork made through an ongoing Oika collaboration between ecologist and cultural communicator, Dr. Rich Blundell, artist Rita Leduc, and Hubbard Brook Experimental Forest.

By presenting an overview of their two-year long collaboration, the exhibition underlines how deep, intimate engagement with the natural science and creativity of a place can offer and extend insights into more ecological ways of being in the world. For more information on Oika, visit oika.com.

A series of programs with Leduc, Blundell, and invited guests will run throughout the course of the exhibition; check the museum's website for more details on virtual or in-person public offerings at <a href="https://www.plymouth.edu/mwm">www.plymouth.edu/mwm</a>.

The Museum of the White Mountains at Plymouth State University enriches the campus community and the broader public through high-quality exhibitions and stewardship of diverse collections to cultivate multifaceted engagement with the past, present, and future of the White Mountain region.





### **OBFS** President's Note

### BY LARA ROKETENETZ, OBFS PRESIDENT

It's hard to believe that the time has come for my last message in the newsletter as president of OBFS. As I've said before, serving in this role has been one of the highlights of my career and has been an absolute honor and a pleasure.

The conference at La Selva was beyond my expectations in terms of the thoughtfulness and care that the planning committee and the staff and leadership of Organization of Tropical Studies brought to our time together. Being surrounded by like-minded colleagues in a place of such exquisite beauty was an incredible experience. I know we were all amazed by seeing sloths, white tent bats, red-eyed tree frogs, toucans, leafcutter ants, monkeys, fer-de-lance, peccary, Montezuma oropendolas, as well as an incredible diversity of tropical plants, the list goes on and on! Our guides around the property enhanced the experience for each of us through their individual expertise and knowledge.

Beyond the incredible beauty of Costa Rica, I was equally excited to see and be with all of you that made it to the conference this year. I am truly amazed by the quality of the people that make up our organization. I heard feedback throughout the week that OBFSers were some of the friendliest, most fun, and kindest folks. I couldn't agree more! OBFS is truly a community unlike any other professional organization.

We share freely and enthusiastically, we are generous with our time, *(continued on page 7)* 

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Banner: Participants at the 2023 OBFS Annual Meeting, La Selva Bio- logical Station, Credit:

Philippe Cohen



# MPALA RESEARCH CENTER—SCIENCE AT THE EQUATOR — BY NELLY PALMERIS

Mpala Research Center, a renowned African research facility, thrives amidst the Laikipia plateau in central Kenya, situated just north of the Equator and northwest of Mt. Kenya (0.292° N, 36.898° E).

Established in 1994 through collaboration with esteemed partners like Princeton University, the Smithsonian Institution, Kenya Wildlife Service, and the National Museums of Kenya, it encompasses thousands of acres of unfenced semi-arid savanna. This region, celebrated as a biodiversity hotspot, boasts 550 bird species and 100 mammal species, including elephants and rare treasures like Grevy's zebra, reticulated giraffe, and African wild dogs.

As a living laboratory, Mpala Research Center invites scientists to explore curiosity-driven questions and address global research issues such as conservation, climate change, biodiversity, ecology, agriculture, human-wildlife interactions, and public health within a natural setting.

Visiting researchers and students benefit from:

- ♦ 48,000 acres of research space for ecological experiments
- Collaboration with local communities, ranches, and conservancies
- Support from skilled field assistants and lab technicians
- Logistical assistance, including research permit application

guidance and comfortable accommodation

- Well-equipped <u>laboratory facilities</u>, including genomics, isotope and endocrine labs
- 24-hour access to internet, electricity, and water supply
- Convenient, clean, modern, professionally supported working spaces and lecture halls to conduct classes, workshops and meetings (continued on page 3)







### (continued from page 2)

The number and diversity of <u>research publications</u> produced each year by researchers and students at Mpala is a testament to the vibrant research community. Long-term projects include:

- Ungulate Herbivory Under Rainfall Uncertainty (UHURU): led by Prof. Rob Pringle (Princeton University), Prof. Jake Goheen (University of Wyoming) and Prof. Todd Palmer (University of Florida), this project seeks to understand how the mammals shape the landscape, and vice versa
- Kenya Rangelands Wild Dog & Cheetah Project: Led by Dr. Rosie Woodroffe (Zoological Society of London Institute of Zoology, U.K.), this project aims at devising approaches for promoting sustainable coexistence between people and the critically endangered wild dog populations
- Princeton Zebra Project: Led by Prof. Daniel Rubenstein (Princeton University). This project primarily focuses on the ecology of endangered Grevy's zebra

With hundreds of species, Mpala is a biodiversity hotspot

- Kenya Long-term Exclosure Experiment (KLEE): Led by Prof.
   Truman Young (University of California, Davis): Explores
   the separate and combined effects on savanna ecology of herbivory by cattle, elephants, and other wildlife species, as well as fire
- <u>Vulturine guineafowl (VGF)</u> led by Dr. Damien Farine (Australian National University): This project uses advanced technology and computational techniques to monitor vulturine guineafowl, uncovering insights into collective movement and social dynamics.

Mpala Research Center stands as a beacon of exploration and collaboration, where nature's mysteries are unlocked, and knowledge knows no bounds.

Contact: Nelly Palmeris, Chief Operations Officer, nelly.palmeris@mpala.org

Photos credit: Victor Sayialel, Communication manager MpalaLive!

# IDEA+ SPOTLIGHT: COMMUNITY GEAR CLOSETS —BY HALEY DUNLEAVY

Whether it's a rain jacket and pants to keep dry in the Southwest's monsoons or boots that can withstand -40°C temperatures, high-quality gear is essential for safe, productive fieldwork.

However, the cost of specialized gear can quickly add up, becoming a barrier for those new to the field. Without it, participants could, at best, experience a bad day. At worst, their safety is at risk. Insufficient access to proper gear can result in newcomers leaving field science, especially for people who face other forms of marginalization or already lack a sense of belonging.

Field stations can help overcome this barrier by curating and maintaining a gear closet, available for all visitors to rent the equipment and clothing they need at no or very low cost. So, how can your station get started?

### **Identify a location**

First, pick a spot where you'll host your closet. Find a location that's well lit, accessible throughout your open seasons and easy to find. Be sure that it has room to grow, which brings us to step two...

### **Solicit donations**

There are likely at least a few pieces of new or lightly used gear collecting dust in your station's storage area. Reach out to your community for items from past projects or courses to donate to the closet. Draft a dream inventory list for potential donors. Hopefully, you'll be presently surprised by the amount of items you receive. Look into grants from professional societies or non-profits that support IDEA+ initiatives in STEM.

### Advertise it to your community

Make sure people know the closet exists. Put an inventory list on your station's website and orientation handouts. Let folks know if they can make reservations for specific items or if you'll operate on a "first come, first serve" basis.

### Maintain the space and the gear

Once it's created, don't neglect it. Organize your collection, making it easy for folks to find what they need. Create a check-out system and return policy to keep track of how it's being used. Ensure that gear is in working, quality condition.

Not only is it essential for safety that your items are performing as intended, it will also send the message that everyone deserves access to quality field gear, regardless of their financial situation. To spread the added burden of maintaining it, host gear closet parties and make it a community effort.



Credit: Modified from www.freepik.com

If you are interested in additional resources, have content to submit for the IDEA+ Spotlight, or are interested in joining the IDEA+ committee please reach out to Tori McDermott (<a href="mailto:vmmcdermott@alaska.edu">vmmcdermott@alaska.edu</a>), Phoebe Jekielek (<a href="mailto:phoebe@hurricaneisland.net">phoebe@hurricaneisland.net</a>) or email <a href="mailto:diversity@obfs.org">diversity@obfs.org</a>

Contact: Haley Dunleavy is Communication & DEI Manager at Toolik Field Station, hdunleavy@alaska.edu

### COLLECTIONS AT SAGEHEN — BY FAERTHEN FELIX AND ERICA KRIMMEL

Like many field stations and reserves, UC Berkeley - Sagehen Creek Field Station, California has small legacy natural history collections of local plants and animals. Our total number of herbarium, insect, bird and mammal specimens number less than 4,000. In the past, these collections were typically used only for on site student education and researcher reference.

But years ago, we decided that they held far broader potential and began digitizing our collections, and combining them with ongoing volunteer-provided live observations through the <u>iNaturalist</u> platform. We presented on our early efforts at several OBFS annual meetings, along with <u>iDigBio</u>.

The digitization project has been a fun, gradual, ongoing background effort. The backlog of legacy work is now completed, and we continue to add new specimens—mostly plant vouchers and a few insects—at a slow pace. Three years ago, we added ourselves as a data provider to GBIF, which jumpstarted our ability to track research publications: and just since then, Sagehen's physical collections have been cited in almost 300 scientific papers by researchers all over the globe. Along the way, the program has also grown into the backbone of Sagehen's volunteer program, providing opportunities for students, interns and the general public to engage meaningfully with the Station and its science.

If you'd like to learn more about the project and recent results—or to contact us about it—we updated our Collections Activity Report this summer: <a href="https://bit.ly/46NOg9P">https://bit.ly/46NOg9P</a>.

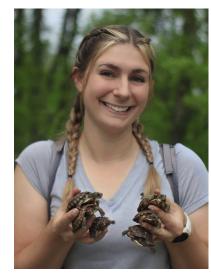
Contact: Faerthen Felix, ArtSciConverge Coordinator at Sagehen Creek Field Station, faerthen@gmail.com

### FAITH KUZMA: BOX TURTLE CHAMPION — BY SARA EDELMAN

Grand Valley State University master's student Faith Kuzma began researching the population decline of the eastern box turtle (*Terrapene carolina carolina*) at the Pierce Cedar Creek Institute, Michigan in 2019. Kuzma said little was known about box turtle population, but the population likely has declined over time.

To increase turtles' survival in the wild, Faith and her team put them in a protective environment for a period of time. "Head starting" is a conservation method used with animals that are vulnerable during their juvenile stage. Through her research she learned the head started turtles have higher survival rates.

Faith said the experience has made her a better scientist in every aspect. What surprised her most was how much planning and "behind the scenes" work went into research. "I got experience writing grants, applying for



permits, ordering supplies, and planning fieldwork activities." She also received practical experience that will prepare her for her future such as practicing presenting scientific research via oral and poster presentations and writing scientific papers. In the future, Faith hopes to continue field-based research with direct implications for conservation and management.

### INDIO MOUNTAINS RESEARCH STATION — BY VICENTE MATA-SILVA

Indio Mountains Research Station (IMRS) is located at the southern corner of Hudspeth County, in the Trans-Pecos region of Texas. The station is operated by University of Texas at El Paso (UTEP).

Currently, the station encompasses 41,200 acres of pristine Chihuahuan Desert landscape, including aquatic and riparian ecosystems of the Rio Grande. Newly included habitats are protecting fish, additional mammals, reptiles (including birds), and numerous aquatic invertebrates.

IMRS serves students, researchers, and educators primarily from UTEP, and institutions from the El Paso region. With the recent addition of a National Science Foundation-funded wet laboratory, the station provides opportunities for more research and educational activities.

So far, this year the station has hosted REU students, biology and geology classes, and

researchers working on subjects regarding geology, malacology, herpetology, entomology, and ornithology.



For more information on visiting IMRS, visit <u>utep.edu/science/indio/</u> and <u>www.facebook.com/groups/1167540990406903</u>.

Contact: Co-Director Dr. Vicente Mata-Silva (vmata@utep.edu)





Above Right: IMRS. Below Left: Field Biology students from UTEP during a Maymester 2023 field trip. Credit: Matthew Montoya. Below Right: Yucca faxoniana at IMRS. Credit: Vicente Mata-Silva

### ECOTONES: ARTS AT FIELD STATIONS & MARINE LABS — BY NANCY LOWE

There are several resources which will be available on the Members Only section of the obfs.org website (a good reason to keep your membership in good standing!). First, Artist Leah Wilson and I have been working on guidelines for starting or strengthening an artist in residence program. Highlights from this resource include:

- Starting a new residency
- Building relationships with artists and arts organizations
- Criteria for selecting artists, setting up jurying panel with artists and scientists
- · Building meaningful interdisciplinary connections and cross-training between artists and scientists
- Process vs. product: residency or commissioned work?
- Compensation of artists
- Exhibits and other dissemination
- Funding strategies
- Some useful references about arts at FSMLs

Second, we provided an artist-in-residence application template to help identify artists that are a good fit for your site and its programs. Third, we will post a slide presentation showcasing artists who have worked at FSMLs as well as other artists working at the intersection of art, science, and environment. Finally, member sites can be listed on the new dedicated arts webpage: <a href="www.obfs.org/field-stations/art/">www.obfs.org/field-stations/art/</a>. To add your site or edit an existing entry, email <a href="mailto:scienceandance@gmail.com">scienceandance@gmail.com</a>.

Many artists find residencies through the <u>Artist Communities Alliance directory</u>. Ecotones: Arts at FSMLs is listed on the ACA directory, which links directly to the obfs.org Ecotones page. These webpages will greatly broaden the pool of artists who participate in arts programs at FSMLs.

Ecotones need funds for FSML fees, artists' stipends, artists' travel, and other costs; also needed are folks with experience recruiting major donors. Please let me know if you have any leads, or would like to contribute to this fundraising effort.

\*Contact: Nancy Lowe, sciencecandance@gmail.com\*

### **OBFS PRESIDENT'S NOTE**

(continued from page 1)

talent, and treasure, and we care about each other and each other's field stations. Just like our OTS nature guides, your participation in OBFS makes the organization richer in more ways than one. The workshops, concurrent sessions, plenary talks, awards, and candid conversations around the delicious meals made the conference something to remember and I am appreciative of your efforts.

I will once again encourage you to take part in the leadership of OBFS by joining us on committees — you can contribute to our community by helping to guide the future direction of OBFS. The organization depends on a strong membership for sustainability and resilience as we navigate this changing world together. Thank you all for the amazing opportunity to serve you and OBFS in this leadership role.

I am proud of what we accomplished together during my tenure, and I will be forever grateful to the support and friendships from all of you, my exceptional colleagues.



Lara (in orange) with some of the OBFS Board Members. Credit: Angie Patterson

### STONE LAB'S REU FELLOWSHIPS — BY J. BRIAN ALFORD

The Ohio Sea Grant Program at the Ohio State University supported four Research Experience for Undergraduate (REU) students during summer 2023 at Stone Laboratory in Put-in-Bay, Ohio.

Alex Kushner was selected from OSU, and under the tutelage of Dr. Justin Chaffin from Stone Lab, she investigated the bioavailability of dissolved reactive phosphorus (DRP). Her study focused on how much bioavailable DRP algae can uptake when nanoparticles called colloids are present in the water. Results from this experiment contradicted expectations with future experimentation needed in high flow conditions.

Emma Pierce, from Notre Dame University, determined if Round Goby boldness is inhibited or changed by different types of turbidity. She also studied how the presence of a predator, smallmouth bass, impacts boldness and foraging in these conditions.



Kevli Sheth is from Centre College, Kentucky. Kevli was mentored by Ms. Lisa Kutschbach-Brohl from the Lake Erie Islands Conservancy. She researched pollinator habitats and compared the habitat quality, native plant richness and coverage, and insect families present across the pre-monitored and postmonitored sites.

Juan Flores is also from Notre
Dame University, and he conducted
a survey of the mammals of the
Bass Islands and was co-supervised
by Dr. Amy Alford and Renee Fultz
of the Lake Erie Islands Nature and
Wildlife Center. Using a combination of camera traps, scat surveys,
live traps, acoustic monitoring, and
visual encounters, Juan was able to
provide species diversity estimates
for forest preserves.

The students gave presentations to the public—their first time presenting their own research. They are working on journal manuscripts that will hopefully be published soon. The REU program at Stone Lab is supported by endowed funds from private donations.

To learn more, go to: ohioseagrant.osu.edu/research/reu.



Above Left: Student Kevli Sheth sets up a Malaise trap for sampling insects. Above Right: Stone Lab REU students and supervisors.

Contact: Brian Alford, Assistant Director, alford.109@osu.edu



Dr. Reed Beaman.

### **Transitions**

Dr. Reed Beaman is the new US National Science Foundation Program Officer responsible for Capacity: Biological Field Stations and Marine Laboratories (FSML) programs. He has degrees in botany from the University of Michigan and the University of Florida. Dr. Beaman spoke at the 2023 OBFS meeting.

Contact: <a href="mailto:rsbeaman@nsf.gov">rsbeaman@nsf.gov</a>

Dr. Peter McCartney received the **Friend of OBFS Award**.

He is the former Program Director in the DBI (Division of Biological Infrastructure) and BIO (Directorate For Biological Sciences) at the National Science Foundation.

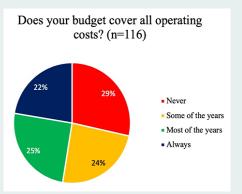
### OBFS MEMBER SURVEY SUMMARY — BY PAUL FOSTER

The results are in from the survey OBFS commissioned last year. The goals of the survey were to:

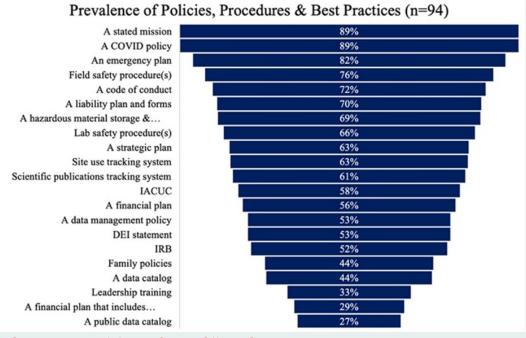
- 1) Provide the necessary input from the membership for the implementation of the Strategic Plan;
- 2) Develop better understanding of the membership for grant writing, 1- pagers, and outreach activities;
- 3) Assess the current representation of diverse communities including but not limited to racial, ethnic, socioeconomic, and gender status;
- 4) Compare changes in the membership since the Strategic Vision survey was conducted in 2013, and
- 5) Develop a better understanding of member station retention and recruitment of new member stations.

Dr. Amanda Lindell was contracted by OBFS to conduct the survey, which was developed following numerous conversations with OBFS committees and board members. In September 2021, the survey was emailed to 1,521 representatives from more than 500 field stations worldwide. OBFS received 206 responses for a response rate of 13.5% with approximately 25% of OBFS member stations participating.

Key findings include that at the majority of stations, budgets rarely cover all operating costs (Figure 1). There was a desire that OBFS develop more resources on financial sustainability including how to better diversify revenue sources. A second finding was that DEI policies are gaining recognition. More than 75% of stations have a field safety procedure, among other advances (Figure 2). However, among respondents (who might be assumed to hold leadership positions at field stations), the sample was skewed racially toward White or Euro-Americans (86.2%) and gender identity as Cis-gender Man (56.6%).



Finally, the survey showed that 58% of respondents find their membership dues somewhat to very valuable. Membership services, opportunities for collaborations, and the annual meeting all ranked highly as benefits of OBFS membership. Plans are underway to write an article summarizing survey results for a broader audience.



Contact: Paul Foster, AIBS Liaison, pfoster@bijagual.org

# KALAMOS ISLAND BIOLOGICAL FIELD STATION — BY THEODORE KARFAKIS

Kalamos Island Biological Field Station is located in the inner Ionian archipelago area in Western Greece. It is situated in the lands of the traditional community of Kalamos island in the main village that bears the same name.

The area that surrounds the station is considered important for wildlife and has a number of protected areas that include land, sea and freshwater habitats. The station sits on the botanical diversity hotspot for all the Ionian islands (Kalamos island).



Since 2015 the station has been run by Terra Sylvestris, a local non-profit organization focused on baseline biodiversity studies to catalyze the creation and management of a community conserved area.

Facilities include an open air field lab, dorms, camping site, communal kitchens and bathrooms. The station can host up to 18 people.

The focus of the work at the station is vertebrate and vegetation monitoring on land and sea but we also work on entomological and bat monitoring and conservation-related GIS and mapping work. The station also functions

as a community conservation center. Monitoring focuses on birds as this is a migratory bird passage and important bird area for the birds of Greece according to Birdlife International. So far we have monitored over 50 species of birds protected by Euro-



pean Union legislation, the endangered Mediterranean monk seal (Monachus monachus) and coastal vegetation and introduced species. Terra Sylvestris also offers internships, ecological tours and a field volunteer program.

Photo credits, Left: Colorado State University; Above Right: Aron Khune; Below Right: Ted Karfakis.



Contact: Theodore Karfakis, tedkarfakis@terrasylvestris.org

### CRISPR USED IN MONARCH GENETICS AT UMBS — BY CHRISSY BILLAU

Students at University of Michigan Biological Station are using gene-editing technology on iconic pollinators to explore the emerging field of ecological evolutionary developmental biology as part of a four-week UMBS course titled Eco-Evo-Devo.

<u>CRISPR</u> is a tool that allows scientists to disable or alter specific sections of DNA in cells of living organisms. Under the guidance of Dr. André Green, a UMBS instructor and an assistant professor, UMBS students in the summer 2023 term attempted to engineer a specific monarch butterfly mutation.

Green studies the environmental and genetic basis of monarch butterfly migration and how migration has evolved. "I love the setting of the Biological Station because we see and appreciate the biodiversity that's around us," Green said. "But we also get to think a bit more deeply about: How does that biodiversity come to be?"

Their work examined whether a specific gene functions in monarchs as it does in other animals. For a video and more, see the UMBS website.

Photos, Upper Right: a student in the Eco-Evo-Devo lab; Lower Right: Dr. Green holds a monarch butterfly.

Contact: Chrissy Billau, UMBS Communications Specialist, cbillau@umich.edu



### OBFS VIRTUAL CAFÉ

One hour Virtual Café featuring the Mpala Research Centre

Thursday, December 7, 2023

### **Start Time:**

8 AM PT (Pacific Time)
11 AM ET (Eastern Time)
5 PM CET (Central European Time)
6 PM EAT (Eastern Africa Time)

Zoom Link: https://us06web.zoom.us/

j/86795924912?

pwd=Mfi1DabvLTxCRqlHQLM6S0GkZvGjOI.1

Meeting ID: 867 9592 4912

Passcode: 429584

Contact: Rhonda Struminger rhonda@cichaz.org and Nelly Palmeris nelly.palmeris@mpala.org

### OBFS IN BIOSCIENCE PODCAST

The American Institute of Biological Sciences podcast recently featured OBFS!

bioscience-talks.aibs.org/episodes/organizationof-biological-field-stations

Three leaders of OBFS represented three different field stations:

- Dr. Lara Roketenetz, University of Akron Field Station, Ohio
- Dr. Rhonda Struminger, Centro de Investigaciones Científicas de las Huastecas "Aguazarca" CICHAZ, Mexico
- Dr. Christopher Lorentz, Ohio River Biology Field Station at Thomas More University, Kentucky

Contact: Conner Philson, OBFS Outreach and Communications Committee Chair, cphilson@q.ucla.edu



### UGA MARINE INSTITUTE: COASTAL SCIENCE — BY THOMAS HANCOCK



Above: R.J. Reynold's historic dairy barn, now the main laboratory of the Marine Institute.

The University of Georgia Marine Institute on Sapelo Island (UGAMI) is a well-known field destination that supports research and education in coastal ecosystems.

Since its founding in 1953, UGAMI has served as the base of operations for hundreds of researchers including staff of the Georgia Coastal Ecosystems Long Term Ecological Research network (GCE-LTER) who monitor estuarine and intertidal wetland ecosystems and how these systems respond to long-term change.

UGAMI provides access to pristine coastal landscapes and field support for undergraduate and graduate classes from colleges and universities throughout the United States. Recently we embarked on a multi-phase effort to renovate our laboratory and improve campus resiliency.

These efforts will continue this fall as we break ground to update our almost century old student apartments. Opportunities for residential instruction have been significantly increased. We now offer spring, Maymester, and summer semester courses. These courses provide hands-on lab and field-based experiences in marine systems for undergraduate students majoring in ecology, natural resources, marine sciences, and biology. Students can also conduct independent research projects under faculty direction.

For more information about our research and educational opportunities, please visit <a href="https://ugami.uga.edu">https://ugami.uga.edu</a>.

Contact: Thomas Hancock, Assistant Director for Academics, thomas.hancock@uga.edu

### **HOW TO FIND US**

www.obfs.org/

@joinobfs



@OBFS-FieldBio



**YouTube** 



The Virtual Field





### Organization of Biological Field Stations

P.O. Box 400327 Charlottesville, VA 22904-4327





STACY MCNULTY, EDITOR E-mail: editor@obfs.org

### OTS HOSTS OBFS MEETING — BY ANDRÉS MÉNDEZ

This year OTS had the pleasure of co-organizing and hosting the 58th Annual Meeting of the Organization of Biological Field Stations (OBFS). For over a week, La Selva Research Station was full of workshops, presentations, plenaries, tours, and more than 160 people from 12 different countries who are passionate about field stations. Instead of writing a normal recap of the event, I want to highlight my impressions of the event as a first-time participant and a community "outsider."

A highly passionate community. After five days and many conversations, I can assure you that the OBFS community loves what it does. I cannot describe how rewarding it was to see how freely each and every person shared their knowledge, experience, and capabilities to achieve the common goal of support for the community – just because they love what they do, the stations, and promoting science.



Orlando Vargas won the 2023 OBFS Local Hero Award. He holds the plaque surrounded by OTS colleagues.

**Integral approach.** I have never imagined the number of conversations that could revolve around field stations. Although it was impossible to attend to all of them, the meetings I did attend prompted discussions about virtual field stations; human resource management; donors and fundraising; cultural and indigenous heritage; and diversity, equity and inclusion; among many others. That showed the integrality of the event as well as the varying approaches that a group can have related to the broader topic.

**Human touch.** If the warmth of midday temperatures at La Selva was not enough, the warmth emanating from interactions among conference participants was amazing. Every person was open to sharing their story, no matter the field of work, age, or language. I am sure that this opened the door to new projects and joint initiatives.

Excerpted with permission from OTS' Newsletter.

 $Contact: Andr\'es\ M\'endez\ Marenco,\ OTS'\ Communications\ Specialist, and res.mendez@tropical studies.org$