

The PIER Review

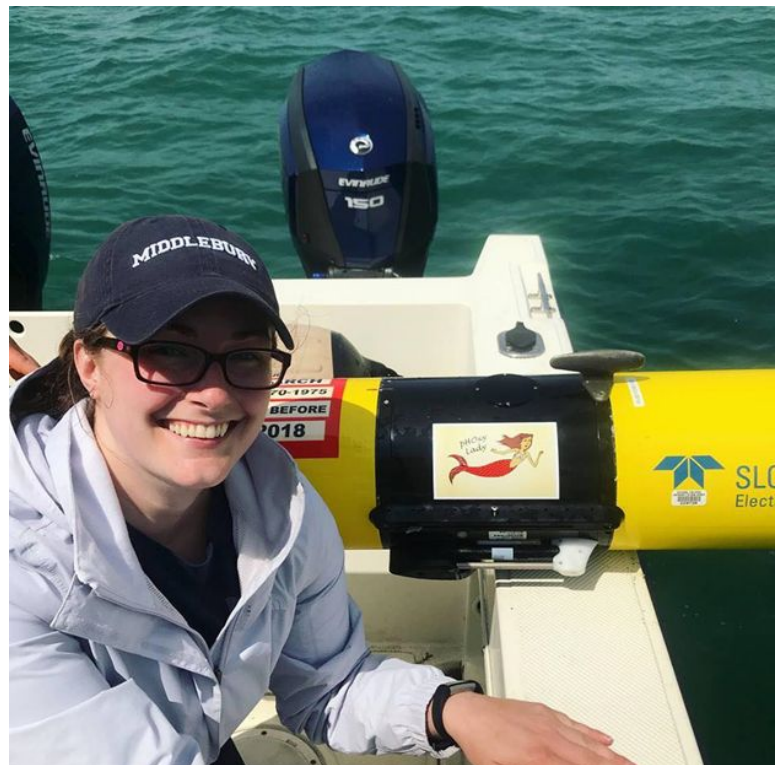
Welcome to the March 2020 issue of the PIER Review, the monthly [GOA-ON Pier2Peer](#) newsletter! This edition showcases accomplishments of the Pier2Peer members, provides updates for our members, and shares funding, job opportunities, and recently published open-access publications. Please send ideas and feedback for future Pier Review editions to **Mike Acquafredda, the Pier2Peer Coordinator** (Michael.Aquafredda@noaa.gov).

P2P FEATURE

An up-and-coming OA researcher that you should know is Liza Wright-Fairbanks.

Liza, a PhD candidate at Rutgers University in New Jersey, USA, studies ocean and coastal acidification in the Mid-Atlantic Bight (MAB). The MAB is a region nested within the U.S. Northeast Shelf Large Marine Ecosystem, and it supports some of the United States' most economically important shellfisheries, many of which are sensitive to acidification. This region is subject to acidification due to oceanic uptake of CO₂, low-alkalinity freshwater input, nutrient loading and eutrophication, and seasonal water mass dynamics like coastal upwelling and stratification. The traditional acidification observing system in the MAB is limited both temporally and spatially, making it difficult to understand the relative influence of these drivers.

In order to address these observing limitations, Liza and her collaborators integrated a deep-sea Ion Sensitive Field Effect Transistor (ISFET) pH sensor into a Teledyne-Webb Slocum G2 glider. Slocum gliders are autonomous underwater vehicles which swim



Liza and the pH glider (the pHOxy Lady)

from the ocean surface to the seafloor, collecting high-resolution data on 30- to 60-day deployments. In addition to the ISFET sensor, this glider is equipped with sensors that provide profiles of conductivity, temperature, depth, spectral backscatter, chlorophyll fluorescence, and dissolved oxygen. This allows Liza to map ocean pH against the other variables and conduct salinity-based estimates of total alkalinity in order to resolve the carbonate system.

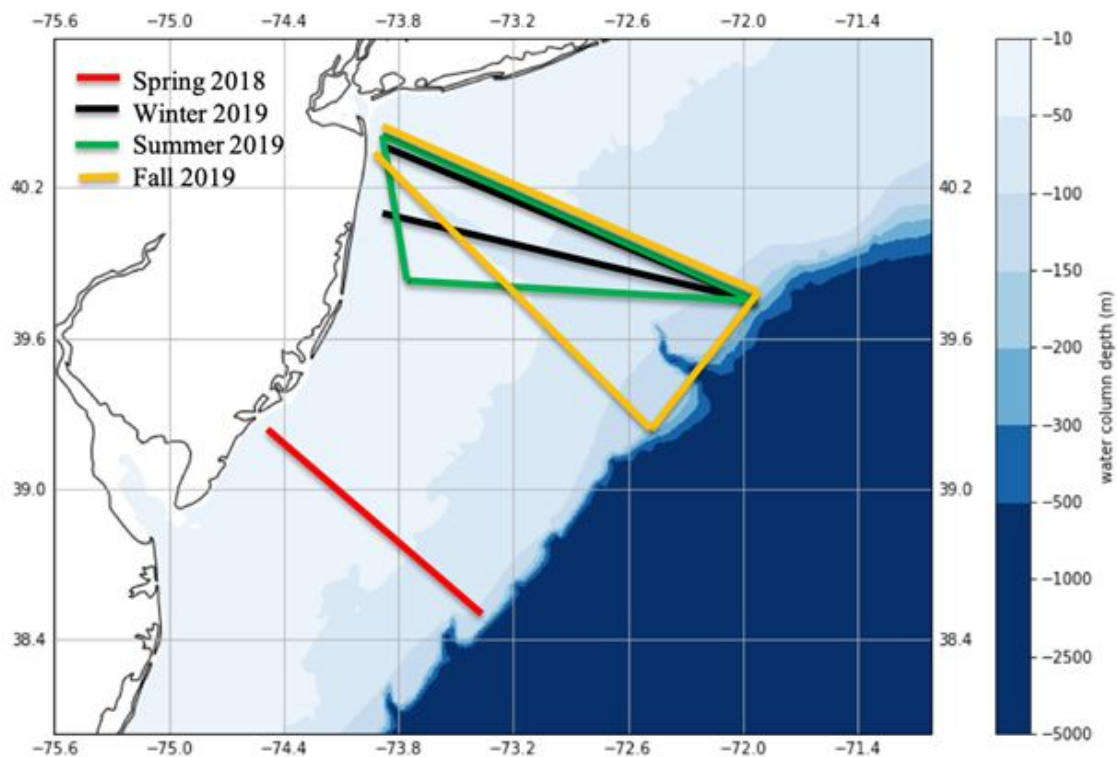
Liza and her collaborators have flown the pH glider on four seasonal deployments in the MAB. These deployments follow tracks from the coast of New Jersey out to the shelf break, reaching depths of up to 200 meters. These seasonal missions have provided the first temporally and spatially high-resolution picture of carbonate chemistry dynamics along the MAB shelf. The data collected on these deployments will allow Liza to determine variable seasonal and spatial drivers of acidification in this important economic zone.

The seasonal glider deployments also flew through Atlantic sea scallop (*Placopecten magellanicus*) and Atlantic surfclam (*Spisula solidissima*) fishery grounds, providing a look at the carbonate system dynamics these species experience throughout a year. The data from these deployments is currently being integrated into laboratory and modeling experiments to investigate the effects of seasonal carbonate dynamics on larval shellfish success.



Deployment out of Sandy Hook, NJ, USA (above & below)





Seasonal glider deployment tracks

Liza wants to support newcomers to the field of OA and would be happy to serve as a **Pier2Peer mentor**. If you find her OA research interesting and would like to pair up, please send her an email at elizabeth.wrightfairbanks@marine.rutgers.edu.

Do you have an exciting accomplishment or experience with the Pier2Peer program that you would like to share? Send a short summary and some photos to Mike Acquafredda (Michael.Acquafredda@noaa.gov) and you could be featured!

NETWORKS

[Become a Pier2Peer recruiter](#)

Many early career OA scientists need a mentor! Please help us recruit senior and experienced OA observing experts to serve as Pier2Peer mentors. If you know someone who would be a good mentor, direct them to the [Pier2Peer website](#) or put them in contact with Mike Acquafredda (Michael.Aquafredda@noaa.gov).

Additionally, if you are attending a meeting or event, and you are interested in sharing a few slides on the program and disseminating sign-up information, then please email Mike. He will send you communication materials and sign-up sheets for your upcoming event.

[Join the OA Info Exchange](#)

The OA Information Exchange (OAIE) is a place to swap ideas, share resources, and interact with people in a variety of disciplines across many regions. This includes your mentor or mentee!

Members can:

- post updates and comments with questions, answers or announcements
- share papers, media files, presentations and links
- add events and host webinars
- join teams based on regions and topics of interest
- meet new people from a variety of fields

Scientists, citizen scientists, educators, NGO and government employees, resource managers, fishers, aquaculturists, concerned citizens, and others are all welcome to take part in the OA Information Exchange community! You can join [here](#).

[Join the Interdisciplinary Marine Early Career Network \(IMCaN\)](#)

Officially launched at the IMBeR Future Oceans2 Open Science Conference in Brest, France in 2019, IMECaN aims to:

- Provide a networking platform for early career marine researchers to develop collaborations;
- Provide training and development in areas not traditionally provided through formal education and training programmes; and
- Provide leadership opportunities for ECR marine researchers, particularly from developing nations.

Join the IMCaN and learn about upcoming activities [HERE](#)

NEWS

Due to the outbreak of the novel coronavirus, COVID-19, the following international conferences have been cancelled or postponed:

-[Sixth International Symposium on Arctic Research \(ISAR-6\)](#) (2-6 March 2020, Japan)

-[International Indian Ocean Science Conference \(IIOSC\)-2020](#) (16-20 March 2020, India)

UPCOMING EVENTS & CONFERENCES

[5th International Symposium on the Ocean in a High-CO2 World \(Lima, Peru\)](#)

The 5th Symposium on the Ocean in a High-CO2 World will take place in **Lima, Peru from 7-10 September 2020**. The Symposium is the place to share cutting-edge science in a rapidly developing frontier of research dealing with the science of ocean acidification and related stressors. The Symposium will feature keynote talks by some of the leading experts in the field, as well as special events on ocean acidification and aquaculture, carbonate chemistry and the Latin American Ocean Acidification Network (LAOCA). As with past symposia in this series, we anticipate GOA-ON to play an important role in presenting advancements in ocean acidification research.

For more information on the Symposium themes, abstract submissions and meeting details, please visit the Symposium website at <http://www.highco2-lima.org>.

The Symposium will offer travel support to help early career researchers present their work. More info here: http://www.highco2-lima.org/abstracts/Trave_Grant_Awards.htm.

Key dates:

~~6 March 2020, abstract submission and travel support application deadline~~

DEADLINE EXTENDED

25 March 2020, abstract submission and travel support application deadline

15 April 2020, abstract and travel support applicants notified

5 June 2020, early registration closes

21 August 2020, registration closes

7 September 2020, on-site registration

[A Changing Arctic Conference](#)

June 2-5 2020

Description: Robust evidence now exists for anthropogenically-forced shifts in the Earth's environment. Observations in the Arctic reveal dramatic reductions in the extent and thickness of the sea ice, rising atmospheric temperatures, widespread permafrost degradation and ocean acidification. These changes bring with them implications for biology, ecosystem services and society in general. Full understanding of current and projected Arctic environmental change is

becoming an imperative in order to minimize and manage corresponding impacts. This conference aims to provide a forum for the three main themes of:

Land - incorporating ecological impacts, permafrost, and landscape evolution, **Ocean (coastal and open)** - incorporating physical changes, ocean acidification, and ecological impacts,

The Future — social aspects, such as mitigation, adaptation, exploration, and management.

Venue: Clarion Hotel The Edge, Tromsø, Norway

Register here: <https://www.nature.com/natureconferences/changingarctic20/index.html>

[2020 UN Ocean Conference](#)

June 2-6 2020

Description: The Ocean Conference, co-hosted by the Governments of Kenya and Portugal, comes at a critical time as the world is strengthening its efforts to mobilize, create and drive solutions to realize the 17 Sustainable Development Goals (SDGs) by 2030. The UN Ocean Conference will propel much needed science-based innovative solutions aimed at starting a new chapter of global ocean action towards advancing [SDG 14: Life Below Water](#)

Location: Lisbon, Portugal

More info here: <https://www.un.org/en/conferences/ocean2020>

FUNDING & JOB OPPORTUNITIES

The Ocean Foundation Pier2Peer Scholarships

Organization: The Ocean Foundation

Description: Small grant program providing funds to Pier2Peer matches to collaborate on a project, conduct training visits, collect data for GOA-ON submission, etc. Scholarships are given out on a quarterly basis. Applications can be submitted to Mike Acquafredda (Michael.Acquafredda@noaa.gov) and Alexis Valauri-Orton (avalauriorton@oceanfdn.org).

Requirements: Applicants must be in an active Pier2Peer partnership and applying to use funds to support this collaboration.

Amount: USD 5,000

Deadline: Current quarter deadline: 30 April 2020;

The Ocean Acidification Information Exchange Microgrants

Description: The mission of the Ocean Acidification Information Exchange is to respond and adapt to ocean and coastal acidification by fostering an online environment built on trust, where our members, regardless of background, feel empowered to ask, answer, and learn from one another. To that end, OAIE offers grants for members who propose innovative strategies for leveraging the OA Information Exchange's collaboration tools to advance the community's mission, facilitate their own work related to ocean and coastal acidification and expand the reach/utility of the OAIE. Submit proposals using this [Google form](#). More information and criteria can be found on the [OAIE](#) or the [RFP](#).

Requirements: Must be a member of the OAIE

Amount: Award amounts between \$200USD and \$5,000USD.

Deadline: Rolling Basis

Western Indian Ocean Marine Science Association Marine Research Grant Programme

Organization: Western Indian Ocean Marine Science Association (WIOMSA)

With support from the Swedish Government and WIOMSA, the Marine Research Grant (MARG) Programme seeks to enhance capacity to conduct research and increase our understanding on various aspects of marine sciences, and offer opportunities for researchers from the WIO to present their results in different regional and international fora. In addition provides opportunities for targeting wider audiences and opportunities to learn special skills.

The MARG Programme covers all subject areas of marine science and technology. MARG is a competitive grant system managed by a special Committee that selects proposals for research in those areas that are designated as being high priority within the development plans of the WIO member states. The funds can be used at the discretion of the grantee to enable the proposed schedule of work to be carried out, which must take place within 1 year of the award being made. The grants are available for researchers within WIO institutions.

MARG-I: No longer accepting proposals

MARG-II: Intended to provide opportunities to individual research scientists to share their work, or gain technical experience by working in a specific laboratory. (Continued on next page)

MARG II grants are also available for data analysis and manuscript write-up within the WIO region or where necessary, outside the region. The maximum duration of MARG-II is 3 months, and the maximum amount offered is US\$ 6,000. ***Proposals for MARG II Grants are reviewed continuously through the year as long as funds are available.***

MARG-III: Intended to provide opportunities for individual researchers to travel to attend scientific meetings and conferences for the purpose of presenting their work and learning from others. The maximum amount offered is US\$ 3,000. MARG III grants are provided for the purchase of return tickets, accommodation or daily subsistence allowance. ***Proposals for MARG III Grants are reviewed continuously through the year subject to availability of funds.***

For detailed instructions for applying for these grants, download the call for proposals and to apply visit <http://proposals.wiomsa.org>

For more information contact the WIOMSA secretariat: secretary@wiomsa.org

NF-POGO Centre of Excellence 2020-2021 Call of Applications:

The application window is now open for the next Nippon Foundation-POGO Centre of Excellence (NF-POGO CofE), which provides world class education and training in the field of observational oceanography. This is an intensive training course for young professionals at the postgraduate level, ten months in duration, with an intake of ten trainees per year.

The course is sponsored by the Nippon Foundation and hosted by the Alfred Wegener Institute for Polar and Marine Research. It is conducted at AWI's site on the offshore island of Helgoland with focus on open-ocean sciences and also at AWI's site on the UNESCO reserve Wadden Sea island of Sylt where shelf/basin interactions are topics of study.

The call for applications will be open until the 15 March 2020. Successful candidates will be informed by the end of June 2020, with training scheduled to begin in October.

Read more about what the training involves and submit an application here: [link](#)

Rev Ocean Maiden Voyage 2021 - Science and Expedition Cruise

Description: REV Ocean is a research vessel, equipped with the most diverse, state-of-the-art science and communication facilities available today. It will operate globally and focus on issues related to climate change, plastic pollution, overfishing, and environmental impacts of fishing. Their mission is “to go from curiosity to understanding to solutions”. For its maiden voyage, the REV Ocean vessel will travel from Oslo, Norway to Antarctica between June and December 2021. During that time, its equipment will be tested so the full functionality of its systems can be assessed. To maximize the value of the initial expedition, Rev Ocean is calling for proposals of research, projects and other expedition activities aligned with their Ocean Strategy and Ocean Science Program and that can be conducted during its maiden voyage. More info [here](#). If you are interested in submitting a proposal, please send an email to Eva Ramirez-Llodra (eva.ramirez-llodra@revocean.org) to receive login access for the online form.

Deadline: Proposals must be submitted to the online form by 1 April 2020 by midnight (CET).

POGO (The Partnership for Observation of the Global Ocean) Shipboard Fellows

Description: POGO offers shipboard fellowship opportunities on ocean research vessels. Normally, calls for fellows are issued six months before a cruise begins, but POGO also fills available berths with qualified applicants on shorter notice. They have issued an open call for early career scientists, technicians, postgraduate students, and post-doctoral fellows involved in oceanographic work at centers in developing countries.

Requirements: Applicants must be involved in oceanographic work in a developing country or a country with an economy in transition. They must provide a fellowship proposal, intentions to build capacity for ocean observing, and a summary CV. Click here for [Application Details](#).

Amount: Round-trip transportation; up to two months’ stay at home institution to train prior to cruise; accommodation at ship port; ship messing fee; seafaring medical/survival course.

Deadline: Open call with no stated closure.

EMBO (European Molecular Biology Organization) Short-Term Travel Fellowships

Description: The fellowship funds research exchanges of up to three months between laboratories in [eligible member countries and cooperation partners](#).

Requirements: Applicants must be from one of the member or cooperation countries and traveling to a lab in another member or cooperation country. Research must be related to life sciences. The travel must be associated with a larger project and not just limited to training in a technique, though it can include that type of training. Click here for [Application Details](#).

Amount: Travel and living costs of the traveling fellow

Deadline: Three months before proposed starting date of travel

Jobs Lists

[The Global Marine Community Newsletter & Jobs List](#)

[Ocean Opportunities](#)

[Josh’s Water Jobs List](#)

[International Ocean Carbon Coordination Project Jobs](#)

[OA-ICC Job News Stream](#)

THE LATEST OA OPEN-ACCESS ARTICLES

OA-ICC bibliographic database

The OA-ICC bibliographic database currently contains more than 6,000 references related to ocean acidification, and includes citations, abstracts and assigned keywords. In addition to being available in [Mendeley](#), this bibliographic database is now freely available on the platform [Zotero](#). In order to access this database, go to the Zotero homepage and create a free account. Click on the Groups tab, search for the group "OA-ICC", and join this group. For more information on how to access the database and its functions, please see the "[User instructions](#)".

To receive daily notifications of new ocean acidification literature, news, and opportunities, subscribe to the [OA-ICC News Stream](#).

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