

The PIER Review

Welcome to the April 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).

Pier2Peer Program Assessment 2020

Please take a few minutes (<5) to complete a survey about your experience in the Pier2Peer Program. These surveys will be used to determine the effectiveness of the Pier2Peer Program. We will use this information to improve the program, to grow the program's membership, and to explore additional funding opportunities for active mentor/mentee pairs. Your answers will not be seen by your mentors or mentees.

Mentees, access your survey [here](#).

Mentors, access your survey [here](#), and please complete one survey for each of your mentees.

P2P FEATURE

This month's Pier2Peer feature showcases the partnership of Dr. Lucia Epherra, Dr. Antonella De Cian, and Dr. Melissa Melendez. Lucia Epherra and Antonella De Cian are biologists working in the Laboratory of Biological Oceanography (LOBio) at the Centro Nacional Patagónica (CENPAT, National Patagonian Center) - Consejo Nacional de Investigación de Investigaciones Científicas y Técnicas (CONICET, National Council of Scientific and Technical Research) in Puerto Madryn, Argentina. Lucia began studying the effect of ocean acidification on the echinoid *Arbacia dufresnii* in Nuevo Gulf (northern Patagonia, Argentina) in 2018. Once she started to specialize in the topic, she noted the lack of carbonate chemistry data in the area and the rest of the Patagonian coast, as well as the need for more comprehensive environmental studies. The "G-NEO1" time-series station was created in 2016 to carry out monthly coastal monitoring as part of LOBio's aims and Antonella's Ph.D. project. The objective of G-NEO1 is to study seasonal and inter-annual variations of different oceanographic parameters (e.g., temperature, salinity, and nutrients concentration), plankton dynamics, and atmospheric variables (e.g., wind and atmospheric dust) in the Nuevo Gulf.

In January 2019, Lucia was selected to participate in the “Latin American and Caribbean Advanced Training on Ocean Acidification Monitoring” in Colombia. The training was organized by The Ocean Foundation and its partners, including The Global Ocean Acidification Observing Network (GOA-ON), the International Atomic Energy Agency’s Ocean Acidification International Coordination Centre (IAEA OA-ICC) and the Latin America Ocean Acidification Network (LAOCA Network). The purpose of the training was to provide the “[GOA-ON in a Box](#)” monitoring kit and advanced hands-on training to enable the development of new monitoring stations in the Latin America and Caribbean region. As a result of this opportunity, Lucia invited Antonella to participate in the training and to collaborate on the G-NEO1 monitoring station efforts.

Melissa Meléndez, an oceanographer at the University of New Hampshire, served as a trainer and lecturer in the OA training. She provided expertise on the carbonate chemistry and methods for monitoring ocean acidification, as well as information on the current efforts underway in the Caribbean region.



Drs. Lucia Epherra, Antonella De Cian, and Melissa Melendez at the Latin American and Caribbean Advanced Training on Ocean Acidification Monitoring in Colombia.

After the workshop, the P2P program asked Melissa to be a mentor for the Argentinean team. While waiting for the “GOA-ON in a Box” equipment to arrive in Argentina, the new team presented a project to The Ocean Foundation. Together, the team will study seasonal and inter-annual variations of the carbonate system at the G-NEO1 station and integrate the oceanographic, biological and atmospheric data. The new OA observations will provide baseline data for future research on carbonate chemistry and its relationship with biological and physical processes in the coastal regions of Patagonia.

When the monitoring kit arrives, efforts will be made for Melissa to arrive on site in Argentina to help to prepare the laboratory equipment, design and initiate the sampling, and also take a tour through beautiful Patagonia!

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.Acquafredda@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

New Pier2Peer Matching Process

Over the next few weeks, we will be rolling out a new Pier2Peer matching process that will help us create new mentor-mentee pairs. When new mentors register for the P2P Program, their information will be used to generate "Mentor Profiles" that will appear on the [P2P website](#). When new mentees register, they will be directed to the Mentor Profile List, where they can browse the profiles of available mentors and find one whose interests, skills, and expertise aligns with their specific needs. Potential mentees will then rank up to 3 possible mentors with whom they would like to work. Using this information, the P2P coordinator will make the final pairing after confirming with the selected mentor.

GOA-ON membership reaches 100 countries

In 2012, when GOA-ON was founded, the network was comprised of 62 scientists from 23 countries. Since then, the network has expanded its activities, gained visibility, and as a result, has become truly global. **As of 2020, GOA-ON membership has reached 730 scientists from 100 countries!** GOA-ON welcomes new experts joining its network to help implement its activities and to achieve its goals. To check out all of the countries that contain GOA-ON members, click [here](#).

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

[A Changing Arctic Conference](#) (Norway, ~~June 2-5-2020~~, TBD)

[UN Ocean Conference](#) (Portugal, ~~2-6 June 2020~~, TBD)

[World Aquaculture Society Meeting](#) (Singapore, ~~8-12 June 2020~~, 14-18 December 2020)

UPCOMING EVENTS & CONFERENCES

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

7-10 September 2020

The 5th Symposium on the Ocean in a High-CO2 World 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 OA research.

Location: Maria Angola Hotel & Centro de Convenciones, Miraflores, Lima, Peru

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

Key dates:

24 April 2020 - NEWLY EXTENDED abstract submission & travel support application deadline

7 May 2020 - abstract and travel support applicants notified

5 June 2020 - early registration deadline

21 August 2020 - registration deadline

7 September 2020 - Meeting begins (on-site registration available)

[2020 UN Ocean Conference](#)

~~2-6 June 2020~~/ **New dates TBD**

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

[World Aquaculture 2020](#)

New Dates: 14-18 December 2020

The annual meeting of the World Aquaculture Society will be held in Singapore this year. The Asian-Pacific region has dominated aquaculture production for decades. However, aquaculture continues to expand broadly across the region. Within Singapore, aquaculture is becoming increasingly integrated into its food system, making 2020 the perfect time for the world aquaculture community to focus on this island city-state. A major international trade show will also take place at the meeting. The trade show is a place to learn about the latest aquaculture technologies presented by exhibitors from around the world.

Location: Singapore EXPO Convention & Exhibition Centre and MAX Atria, Singapore

[Registration](#) is open now!

[The American Geophysical Union's Fall Meeting](#)

7 – 11 December 2020

AGU's Fall Meeting is the largest international Earth and space science meeting in the world. The meeting will be hosted in San Francisco, California. Fall Meeting 2020 aims to bring a diverse and relevant set of topics to help move Earth and space science forward. It all starts with the innovative and dynamic session proposals from AGU's community. Session submissions are open now. We encourage sessions with diverse groups of conveners who can work together to broaden participation. For more information about sessions, town halls, workshops, and innovative sessions, click [here](#).

Key dates:

15 April 2020 - deadline for session, town hall, and workshop proposal [submissions](#)

June 2020 - abstract submissions open

29 July 2020 - deadline for abstract submissions

August 2020 - housing and registration open

October 2020 - scientific program released

7 December 2020 - Fall Meeting begins

FUNDING & JOB OPPORTUNITIES

The Ocean Foundation Pier2Peer Scholarships

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: \$5000 USD

***Deadline:* Current quarter deadline: 30 April 2020;**

In the First Quarter of 2020, scholarships were awarded to:

Dr. Hassoun, Dr. Koffi, and Dr. Yao (\$5000 USD)

ROAM-AFRICA2: Relationship between the carbonate system trends, Ocean Acidification, and Marine organisms in the Gulf of Guinea, AFRICA

Dr. Dupont, Dr. Bermudez, and Ms. Garcia (\$5000 USD)

Sea Urchins Ocean Acidification Research: Assessing physiological tipping point of Eucidaris galapagensis larvae, an ecosystem engineer in the Galapagos, when exposed to a broad range of pH

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: Between \$200USD and \$5000 USD.

Deadline: Rolling Basis

[NOAA Graduate Research Fellowship in Ocean, Coastal, and Estuarine Acidification](#)

Description: The Louisiana and Texas Sea Grant Programs, in partnership with the NOAA Ocean Acidification Program (OAP), are pleased to announce the availability of Ocean Acidification Graduate Research Fellowships for the two-year period covering the 2020/2021 and 2021/2022 academic years.

Requirements: The fellowship is open to full-time graduate students at any academic institution in Louisiana and Texas who are engaged in coastal and marine research relevant to regional ocean, coastal, and estuarine acidification

Amount: \$46,000 per year for two years.

Deadline: 17 April 2020

[REV Ocean Cruises in 2022](#)

Description: REV Ocean will be opening its first call for proposals for research and innovation projects on board RV REV Ocean in April 2020. We are looking for the best marine scientists and innovators globally, to focus on solutions to three of the most important challenges facing the ocean today: (1) plastic pollution, (2) climate change / ocean acidification, and (3) overfishing and destructive fishing impacts. To ensure research proposals are of the highest quality and match with REV Ocean selection criteria, all projects will be evaluated in a thorough and transparent international peer-reviewed process. The successful proposals will have access to the vessel and its equipment for cruises in 2022.

Deadline: TBD - The date of announcement and closing for this call will be relatively short; follow their social media and check their [website](#) to be alerted when the call opens.

[Western Indian Ocean Marine Science Association Marine Research Grant Programme](#)

With support from the Swedish Government and the Western Indian Ocean Marine Science Associated (WIOMSA), the Marine Research Grant (MARG) Programme seeks to enhance research capacity and increase our understanding of various aspects of marine sciences in the western Indian Ocean (WIO).

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 \$6,000 USD. ***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 \$3,000 USD. 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

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](#)

[Ocean Carbon & Biogeochemistry Jobs and Post-docs List](#)

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](#).

Bove, C., Umbanhowar, J., & Castillo, K. D. (2020). Meta-analysis reveals reduced coral calcification under projected ocean warming but not under acidification across the Caribbean Sea. *Frontiers in Marine Science*, 7, 127. DOI [10.3389/fmars.2020.00127](https://doi.org/10.3389/fmars.2020.00127)

Bresnahan, P. J., Wirth, T., Martz, T., Shipley, K., Rowley, V., Anderson, C., & Grimm, T. (2020). Equipping smart coasts with marine water quality IoT sensors. *Results in Engineering*, 5, 100087. <https://doi.org/10.1016/j.rineng.2019.100087>

Cominassi, L., Moyano, M., Claireaux, G., Howald, S., Mark, F. C., Zambonino-Infante, J. L., & Peck, M. A. (2020). Food availability modulates the combined effects of ocean acidification and warming on fish growth. *Scientific Reports*, 10(1), 1-12. DOI [10.1038/s41598-020-58846-2](https://doi.org/10.1038/s41598-020-58846-2)

Gomez, F. A., Wanninkhof, R., Barbero, L., Lee, S. K., & Hernandez Jr, F. J. (2020). Seasonal patterns of surface inorganic carbon system variables in the Gulf of Mexico inferred from a regional high-resolution ocean-biogeochemical model. *Biogeosciences Discussions*, 17:1685-1700. <https://doi.org/10.5194/bg-17-1685-2020>

Martínez-Crego, B., Vizzini, S., Califano, G., Massa-Gallucci, A., Andolina, C., Gambi, M. C., & Santos, R. (2020). Resistance of seagrass habitats to ocean acidification via altered interactions in a tri-trophic chain. *Scientific Reports*, 10(1), 1-13. DOI [10.1038/s41598-020-61753-1](https://doi.org/10.1038/s41598-020-61753-1)

Nelson, K. S., Baltar, F., Lamare, M. D., & Morales, S. E. (2020). Ocean acidification affects microbial community and invertebrate settlement on biofilms. *Scientific Reports*, 10(1), 1-9. DOI [10.1038/s41598-020-60023-4](https://doi.org/10.1038/s41598-020-60023-4)

Raphael, A., Dubinsky, Z., Iluz, D., & Netanyahu, N. (2020). Neural Network Recognition of Marine Benthos and Corals. *Diversity*, 12(1), 29. DOI [10.3390/d12010029](https://doi.org/10.3390/d12010029)

Terorotua, H., Duvat, V. K., Maspataud, A., & Ouriqua, J. (2020). Assessing Perception of Climate Change by Representatives of Public Authorities and Designing Coastal Climate Services: Lessons Learnt From French Polynesia. *Frontiers in Marine Science*, 7, 160. DOI [10.3389/fmars.2020.00160](https://doi.org/10.3389/fmars.2020.00160)