

The PIER Review

Welcome to the March 2021 issue of the PIER Review, the monthly [GOA-ON Pier2Peer](#) newsletter! This edition introduces the new Pier2Peer Coordinator, Dr. Kerri Dobson. Additionally, this issue contains relevant OA-related news, updates, funding and job opportunities, and recently published open-access publications. Please send ideas and feedback for future issues of the *Pier Review* to kerri.dobson@noaa.gov.

Letter from the Editor

Although this past year was nothing like what I expected when I first joined the NOAA Ocean Acidification Program, I feel so fortunate to have had the opportunity to work on the GOA-ON Secretariat and to act as the Pier2Peer Coordinator.

Despite staying put in my little apartment in the District of Columbia, my horizons were broadened this year through the interpersonal connections I made with the enthusiastic researchers from around the Pier2Peer community. I hope that one day soon I will get to meet some of you in-person.

Although I will no longer be a member of the GOA-ON Secretariat or serve as the P2P Coordinator, I will continue helping out with the GOA-ON Webinar Series. I'm handing off my duties to Dr. Kerri Dobson of the NOAA Ocean Acidification Program. I'm confident that Kerri will do an excellent job leading Pier2Peer. She will ensure that this important scientific mentorship program thrives.

Finally, I would like to thank all of the Pier2Peer mentors and mentees whose active involvement is what truly makes this an effective program and makes our community strong.

Take very good care,
Mike Acquafredda



P2P FEATURE

Introducing the new Pier2Peer Coordinator, Kerri!

Starting in March 2021, Dr. Kerri Dobson will be the new coordinator for the GOA-ON Pier2Peer Program. She will also become a member of the GOA-ON Secretariat.

Originally from the UK, Kerri realized her love for the ocean when she learnt to scuba dive in Mexico while travelling on her gap year. From there she gained her BSc in Environmental Geography and International Development from the University of East Anglia and her MSc in Marine Ecology and Environmental Management from Queen Mary University of London.

Kerri loves to travel and has worked on coral research and conservation in the Egyptian Red Sea, Madagascar, Montserrat (Caribbean), and Hawaii. She recently completed her PhD in multiple stressor effects (in particular, coral bleaching and ocean acidification) on coral physiology and biochemistry, at the Ohio State University.



As OAP's 2021 Knauss International and Domestic Policy Fellow, she is looking forward to working with GOA-ON, learning more about OA policy worldwide, and facilitating more research connections!

Do you have an exciting accomplishment or experience with the Pier2Peer program you would like to share? Send it to Kerri Dobson at Kerri.Dobson@noaa.gov and you could be featured!

NETWORKS

****New [Pier2Peer Mentors](#) are available****

Do you know someone who is looking to expand their skills set or their understanding of OA? Then encourage them to join the Pier2Peer Network! Have you already joined the Network, but haven't been matched with a mentor yet? Then, you're in luck! Over the last few weeks, several new researchers have signed up to be Pier2Peer mentors. Visit the Pier2Peer webpage for more information.

Remember, 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 Kerri. She will send you communication materials and sign-up sheets for your upcoming event.



Ocean Acidification Information Exchange

[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 field

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, IMCaN 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](#)

UPCOMING EVENTS & CONFERENCES

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

New dates: TBD

Description: The 5th International Symposium on the Ocean in a High CO2 World will likely be rescheduled once again. The organisers will continue to monitor the state of the COVID-19 pandemic that may require further adjustments to the dates. Please continue to check the Symposium website to find out more about dates and deadlines. GOA-ON will continue to support the Symposium and to provide updates to the community.

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

Location: Lima, Peru

[2020 UN Ocean Conference](#)

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

[OA Session at ASLO \(Association of Limnology & Oceanography\)](#)

Dates: 22-27 of June 2021 (exact dates may change depending on covid-19)

Description: The GOA-ON Mediterranean Hub has been approved to lead a session titled, “Ocean acidification: trends and effects from local to regional scales”, at the upcoming ASLO 2021 ASM conference.

Location: Palma de Mallorca, Spain (but will now be largely or entirely virtual)

[World Aquaculture 2020](#)

Dates: 14-18 June 2021

Description: 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!

WEBINARS

[GOA-ON Webinar Series](#)

The goal of the GOA-ON Webinar Series (GWS) is to foster greater collaboration and a sense of community among the GOA-ON community. Webinars will take place every few weeks and will consist of a presentation followed by a question and answer session. All webinars will be recorded and shared on the [GOA-ON Youtube Channel](#). GOA-ON hopes to use this webinar series to lift the voices of early career scientists, like Pier2Peer mentees, and other members of the GOA-ON research community who wish to share their science with a broader audience. If you are interested in giving a presentation or would like to suggest a topic, please fill out this [form](#).

The first webinar in the series featured Drs. Sam Dupont and Steve Widdicombe. They discussed the GOA-ON Biological Working Group and their efforts to determine optimal monitoring strategies for observing biological rates.

The second webinar in the series featured Katherina Schoo and Kirsten Isensee, who gave a presentation about the United Nations' Sustainable Development Goal (SDG) 14, the SDG target 14.3, and its indicator 14.3.1, which are focused on addressing ocean acidification.

The third webinar in the series featured Dr. David Long, William Pardis, and Kalina Grabb. They discussed "the pHyter", a new, low-cost, handheld pH-measuring instrument with the potential to democratize OA monitoring.

These webinars were recorded and can be viewed on the [GOA-ON YouTube Channel](#). For more information about the GWS, check out its new [webpage](#).



The next webinar will be shared by Drs. Sam Dupont, Christina McGraw, & Christopher Cornwall on Thursday, 8 April 2021 @ 16:00 CEST (UTC +2). Register [here](#) and read more about it below.



GOA-ON WEBINAR SERIES

What do you (really) need to know to understand multiple stressors?

Thursday, 8 April 2021 at 16:00 CEST (UTC +2)

Register here: <https://register.gotowebinar.com/rt/5172804599062479629>

Dr. Sam Dupont (presenting author)
Senior Lecturer & Associate Professor
University of Gothenburg, Sweden

Dr. Christina McGraw
Senior Lecturer
University of Otago, New Zealand

Dr. Christopher Cornwall
Research Fellow & Lecturer
Victoria University of Wellington, New Zealand



Webinar description: Resolving the biological impacts of ocean acidification within the midst of multiple stressors is one of the most pressing challenges of our time. Laboratory experimentation is one of the available tools at our disposal but designing and interpreting a relevant multiple stressors experiment is challenging. This interactive talk will explore concepts and common misconceptions when interpreting data from multiple driver studies and provide some keys on how to design a meaningful strategy to resolve impacts of multiple stressors.



Ocean Acidification
International
Coordination Centre
OA-ICC





United Nations
Educational, Scientific and
Cultural Organization



Intergovernmental
Oceanographic
Commission

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

First quarter deadline: 30 April 2021

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.

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

Description: Until the end of 2021, two of EMBO's Fellowship Programmes will consider applications for scientific exchanges involving institutes in Japan and institutes in an EMBC Member State, EMBC Associate Member State or a country or territory covered by a cooperation agreement with the EMBC.

Requirements: Short-Term Fellowships fund research exchanges of up to three months between laboratories in eligible countries. Awarded applicants can stay on their research visit for an additional three months (maximum), however, EMBO will not provide funding for this extended period. The aim is to facilitate valuable collaborations with research groups applying techniques that are unavailable in the applicant's laboratory. Short-Term Fellowships are not awarded for exchanges between two laboratories within the same country. Short-Term Fellowships are intended for joint research work rather than consultations. The fellowships cover travel plus subsistence of the fellow only and not of dependents. Click here for [Application Details](#).

Amount: Travel and living costs of the traveling fellow

Deadline: Fellowship applications are accepted on a rolling basis.

40 Student Opportunities available through NOAA

This list contains information about camps, events, scholarships, internships, and fellowships, and other opportunities for a broad range of audiences, including highschool students, undergraduates, graduate students, and post-docs.

<https://www.noaa.gov/education/opportunities/student-opportunities>

Call for 2021 POGO-SCOR Fellowship Applications

Description: The POGO-SCOR Fellowship programme is designed to promote training and capacity development, leading towards a global observation scheme for the oceans, and is aimed at scientists, technicians, graduate students (preferably PhD) and post-doctoral fellows involved in oceanographic work at centres in developing countries and countries with economies in transition. Priority is given to early career applicants. The fellowship offers the opportunity to visit other oceanographic centres for a short period (1 to 3 months) for training on aspects of oceanographic observations, analyses, and interpretation and includes financial support for travel and living expenses.

Deadline: 30 April 2021.

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](#)

[NOAA OAP Job List](#)

[Ocean Carbon & Biogeochemistry List](#)

THE LATEST LITERATURE

OA-ICC bibliographic database

The OA-ICC bibliographic database currently contains more than 6,300 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 either of these citations management websites and create a free account. Click on the Groups tab, search for "OA-ICC", and join this group. **To receive daily notifications of new ocean acidification literature, news, and opportunities, subscribe to the [OA-ICC News Stream](#).**

Here are some of the latest OPEN ACCESS OA-related articles

Anand, Muthusamy, et al. "Effect of CO₂ driven ocean acidification on calcification, physiology and ovarian cells of tropical sea urchin *Salmacis virgulata*—A microcosm approach." *Heliyon* 7.1 (2021): e05970. <https://doi.org/10.1016/j.heliyon.2021.e05970>

Asfur, Mustafa, Jacob Silverman, and Colin Price. "Ocean acidification may be increasing the intensity of lightning over the oceans." *Scientific Reports* 10.1 (2020): 1-5. <https://doi.org/10.1038/s41598-020-79066-8>

Gattuso, J. P., Williamson, P., Duarte, C., & Magnan, A. K. (2020). The potential for ocean-based climate action: negative emissions technologies and beyond. *Frontiers in Climate*. <https://doi.org/10.3389/fclim.2020.575716>

Gregor, L., & Gruber, N. (2020). OceanSODA-ETHZ: A global gridded data set of the surface ocean carbonate system for seasonal to decadal studies of ocean acidification. *Earth System Science Data Discussions*, 1-42. <https://doi.org/10.5194/essd-2020-300>

Hariato, Januar, et al. "Impacts of acclimation in warm-low pH conditions on the physiology of the sea urchin *Heliocidaris erythrogramma* and carryover effects for juvenile offspring." *Frontiers in Marine Science* 7 (2020): 1197. <https://doi.org/10.3389/fmars.2020.588938>

Harvey, Ben P., et al. "Ocean acidification locks algal communities in a species-poor early successional stage." *Global Change Biology*. (2021). <https://doi.org/10.1111/gcb.15455>

Mekkes, Lisette, et al. "Pteropods make thinner shells in the upwelling region of the California Current Ecosystem." *Scientific reports* 11.1 (2021): 1-11. <https://doi.org/10.1038/s41598-021-81131-9>

Niemisto, Maura, et al. "American lobster postlarvae alter gene regulation in response to ocean warming and acidification." *Ecology and Evolution*. (2021). <https://doi.org/10.1002/ece3.7083>

Villalobos, Cristina, Brooke A. Love, and M. Brady Olson. "Ocean Acidification and Ocean Warming Effects on Pacific Herring (*Clupea pallasii*) Early Life Stages." *Frontiers in Marine Science* 7 (2020): 1112. <https://doi.org/10.3389/fmars.2020.597899>

Wong, Juliet M., and Gretchen E. Hofmann. "Gene expression patterns of red sea urchins (*Mesocentrotus franciscanus*) exposed to different combinations of temperature and p CO₂ during early development." *BMC genomics* 22.1 (2021): 1-21. <https://doi.org/10.1186/s12864-020-07327-x>

Yang, Sung-Yin, et al. "Effects of ocean acidification on coral endolithic bacterial communities in *Isopora palifera* and *Porites lobata*." *Frontiers in Marine Science* (2020). <https://doi.org/10.3389/fmars.2020.603293>