

The PIER Review



Welcome to the March 2019 issue of the PIER Review, the monthly [GOA-ON Pier2Peer](#) newsletter. The Review highlights accomplishments, provides updates for our members, highlights open-access research on ocean acidification, and shares funding or job opportunities. Please send all of your ideas for the newsletter to Alicia Cheripka (alicia.cheripka@noaa.gov) and we will be sure to incorporate your feedback into future editions of The PIER Review.

P2P FEATURE

Just a short three years ago, Dr. Sam Dupont, University of Gothenburg, and Carla Edworthy, South African Institute for Aquatic Biodiversity, met at The Ocean Foundation (TOF)-led Ocean Acidification Workshop in Mauritius. Carla was in the process of developing a physiology lab and was a recipient of the “GOA-ON in a Box” kit for South Africa when she met Sam, whose research is focused on the effects of global changes (e.g. ocean acidification, warming) on marine organisms and ecosystems. His work aims at revealing the mechanisms behind species and ecosystem responses (physiology, ecology, evolution) to environmental change, which made him a perfect fit as a mentor to Carla. They were matched in the Pier2Peer program soon after the close of the workshop in 2016.



Through the years the two have been involved on a wide range of activities, such as visiting Sam’s lab in Sweden on two occasions for a Marine Evolution Under Climate Change course in 2016 as well as an IAEA INT-funded advanced training in June 2018. At the advanced training, Carla was able to take on a leading role for the experimental component which tested the impacts of OA on sea urchin larvae, and this

work is expected to be published. She is currently doing a PhD on OA and fish, involving monitoring and experiments. Sam is continuing his support of Carla and playing an advisory role. In that context, they have applied for grants to expand this work.

Although their official roles as mentor/mentee in the Pier2Peer program are coming to an end, the guidance and opportunities Carla has received have set her up to move from a mentee to a mentor. They also have plans to continue working together on upcoming events, such as WIOMSA trainings in Kenya and Durban. Carla will be a teaching assistant for the Kenya practical advanced training, to be held in Mombasa towards the end of this year, where she will help set up experiments for OA. She will also be teaming up with Sam at the WIOMSA workshop in Durban, South Africa in May, where they will be performing a joint experiment with participants of a recently funded OA project (6 countries) on local adaptations along the Eastern Coast of Africa.

Do you have an exciting accomplishment or experience with the Pier2Peer program you would like to share? Send it to Alicia Cheripka (alicia.cheripka@noaa.gov) and you could be featured!

BECOME A Pier2Peer RECRUITER

We are always recruiting senior and experienced OA observing experts to serve as mentors. If you know someone who would be a good mentor, direct them to the [Pier2Peer website](#) or put them in contact with Alicia Cheripka (alicia.cheripka@noaa.gov).

If you are attending a meeting or event, are interested in sharing a few slides on the program and disseminating sign-up information, please email Alicia and we will send you communication materials and sign-up sheets for your upcoming event. And thanks!

UPCOMING EVENTS and CONFERENCES



[The 4th GOA-ON International Workshop](#) will be held on 14-17 April 2019 in Hangzhou, China. Abstract submission is closed, however registration closes **31 March** (online)/ **14 April** (in person). The 4th GOA-ON International Workshop will bring together scientists from around the world to discuss emerging aspects from the coupled effects of ocean acidification with multi-stressors, review global ocean acidification status and forecast capabilities, and explore opportunities for capacity development. We seek to better understand ocean acidification's impacts on industry, increase coordination across nations and stakeholders, and highlight the widespread recognition of the threat of ocean acidification to the health and sustainability of marine ecosystems.

[The American Geophysical Union \(AGU\) Geoscience and Society Summit](#) will be held on **18-21 March** 2019 in Stockholm, Sweden. Registration is currently open. The Summit aims to create a highly interactive forum for effective cooperation between scientists and users of scientific information to tackle global and local challenges around sustainability of natural resources and systems, global health, and resilience.

[The Eleventh Western Indian Ocean Marine Science Association \(WIOMSA\) Scientific Symposium](#) will be held at the University of Mauritius from 1-6 July 2019. Deadline for travel grant applications is **15 March**. The Symposium will bring together practitioners, academics, researchers and students to share knowledge, experience and solutions to the challenges experienced in our coastal and marine environment. The specific objectives of the symposium are to: Present current knowledge, provide a forum for discussion, exchange of information and experiences on coastal and marine science issues in the Western Indian Ocean region, promote interaction among social and natural scientists in order to strengthen multiand trans-disciplinary research for sustainable management of the coastal and marine environment and to identify gaps and priority research areas for improved management of the coastal and marine environment of the Western Indian Ocean region.

[27th International Union of Geodesy and Geophysics \(IUGG\) General Assembly](#) will be held in Montreal, Canada from 8-18 July 2019. Section **P08-Coastal Ocean Acidification**, along with various other sessions are applicable to ocean acidification. This symposium will highlight new research in coastal acidification, including changes in biogeochemistry; complexities associated with other ocean processes (e.g., freshwater mixing; hypoxia; multiple stressors); impacts on ecosystems and economies; and modeling and projection of future OA.

[OceanObs'19](#) is part of a decadal conference series on setting ocean observation priorities to be held on 16-20 September 2019 in Honolulu, Hawaii, U.S.A. On-site registration will be available and the poster deadline has been extended to **27 June** 2019. The OceanObs'19 conference will celebrate tremendous progress across regional, national, and global ocean observation networks and strengthen user connections to enhance these systems over the coming decade. Strategic working sessions and network functions during the conference will enable oceanographic researchers, technology operators, data experts, early career scientists, policy-makers, and end-users to chart the future of ocean observing.

FUNDING and 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.

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

Amount: USD 5,000

Application Deadline: Current quarter deadline: 31 May 2019; Applications are accepted on a continuing basis; submit to Alicia Cheripka (alicia.cheripka@noaa.gov) and Alexis Valauri-Orton (avalauriorton@oceanfdn.org).

Application Details: Funding Announcement attached to email

2019 Postdoctoral Fellowship Program

Organization: Monterey Bay Aquarium Research Institute (MBARI)

Description: Applications for the postdoctoral fellowship program at the Monterey Bay Aquarium Research Institute (MBARI) are currently being accepted. MBARI is dedicated to the development of state-of-the-art instrumentation, systems, and methods supporting scientific research in the oceans. Ongoing programs at MBARI span marine robotics, ocean physics, chemistry, geology, and biology as well as research and development related to information management and ocean instrumentation. Located in Moss Landing, California at the head of Monterey Canyon, MBARI enjoys convenient access to a diverse range of ocean environments. The institute operates two ocean-going research ships, a coastal workboat, remotely operated vehicles, autonomous underwater and surface vehicles, oceanographic profilers and moorings, the MARS seafloor cabled observatory, and a wide range of oceanographic equipment. MBARI is a non-profit oceanographic research institute supported by the David and Lucile Packard Foundation.

Offers will be made to candidates from the fields of biological, chemical, and physical oceanography; marine geology; and ocean engineering. Candidates must be awarded the Ph.D. degree prior to commencing the two-year appointment starting between July 2019 and July 2020. Applicants are encouraged to communicate with potential research sponsors at MBARI (<http://www.mbari.org/science-and-engineering-mentors/>) for guidance on project feasibility, relevance to ongoing research projects, resource availability, and expected start date.

Application Deadline: March 20th, 2019

[Application Details](#)

PhD Position-Marine Biogeochemistry

Organization: The Helmholtz-Zentrum Geesthacht (HZG)

Description: One scientific focus of the Institute of Coastal Research is the coastal observing system COSYNA (Coastal Observing System for Northern and Arctic Seas) for the systematic observation and modelling of the North Sea, Baltic Sea and Arctic coastal waters. One current project is to determine the carbon budget in the German Bight, aiming at a better understanding of the processes governing the sinks and sources in this region. The German Bight is an example of a very dynamic shelf sea region, influenced by outflow from major rivers like the Elbe, exchange with extensive tidal mudflats and marshes within the Wadden Sea, and coastal processes acting on different time scales, such as winds, tides and the residual circulation of the North Sea. We invite applications for a PhD position (m/f/d) in the research group In Situ Measurements at the Institute of Coastal Research with preferred starting date on May 1, 2019. The position is limited to three years with the degree being awarded through the University of Kiel. Within this research group we are operating an intensive monitoring program measuring different carbon parameters onboard of commercial vessels (FerryBox systems, www.ferrybox.org) and on targeted research cruises.

Application Deadline: March 18th, 2019

[Application Details](#)

POGO Shipboard Fellows

Organization: The Partnership for Observation of the Global Ocean (POGO)

Description: POGO offers a number of shipboard fellowship opportunities on ocean research vessels. Normally, specific calls for fellows working in certain sub-disciplines are issued six months before a cruise begins. However, 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 and countries with economies in transition. Qualified applicants will be contacted if an appropriate shipboard fellowship becomes available.

Requirements: Applicants must be involved in oceanographic work in a developing country or country with an economy in transition. They must provide a fellowship proposal, intentions to build capacity for ocean observing, and a summary CV.

Amount: Round-trip ticket from home institute to the host institution; up to two months' stay at home institution to train prior to cruise; accommodation at ship port; ship messing fee; seafaring medical and sea survival course.

Application Deadline: Open call with no stated closure.

[Application Details](#)

Western Indian Ocean Marine Science Association Marine Research Grant Programme

Organization: Western Indian Ocean Marine Science Association (WIOMSA)

Description: The award is designed to enhance the capacity of scientists in the Western Indian Ocean region to conduct marine research. There are three tiers (MARG I, II,III) that vary in duration and amount. MARG I and II applications are closed.

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. Proposals for MARG III Grants are reviewed continuously through the year subject to availability of funds. MARG III grants are provided for the purchase of return tickets, accommodation or daily subsistence allowance.

Requirements: Applicants should be young scientists studying the Western Indian Ocean region

Amount: USD 3,000 (MARG III), USD 6,000 (MARG II)

Application Deadline: No deadline for MARG III

[Application Details](#)

EMBO Short-Term Travel Fellowships

Organization: European Molecular Biology Organization

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.

Amount: Travel and living costs of the traveling fellow

Application Deadline: Three months before proposed starting date of travel

[Application Details](#)

Training course on best practices for ocean acidification experiments in multi-stressor scenarios, 24-28 June 2019, Monaco

Organization: The International Atomic Energy Agency (IAEA) Ocean Acidification International Coordination Centre (OA-ICC) and the Scientific Committee on Oceanic Research (SCOR) Working Group 149

Description: The objectives of this training course are to become familiar with the modes of learning available in the new SCOR WG149 web-based best practice guide (to become available in April 2019). This best practice guide will provide a valuable platform to test methods and best practices for ocean acidification studies within a multi-stressor context.

Application Deadline: 5 April 2019

[Application Details](#)

Jobs Lists:

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

[Ocean Opportunities](#)

[Josh's Water Jobs List](#)

NEWS and links to select OPEN ACCESS ARTICLES on OA

News:

Blue Charter action group makes strides toward tackling ocean acidification

The Commonwealth, 21 February 2019.

The inaugural Blue Charter action group meeting on ocean acidification was recently held in Dunedin, New Zealand this past month. The three-day workshop was led by the government of New Zealand, which champions the Ocean Acidification Action Group – part of the Commonwealth Blue Charter. More than forty-five participants, including experts, scientists and Commonwealth marine officials met to explore the impacts of ocean acidification and strategies that policymakers can use to address the growing issue.

The workshop is the latest in a series of activities around the Blue Charter programme. Nathan Glassey, a senior official at the New Zealand's Foreign Ministry, stated that the well-attended workshop on ocean acidification showed that countries see real benefit in the Commonwealth's leadership on the issue. A report detailing next steps will be available soon.

Read more about the events of this meeting and The Commonwealth [HERE](#)

WIOMSA OA Workshop in Mombasa, Kenya

12-14 February 2019

GOA-ON was involved in organizing a coordination workshop for six newly funded projects in the Western Indian Ocean related to establishing observations and investigating biological responses to ocean acidification in the region. This workshop was held on 12-14 February 2019 at the Kenya Marine and Fisheries Research Institute (KMFRI) in Mombasa, Kenya with support from the Western Indian Ocean Marine Science Association (WIOMSA), GOA-ON, and IOC-UNESCO. These ocean acidification projects will be funded by WIOMSA and include participants from institutes in Kenya, Mauritius, Mozambique, Seychelles, South Africa, and Tanzania. The 11th WIOMSA Scientific Symposium will be held from the 1st to the 6th of July 2019 in Mauritius.

To learn more about WIOMSA, go to their website: <https://www.wiomsa.org/>

Open-access science:

Algueró-Muñiz, M., Horn, H. G., Alvarez-Fernandez, S., Spisla, C., Aberle, N., Bach, L. T., ... & Boersma, M. (2019). [Analysing the impacts of elevated-CO2 levels on the development of a subtropical zooplankton community during oligotrophic conditions and simulated upwelling](#). *Frontiers in Marine Science*, 6, 61.

Bergstrom, E., Silva, J., Martins, C., & Horta, P. (2019). [Seagrass can mitigate negative ocean acidification effects on calcifying algae](#). *Scientific reports*, 9(1), 1932.

Black, J. G., Stark, J. S., Johnstone, G. J., McMinn, A., Boyd, P., McKinlay, J., ... & Runcie, J. W. (2019). [In-situ behavioural and physiological responses of Antarctic microphytobenthos to ocean acidification](#). *Scientific reports*, 9(1), 1890.

Dang, H., Klotz, M. G., Lovell, C., & Sievert, S. M. (2019). [The Responses of Marine Microorganisms, Communities and Ecosystems to Environmental Gradients](#). *Frontiers in Microbiology*, 10, 115.

Guo, W. (2019). [Seawater temperature and buffering capacity modulate coral calcifying pH](#). *Scientific reports*, 9.

Lizcano-Sandoval, L. D., Marulanda-Gómez, Á. M., López-Victoria, M., & Rodríguez-Ramírez, E. A. (2019). [Climate change and Atlantic Multidecadal Oscillation as drivers of recent declines in coral growth rates in the Southwestern Caribbean](#). *Frontiers in Marine Science*, 6, 38.

Müller, M. N., Dorantes-Aranda, J. J., Seger, A., Botana, M. T., Brandini, F. P., & Hallegraeff, G. M. (2019). [Ichthyotoxicity of the dinoflagellate *Karlodinium veneficum* in response to changes in seawater pH](#). *Frontiers in Marine Science*, 6, 82.

Venn, A. A., Tambutté, E., Caminiti-Segonds, N., Techer, N., Allemand, D., & Tambutté, S. (2019). [Effects of light and darkness on pH regulation in three coral species exposed to seawater acidification](#). *Scientific Reports*, 9(1), 2201.

For more new publications & article relevant to ocean acidification, visit the [OA-ICC News Stream](#).