



SCOR CAPACITY-BUILDING ACTIVITIES 2024
Prepared by Emily Twigg and Rebecca Zitoun

SCOR capacity development activities include a visiting scholar program, the POGO-SCOR fellowships, travel support to scientists from developing countries to attend meetings and conferences, and the Regional Graduate Networks in Oceanography. Additional capacity development activities are carried out by the SCOR projects through Summer Schools.

SCOR has received support from the U.S. National Science Foundation (NSF) since 1984 to provide funding for SCOR capacity development activities. The largest portion of the funds are used for travel grants for scientific meetings, although a portion is used for SCOR's contribution to the POGO-SCOR Fellowships and the SCOR Visiting Scholars program.

SCOR also builds capacity through the encouragement of early-career and developing country scientists in SCOR Working Groups and projects.

SCOR Committee on Capacity Development (CD Committee)

The primary purpose of the SCOR Committee on Capacity Development (CD) is to oversee all SCOR's capacity-development activities and to help the SCOR Secretariat manage these activities. The Terms of Reference (ToRs) of the CD committee are to:

1. Provide direction for all SCOR's existing capacity-development activities: participation of scientists from developing countries and countries with economies in transition in SCOR activities, POGO-SCOR Fellowship Program, travel grants, and provision of reports to libraries in developing countries.
2. Guide and assist SCOR Executive Director in development of new capacity-development activities, particularly the Regional Graduate Schools of Oceanography activity.
3. Assist SCOR-sponsored projects in developing their capacity-development activities.
4. Help SCOR arrange funding for existing and new capacity-development activities.
5. Assist SCOR in interacting with regional and international groups related to capacity development in ocean sciences, such as the ICSU regional centers, START, IOC regional programs, etc.

6. Members of the SCOR Committee on Capacity Development will be appointed for three years, with one additional renewal for a total period of service of 6 years.

SCOR CD Committee Members

In October 2024, four new members joined the committee after the end of service of three members. The new members were recommended by SCOR community members and partners and were selected to ensure the committee maintains a broad range of expertise and balanced regional representation.

| Current Slate (10 members) | Revised Slate (11 members) | Term |
|----------------------------------|----------------------------------|---|
| Chair | | |
| Rebecca Zitoun* (Australia) | Rebecca Zitoun* (Australia) | 1 st term as chair (2022-2025) |
| Members | | |
| Sanae Chiba (Canada/PICES) | Sanae Chiba (Canada/PICES) | 2 nd term (2024-2027) |
| Mauro Cirano (Brazil) | Mauro Cirano (Brazil) | 1 st term (2022-2025) |
| Viena Puigcorbé* (Spain) | Viena Puigcorbé* (Spain) | 1 st term (2022-2025) |
| Moagabo Ragoasha* (South Africa) | Moagabo Ragoasha* (South Africa) | 1 st term (2022-2025) |
| Paula Sierra (Colombia) | Paula Sierra (Colombia) | 2 nd term (2024-2027) |
| Sun Xiaoxia (China-Beijing) | Sun Xiaoxia (China-Beijing) | 2 nd term (2024-2027) |
| Ntahondi Nyandwi (Tanzania) | | |
| Rui Seabra* (Portugal) | | |
| Jennifer Verduin (Australia) | | |
| | Nubi Olubunmi (Nigeria) | 1 st term (2024-2027) |
| | Ebenezer Nyadjro (USA) | 1 st term (2024-2027) |
| | Sazlina Salleh (Malaysia) | 1 st term (2024-2027) |
| | Dale Webber (Jamaica) | 1 st term (2024-2027) |

*Early-career scientist, defined as 10 years or less from PhD

SCOR CD Committee Activities

The Capacity Development Committee met quarterly in 2024 (January, April, July, October). The committee reviewed

- Visiting Scholar applications (January)
- POGO-SCOR Fellowship applications (May)
- NSF travel grant applications (quarterly)
- RNGO status updates

SCOR Visiting Scholars

Since 2009, SCOR has enlisted the services of ocean scientists from both developed countries and developing countries, both recently retired and active, to teach short courses and to provide more extended on-site education and mentorship at developing country host institutions and aiming to establish future collaborations between the visiting scientist and the host institution.

Starting in 2021, the SCOR CD committee recommended that Visiting Scholar applications have identified a host and developed a joint plan. The SCOR Visiting Scholars Program is a **partnership** between SCOR and local hosts. SCOR provides up to \$2,500 for airfare and local expenses for each fellow; local hosts often provide local accommodation and may support some other local expenses. Local support from host institutions demonstrates institutional commitment to the visit. Information about the program is available at <https://scor-int.org/work/capacity/visiting-scholars/>.

Out of 15 applications, Six visiting scholars were selected in 2024. Four scholars have already completed their visits, and two visits will occur in November 2024.

2024 Visiting Scholars

| Name | Scholar Country | Host Country | Visit Date | Topic |
|---------------------|-----------------|--------------|-----------------------------|---|
| Isaure de Buron | USA | Morocco | 30 April-17 May 2024 | Marine parasitology in semi-enclosed coastal systems |
| Jessica Glass | USA | Seychelles | 12-31 May 2024 | eDNA and population genetic techniques |
| Ramia Al Bakain | Jordan | Lebanon | 9 July-23 August 2024 | Evaluation and removal of contaminants from marine sediments and biota |
| Eleonora Puccinelli | Netherlands | South Africa | 13 August-6 September 2024 | Best Practices in Aquatic Food Web Investigations: Stable Isotope and Fatty Acid Approaches |
| James Moffett | USA | India | 17 October-10 November 2024 | Biogeochemistry of oxygen minimum zones |
| Satoshi Nagai | Japan | Philippines | 11-22 November 2024 | Harmful Algal Bloom (HAB) genomics |

SCOR Visiting Scholars are supported by grants from the U.S. National Science Foundation (OCE-2027831 and OCE-2346864) and dues payments by SCOR national committees.

POGO-SCOR Fellowship Programme

The POGO-SCOR Fellowship program is jointly funded by POGO (Partnership for Observations of the Global Ocean) and is designed to promote training and capacity building leading towards a global observation scheme for the oceans. The fellowship program is open to scientists, technicians, postgraduate students (preferably of PhD level) and post-doctoral fellows of developing countries and countries with economies in transition and involved in oceanographic work. The program has awarded almost 200 fellowships since 2001.

In 2024, out of 59 applications, five recipients were selected for the fellowship.

| Name | Fellow Country | Host Country | Topic |
|-------------------------------|----------------|--------------|--|
| Amirotul Bahiyah | Indonesia | USA | Heat Budget Analysis using Argo Float and Ocean-Atmosphere Satellite Data |
| Gabriel Gallegos Diez Barroso | Mexico | Italy | The Yucatan Self circulation under climate change |
| Fernando Becker | Argentina | France | Analysis of sub-mesoscale structures in the north-western Mediterranean by comparing in-situ and satellite data |
| Michelle Glory G Jonik | Malaysia | China-Taipei | Understanding Symbiodiniaceae Culture Protocols and Lipid Production to Assess Coral Stressors: Evaluating Nutrient Limitation Through Nutrient-Induced Fluorescence Transients (NiFTs) and Thermal Stress |
| Esther Karo Oghenede | Nigeria | Ghana | Investigating the Sources, Distribution, and the Impacts of Microplastic Pollution in Coastal Waters: Ghana Coastal Waters as a Case Study |

More information about the program can be found on the [program website](#) and in the [report from POGO](#) to the SCOR annual meeting.

SCOR's contribution to the POGO-SCOR Fellowship program is supported by grants from the U.S. National Science Foundation (OCE-2027831 and OCE-2346864).

NSF Travel Support for Developing Country Scientists

SCOR provides travel support for early-career scientists from low- to medium-income countries to attend ocean science meetings, conferences, workshops, and trainings. Requests for travel support will only be accepted from meeting organizers. Meeting organizers conduct their own selection process for grant recipients.

The following 2024 meetings were approved for support by the Capacity Development Committee:

| 2024 Meetings | Date | Location | Funded Amount | Number of Recipients |
|--|-------------------|-----------|---------------|----------------------|
| Austral Summer Institute XXI - ASI XXI | 2-26 January 2024 | Chile | 3500 | 4 |
| ICES-PICES 7th International Zooplankton Production Symposium | 17-22 March 2024 | Australia | 6000 | 4 |
| Strengthening the Global Ecosystem for Ocean Solutions (GEOS): A Cross-Regional Dialogue on Ocean-Climate Innovation | 8 or 9 April 2024 | Spain | 2500 | 2 |
| MSEAS 2024 – Marine Socio-Ecological Systems Symposium | 3-7 June 2024 | Japan | 5405 | 4 |

| | | | | |
|--|----------------------|-------------------------------|-----------------|--------------------|
| Gordon Research Conference on Ocean Mixing | 9-14 June 2024 | USA | 3050 | 2 |
| Advances in Marine Ecosystem Modelling Research (AMEMR) | 8-12 July 2024 | UK | 4000 | 5 |
| 45th COSPAR Scientific Assembly and Associated Events | 13-21 July 2024 | South Korea | 2130 | 2 |
| School and Workshop on Polar Climates: Theoretical, Observational and Modelling Advances | 22-31 July 2024 | Italy | 4000 | 2 |
| Trematodes 2024 | 8-13 September 2024 | Australia | 4000 | 4 |
| Ocean and Coastal Nutrients Workshop | 16-19 September 2024 | France | 1000 | 1 |
| Ocean Optics XXVI Conference | 6-11 October 2024 | Spain | 4000 | 2 |
| 7th International Marine Conservation Congress (IMCC7) | 13-18 October 2024 | South Africa | 6000 | 9 |
| SOLAS Open Science Conference | 10-14 November 2024 | India | 8000 | 7 |
| Total: | 13 Events | 11 different countries | \$53,585 | 48 awardees |

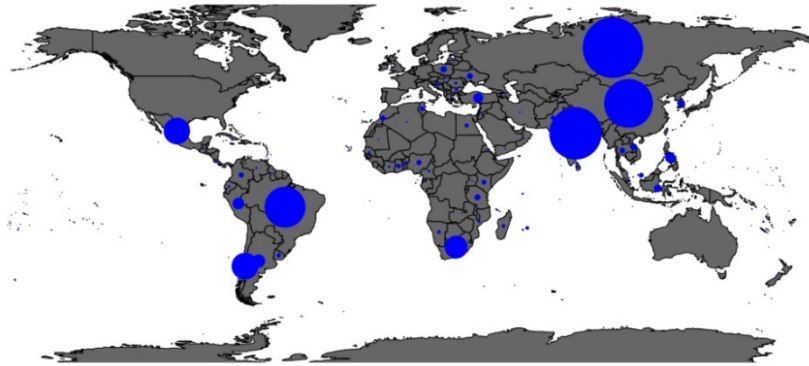
Two meetings have been approved for 2025 so far: Austral Summer Institute XXII (Chile) and the One Ocean Science Congress (France), committing \$13k funds so far for the year.

A summary of the program and its impact will be published in the December 2024 special issue of *Oceanography* on “A Vision for Capacity Sharing in the Ocean Sciences” (<https://tos.org/capacity-sharing-special-issue>).

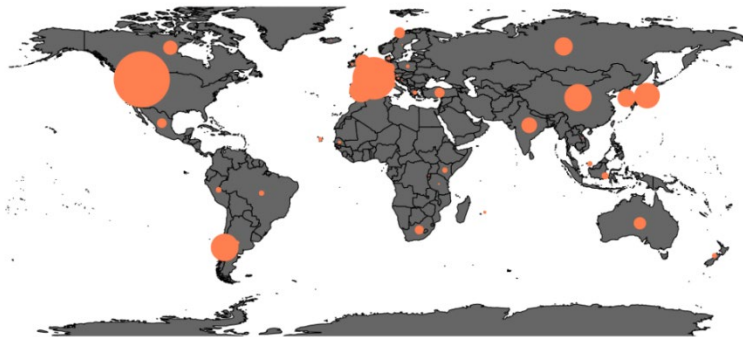
Twigg, E, Miloslavich, P, Urban, E, Zitoun, R. (2024). Enhancing Global Ocean Science Networks: The Impact of SCOR’s Travel Grant Initiative. *Oceanography* (accepted)

As part of the production of the publication, digital records since 1999 were reviewed and improved in order to develop summary statistics about the funded 280 meetings/activities and 1300 awardees receiving over \$1.26 Million USD. The figures below were developed to show the relative proportions (indicated by circle size) of recipients home countries (A) and event hosts countries (B).

(A) Recipient Home Countries



(B) Event Host Countries



Figures produced by Eduardo Klein (IMOS, University of Tasmania, Hobart, Australia)

SCOR travel grants are supported by grants from the U.S. National Science Foundation (OCE-2027831 and OCE-2346864)

Research Discovery Camps at the University of Namibia - Regional Graduate Network in Oceanography (RGNO)

The African-RGNO began in 2014, building upon the foundation developed by Prof. Kurt Hanselman (Switzerland) during two SCOR visiting scholar fellowships, and with financial support from the Agouron Institute and the Simons Foundation (since 2017). The A-RGNO offers annual Research Discovery Camps in Oceanography at the Sam Nujoma Campus (SANUMARC), the University of Namibia (UNAM), in collaboration with the National Marine Information and Research Center (NatMIRC) of the Ministry of Fisheries and Marine Resources (MFMR) of Namibia.

The focus of these camps is to provide courses and hands-on training in the chemical, physical, and biological aspects of oceanography to students with a particular emphasis on the Benguela Current ecosystem.

After two years of operating as an online series of “Discovery Seminars”, the Discovery Research Camp in Namibia was again held onsite in April-May 2022. However, in 2023 and 2024, the program was unable

to be run due to technical problems with the R/V *Welwitschia Mirabilis*. The potential for running the program in 2025 is still under discussion with the MFMR.

The potential that a Master of Science in Marine Sciences will be initiated at UNAM in 2026 offers the opportunity for the RGNO to be tied to an academic program and for dedicated administrative capacity to support the program in a sustainable manner.