

Nighttime sampling – WG 143 on dissolved  $N_2O$  and  $CH_4$  measurements: Intercomparison Cruise to the Baltic Sea on board the R/V Elisabeth Mann-Borghese, image by Damian L. Arévalo-Martínez.

## Goals

- Address global ocean issues
- Plan and conduct research
- Solve methodological and conceptual problems
- Build capacity in developing countries

## Approach

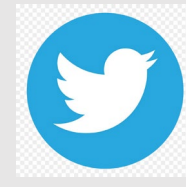
- Support international Working Groups and large-scale Projects
- Engage SCOR National Committees - more than 30
- Supported by SCOR National Committees, funding agencies and foundations
- Develop capacity - visiting scholar, fellowships, travel support
- International collaboration and partnerships - project offices supported by Australia, Canada, China, France, Germany, Japan, Netherlands, New Zealand, Poland, Sweden, UK, and USA

## Engagement

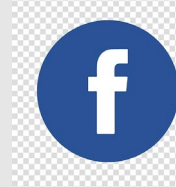
- Promotes equity, diversity, inclusion in oceans sciences
- Encourages and supports involvement of students and early career scientists
- Co-sponsor of the Ocean KAN (Knowledge Action Network)
- Contributor to the UN Decade
- Approved observer at the Intergovernmental Oceanographic Commission (IOC) and Intergovernmental Panel on Climate Change (IPCC)



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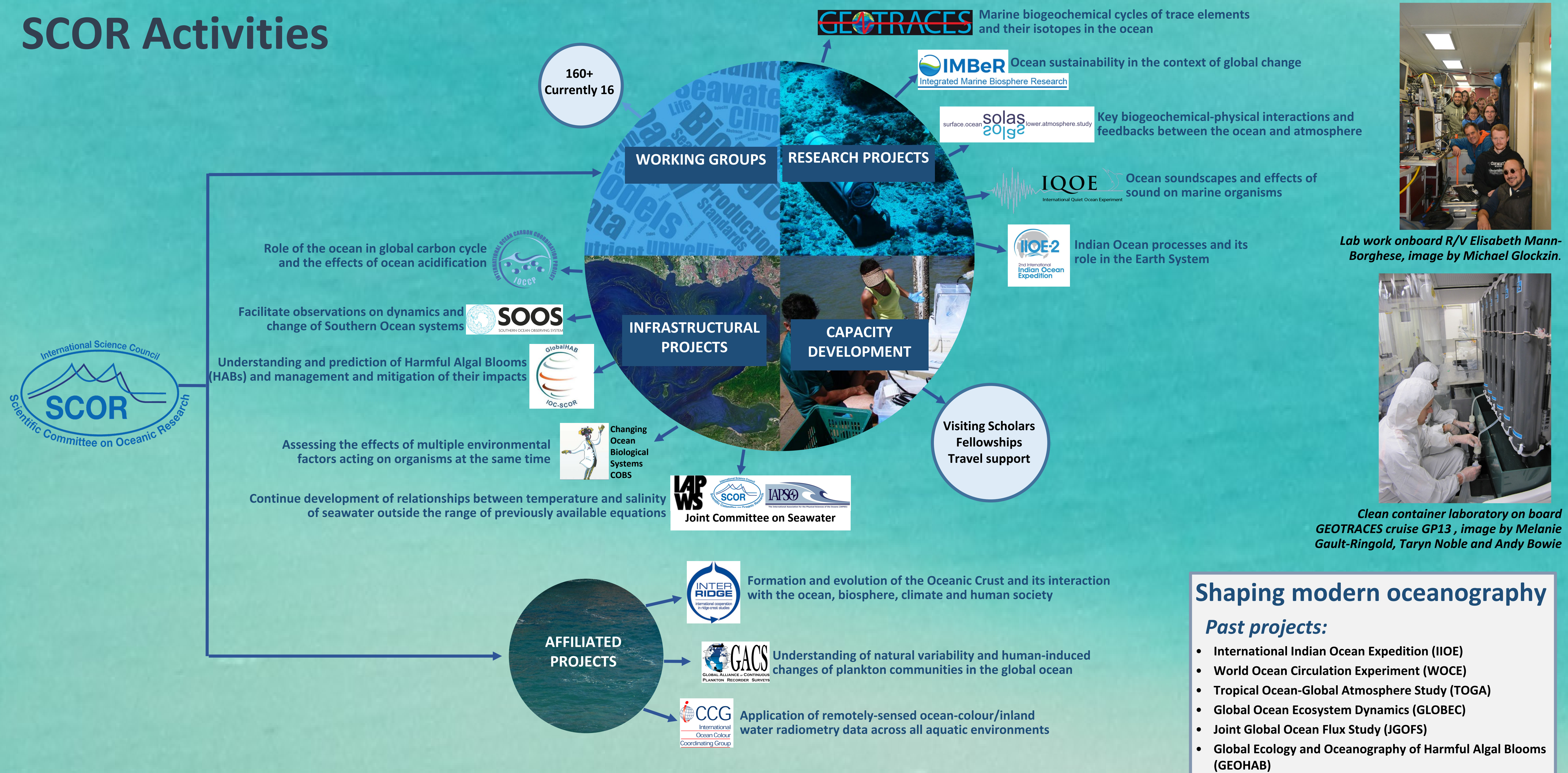


Public Group



secretariat@scor-int.org

## SCOR Activities



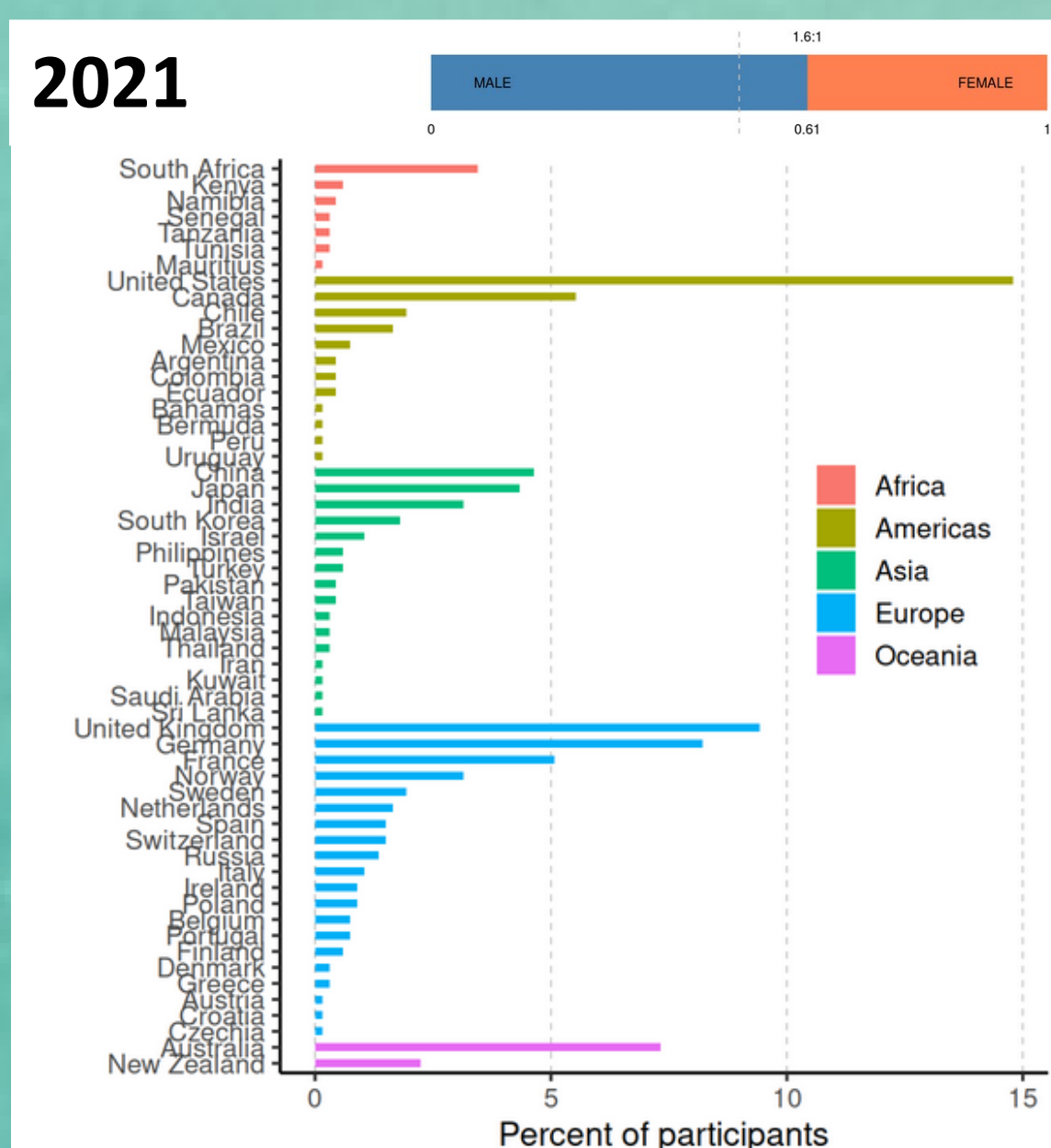
## Shaping modern oceanography

### Past projects:

- International Indian Ocean Expedition (IIOE)
- World Ocean Circulation Experiment (WOCE)
- Tropical Ocean-Global Atmosphere Study (TOGA)
- Global Ocean Ecosystem Dynamics (GLOBEC)
- Joint Global Ocean Flux Study (JGOFS)
- Global Ecology and Oceanography of Harmful Algal Blooms (GEOHAB)

## SCOR community

From the field to the lab, from data analysis to global synthesis – building capacity at every step of the way



From left to right: (1) Sea-glider deployment from South African Agulhas II on voyage to the Southern Ocean, image by Emma Bone; (2) Deployment of CTD Rosette System from South African vessel Agulhas in the Southern Ocean, image by Seb Swart; (3) Retrieving the Continuous Plankton Recorder (CPR) from the Aurora Australis in Eastern Antarctica, image by the Australian Antarctic Division; (4) The Southern Ocean Carbon and Climate Observatory (SOCCO) scientists at work, image by Sandy Tomalla; (5) Vertical Multiple-opening Plankton Sampler (VMPS) collecting plankton for metabarcoding up to 1000 m depth for Working Group 157 MetaZooGene, image by Junya Hirai.



From left to right: (1) Measuring photosynthetic activity on board the R/V L'Atalante, TONGA cruise across the South Pacific Gyre, image by Hubert Bataille; (2) Getting silk from the Continuous Plankton Recorder (CPR) cassette on board of the RV Investigator. The silk shows a phytoplankton bloom on the Eastern Coast of Australia (Melbourne to Sydney Transit), image by Julian Uribe-Palomino; (3) Filtration stand for phytoplankton community characteristics (with student instructions), image by Sandy Tomalla; (4) USCOC Healy and RV Polarstern historical meeting at the North Pole on a GEOTRACES crossover station, image by Stefan Hendricks; (5) A subsample of particles after trawling a Manta net in surface waters in the Southern Mediterranean in 2013. Tiny coloured plastic fragments are visible in the Petri dish, image by Giuseppe Suaria; (6) Inter-comparison exercise for cross-instrument calibration/standardization of chlorophyll induction fluorometer to assess phytoplankton primary production in real time non-invasively, image by Chelsea Technologies Group – Kevin Oxborough.



From left to right: (1) Getting ready to deploy a GO-FLO-CTD for trace metal sampling in the Southern Ocean, onboard SA Agulhas II, image by Raimund Rentel; (2) Glider deployment from South African vessel Agulhas II in the Southern Ocean, image by Seb Swart; (3) IOCCP 2019 Training Course in Kristineberg, Sweden, image by Nancy Williams; (4) SOLAS Summer School 2018 in Corsica, France, image by SOLAS; (5) Working Group 159 (DeepSeaDecade) discussing a roadmap for a standardised global approach to deep-sea biology for the Decade of Ocean Science for Sustainable Development at their first meeting at the University of Aveiro, Portugal, image by Kerry Howell; (6) Virtual meeting of Working Group 158 (C-GRASS) aimed to complete a scientific synthesis of the drivers and trajectories of seagrass ecosystems under global change, and to provide a framework for future coordinated observation and research on seagrass systems, image by Jessie Jarvis.