



Training the next generation

www.ocean-partners.org/training-education



POGO's observational training programme is making a significant contribution to reducing the deficit in trained ocean observers in developing countries. Over 800 young scientists from around 80 countries have received advanced training through POGO initiatives, while the over-subscription for POGO training schemes provides ample proof that the effort is responding to a genuine need.



Training visits to leading oceanographic institutions

These provide a unique opportunity for young scientists from developing countries to be exposed to state-of-the-art research and observation facilities and to network and collaborate with internationally renowned scientists.

POGO-SCOR Visiting Fellowships (2001-present): allow scientists from developing countries to spend up to three months receiving training in ocean observations in a major oceanographic institution. To date, more than 160 young scientists have been trained under this scheme.

NF-POGO Centre of Excellence (CofE) at the Alfred Wegener Institute (AWI) in Germany (2008-present): formerly at BIOS, Bermuda, a joint venture of POGO and the Nippon Foundation, under which ten scientists are supported annually to study for ten months in an intensive programme related to ocean observations.

Training initiatives organised by POGO member institutes (2012-present): including SAHFOS, NIOZ, PML, and the NF-POGO CofE, have taken place in the UK, the Netherlands and Ireland. POGO co-sponsors the training, and provides grants for workshop attendance to enable scientists from developing countries to participate.



Shipboard training

Few opportunities exist for students to acquire the skills necessary to participate in oceanographic campaigns. Building on the infrastructure and expertise pool of its members, POGO is focusing on providing such opportunities.

POGO Fellowship for training on-board AMT cruises (2009-present): supports one young scientist annually to participate in a major oceanographic cruise, and spend time at a participating major oceanographic institute (PML or NOC, UK) before and after the cruise to experience cruise preparation and data analysis.

FRidge Cruise: In partnership with Plymouth Marine Laboratory (PML) and the Universities of Liverpool and Southampton, the Nippon Foundation and POGO have organised a fellowship on the FRidge cruise, which is the latest UK contribution to GEOTRACES (GA13), taking place in the North Atlantic.

PAP Cruise: Through an ongoing collaboration with the Porcupine Abyssal Plain (PAP) Site long-term monitoring programme, POGO and its partners have supported three scientists since 2013 to join the annual research cruise servicing the Porcupine Abyssal Plain (PAP) observatory in the Northeast Atlantic.

Floating Summer School: In 2015 and 2016, NF-POGO co-sponsored shipboard training on the North South Atlantic Transect (NoSoAT) cruise, from Bremerhaven (Germany) to Cape Town (South Africa), on the RV Polarstern, together with the AWI and Strategic Marine Alliance for Research and Technology (SMART).



Training in developing countries

POGO recognises the importance of bringing expertise to developing countries, as a complementary method to those described above.

NF-POGO Centre of Excellence Regional Training (2009-present): organised as part of the NF-POGO CofE, in a developing country, for 2 to 4 weeks, held so far in Brazil, Vietnam, India, the Philippines and Mexico.

POGO Visiting Professorships (2009-14): one senior scientist, annually, visited a developing country to conduct training in ocean observations for a period of 2 weeks to 3 months.

Regional Initiatives: POGO provides support for regional participation in training. So far, this has included the Austral Summer Institute in Chile, the Masters in Applied Marine Science at the University of Cape Town in South Africa, training at the Indian National Centre for Ocean Information Services, and the Masters in Physical Oceanography in Benin.

The Impacts

POGO follows the progress of its trainees closely after the training has been completed. This is both to evaluate the medium- to long-term impacts of the training and to provide further opportunities for networking, collaboration and additional training to the alumni.



- ◆ **Opening doors for further career development:** Following the training, many recipients of POGO grants are able to secure PhD or postdoctoral scholarships at home or abroad.
- ◆ **Trainees becoming the trainers:** Many POGO trainees pass on their knowledge to colleagues and to the scientific community-at-large through seminars, lectures and training courses, providing real evidence of sustained capacity building.
- ◆ **Enhanced collaboration between institutions:** POGO programmes initiate collaborations between institutions in developing and developed countries that often continue beyond the period of the training, in some cases leading to further research visits, setting up of joint projects and joint publications.



"The fellowship programme is an excellent opportunity to spend time with leading international scientists. This is great not only for training, but also to set up collaborations between scientists, institutions and countries"

Anne Treasure, UCT, South Africa

"This is a marvellous opportunity to share expertise across the world. Hosting a POGO Fellow was very rewarding for me and for my group. I hope to maintain a collaboration with her and her colleagues."

Prof. Karen Heywood, University of East Anglia, UK.

"I think POGO fellowship and sponsorship programs are among the most valuable programs in existence today. The focus on developing nations and young investigators is truly exceptional. There are few or no other such opportunities for technical personnel from these countries, and the experiences serve to strengthen ties between members of the science community, between agencies in charge of resource management, and ultimately they help improve the relationship between countries."

Dr. Frank Muller-Karger, University of South Florida