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5.0 CAPACITY-BUILDING ACTIVITIES

5.1 SCOR Committee on Capacity Building

The 2006 SCOR meeting approved terms of reference for a SCOR Committee on Capacity Building, whose primary purposes are to oversee all of SCOR's capacity-building activities and to help the SCOR Secretariat manage these activities. The approved terms of reference follow:

- Provide direction for all of SCOR's existing capacity-building 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.
- Guide and assist SCOR Executive Director in development of new capacity-building activities, particularly the Regional Graduate Schools of Oceanography activity.
- Assist SCOR-sponsored projects in developing their capacity-building activities.
- Help SCOR arrange funding for existing and new capacity-building activities.
- Assist SCOR in interacting with regional and international groups related to capacity building in ocean sciences, such as the ICSU regional centers, START, IOC regional programs, etc.

The SCOR Executive Committee approved an initial committee membership in July 2007:

Venu Ittekkot (Germany), Chair
Alfonse Dubi (Tanzania)
John Farrington (USA)
Wajih Naqvi (India)
Shubha Sathyendranath (Canada)
Jilan Su (China)
Tatsuki Toda (Japan)

Additional members will be added in the coming months and memberships will be evaluated annually. The committee will begin its work by evaluating the range of capacity building currently conducted by SCOR and described below. An exciting development arose from the SCOR Project Summit, when Murray Brown, training consultant for UNESCO/IOC/IODE at its Project Office in Ostend, Belgium offered to develop a Web-based catalog of the capacity-building activities of ocean research projects and organizations. The draft of this catalog is available at http://www.scor-int.org/Capacity_Building/index.htm and is being reviewed by Project Summit participants and by the projects/organizations listed in the catalog.

A questionnaire was sent to all SCOR nations about their support for and participation in capacity-building activities for ocean sciences. The results will be compiled and made available on the SCOR Web site. The Committee on Capacity Building will use this information to help guide its activities.

The draft 2008 SCOR budget includes \$10,000 for the committee's activities.

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5.1.1 Regional Graduate Schools of Oceanography and Marine Environmental Sciences (RGSO)

The Committee on Capacity Building is making preliminary inquiries toward holding a regional planning meeting for the Latin America/Caribbean region.

5.1.2 POGO-SCOR Visiting Fellowships for Oceanographic Observations

This fellowship program continues to attract highly qualified applicants. In the seventh round of applications, 38 applications were received and 13 individuals were funded for fellowships in 2007. SCOR provided \$10,000 of the total estimated cost of \$60,000. Information about the recipients follows.

Fellowship Applicant	Parent Supervisor/ Organisation	Host Supervisor/ Organisation	Training topic
José Juan Barrera Alba Brazil	Sonia Maria Flores Giancesella Oceanographic Institute, Sao Paulo University (IOUSP), Brazil	Michael Sieracki J.J. MacIsaac Aquatic Cytometry Facility Bigelow Laboratory for Ocean Sciences, Maine, USA	Training in 'Flow Cytometry' and 'Flow Cytometer And Microscope' (FlowCAM) techniques for application in coastal and oceanic researches on Gulf of Maine (USA) and Brazil.
Leslie Aveytua-Alcazar Mexico	Dr. Victor Camacho-Ibar Universidad Autonoma de Baja California Ensenada, Baja California, Mexico	Dr. Alejandro J. Souza Proudman Oceanographic Laboratory Liverpool, UK	Applying a coupled biophysical model (POLCOMS/ERSEM) to San Quintin Bay, Mexico.
Olivia Cabrera Philippines	Dr. Cesar Villanoy Marine Science Institute University of the Philippines	Dr. Emmanuel Boss School of Marine Sciences University of Maine, USA	Application of remote and in-situ ocean optical measurements to ocean biogeochemistry
Tingwei Cui China	Zhang Jie First Institute of Oceanography State Oceanic Administration Qingdao, China	Steve Groom Plymouth Marine Laboratory Plymouth, United Kingdom	Development of the semi-analytical model in the Bohai Sea
Soumaya El_Amrani Morocco	Dr. Rachid Fadel Abdelmalek Essaâdi University Faculté des Sciences Tétouan -Morocco	Dr. Jesus M. Mercado Carmona Centro Oceanográfico de Málaga, Instituto Español de Oceanografía Málaga, Spain	Participation in onboard research survey, lab analysis of chlorophyll a, alkalinity and phytoplankton, statistical analysis of time series (ARIMA, seasonal decomposition, etc.).
Marlos Goes Brazil	Ilana Wainer Universidade de Sao Paulo Sao Paulo, SP Brazil	James Carton University of Maryland Computer and Space Sci. Building, USA	Observational Study of the Variability of Antarctic Intermediate Water in the Atlantic Ocean.
R. Madhan India	Dr. Elgar Desa National Institute of Oceanography, India	William J. Kirkwood Monterey Bay Aquarium Research Inst. Moss Landing, CA, USA	Design of station keeping Vertical Profilers for coastal and deep ocean observations.

Wahid Mufaddal Egypt	Mohamed A. Shata Director National Institute of Oceanography & Fisheries (NIOF) Alexandria, Egypt	Samantha Lavender School of Earth, Ocean & Enviro. Sciences (SEOES) Plymouth University Plymouth, UK	Utilization of ocean colour satellite data for the study of seasonal variability of phytoplankton and suspended sediments in the coastal waters off the Nile Delta, Egypt.
Ravidas Naik India	Dr. A.C. Anil National Institute of Oceanography Dona Paula, Goa, India	Diana Sarno Taxonomy/Identification of Marine Phytoplankton Stazione Zoologica "A. Dohrn", Naples, Italy	Taxonomy and biogeography of marine phytoplankton.
Eduardo Negri (de Oliveira) Brazil	Bastiaan Adriaan Knoppers Federal University Fluminense (UFF) Outeiro São João Batista s/n° - Centro Niterói/RJ – Brazil	Richard Warren Gould, Jr. Naval Research Laboratory Ocean Optics Section Stennis Space Center, MS 39529 USA	Remote Sensing of Case 2 Water Quality
Ivonne Radjawane Indonesia	Safwan Hadi, Ph.D Oceanography Research Group, Faculty of Earth Sciences and Mineral Technology, Bandung Institute of Technology (ITB), Bandung, Indonesia	Prof. Dr. Fei Chai School of Marine Science University of Maine Orono, ME, USA	Application of biogeochemical model for regional and global scale using the coupled Regional Ocean Modeling System (ROMS) on the parallel computer facility.
Ana Ramirez-Manguilar Mexico	Laura E. Carrillo Bibriezca El Colegio de La Frontera Sur Chetumal, Q. Roo, Mexico	John Wilkin Institute of Marine and Coastal Sciences Rutgers University, New Brunswick, NJ, USA	Numeric model for the coastal zone of Quintana Roo, Mexico
Marcelo Landim de Souza Brazil	Ermindia da Conceição Guerreiro Couto Programa de Pós-Graduação em Sistemas Aquáticos Tropicais Universidade Estadual de Santa Cruz Bahia, Brazil	Dr. Gwenaël Abril EPOC (Environnements et Paléoenvironnements OCéaniques) Université Bordeaux 1 Talence Cedex, FRANCE	Determination of pCO ₂ and CO ₂ fluxes through ocean/atmosphere interface by direct measurement.

5.1.3 NSF Travel Support for Developing Country Scientists

SCOR has received support from the U.S. National Science Foundation (NSF) since 1984 to provide funding for an important SCOR activity in the area of capacity building. Travel grants are awarded to ocean scientists from developing countries and the former Soviet Union, Eastern Europe, and other countries with economies in transition, to enable them to attend international scientific meetings.

The amount of the award from NSF is now \$75,000 per year. Of this, a small amount (\$5,000 per year) is used to offset SCOR Secretariat expenses for contacting meeting organizers and

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recipients of travel funds, and for making travel arrangements. Recipients of SCOR travel awards are always chosen in consultation with the organizers of meetings that SCOR has agreed to cosponsor; direct applications from individuals are not accepted by the SCOR Secretariat. Priority is given to applicants who are presenting a paper or poster at the meeting or to those who have some special expertise or regional knowledge to bring to a workshop or working group. Preference is also given to younger scientists. In general, care is taken to ensure that the recipients of SCOR/NSF funds are *active* scientists, and that they have not received similar support from SCOR in the previous two years. All travel grant recipients are informed that their support comes from SCOR and that it is made possible through NSF funding.

Since 2001, a portion of total funding has been provided for longer-term courses or fellowships, such as the POGO-IOC-SCOR Visiting Fellowships for Oceanographic Observations.

The most recent three-year grant began on 1 July 2005, running until 30 June 2008. During the first two years of the grant, 171 individual scientists from 35 countries received full or partial travel support that enabled them to attend 33 different scientific meetings or training programs during this period.

The SCOR Executive Committee approved two requests for travel support since the 2006 SCOR Meeting:

- International Symposium on Science and Conservation of Horseshoe Crabs (June 2007)
- GEOTRACES Cruise Planning Meetings (June, Sept. and Oct.)

2007-2008 Requests for Travel Grants

About \$215,000 of SCOR's current \$225,000 grant from NSF has been committed, leaving about \$10,000 to commit between Sept. 2007 and June 2008. Some of the requests listed below are for meetings in which SCOR is directly involved in planning, so there is no formal written request. Any funds approved will be contingent on SCOR receiving continuing funding from NSF. (A new proposal will be submitted in late 2008.) Assuming that the new grant would provide \$75,000 per year, the following requests would almost commit all SCOR travel funds to mid-2009.

Meeting/Training	Date(s)	Amount
#1 POGO-SCOR Visiting Fellowships for Oceanographic Observations	2008	\$10,000
#2 SCOR 50 th Anniversary Symposium	20-21 Oct. 2008	\$20,000
#3 World Conference on Marine Biodiversity	11-15 Nov. 2008	\$5,000
#4 WG 129 on Deep Ocean Exchanges with the Shelf		\$5,000

#5 Second Symposium on the Ocean in a High-CO ₂ World	6-8 October 2008	\$5,000
#6 IMBER Imbizo		\$7,500
#7 Eastern Boundary Upwelling Ecosystems - Integrative and comparative approaches (GLOBEC/IMBER/SOLAS)	2-6 June 2008	\$7,500
#8 SCOR Office Expenses		\$5,000
#9 PICES XVII Theme: "Beyond observations to achieving understanding and forecasting in a changing North Pacific Forward to the future".	23 October – 2 November 2008	\$5,000
Total		\$70,000

Request #1

Continued support for the POGO-SCOR Visiting Fellowships for Oceanographic Observations. As noted elsewhere, this is the major form of SCOR-POGO cooperation currently and the program has been greatly appreciated by both fellowship recipients and hosts.

Request #2

SCOR 50th Anniversary Symposium. An important aspect of the symposium will be to attract young scientists to the meeting from SCOR nations. The organizing committee would like to be able to pay for one young scientist from each of SCOR's 12 members that are developing countries or countries with economies in transition.

Request #3

World Conference on Marine Biodiversity

Valencia, Spain 11-15 November 2008

Aim of the Conference

To review the current extent of understanding of marine biodiversity and its role in marine ecosystem functioning, to assess current and future threats and potential mitigation strategies for conservation and regulation of marine resource and to define the future research priorities.

Chairs of the Conference:

Carlo Heip and Carlos Duarte

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Supporting Organisations

EU Network of Excellence MarBEF
International Council for the Exploration of the Seas
Conseil International pour l'Exploration Scientifique de la Mediterranee
UNESCO/IOC
Scientific Council for Oceanic Research SCOR (provisional)
Scientific Council for Antarctic Research SCAR
DIVERSITAS
The Marine Board of the European Science Foundation
Census of Marine Life
Eurocensus of Marine Life
Directorate General of Research of the European Commission
European Environment Agency
IUCN?

International Scientific Committee

3 theme leaders of MarBEF
one representative from each supporting organisation
(to be appointed by June 1, 2007)

Local Organizing Committee

To be composed by Carlos Duarte

Outline of organization

The conference will last for four days with plenary presentations in the morning and a number of parallel sessions in the afternoon (or in the late morning and afternoon depending on demand). Invited plenary speakers may be suggested (and preferably funded) by the sponsoring organizations. Sessions can be offered by the supporting organizations, including session convenors and, when possible, funding of invited session speakers, until November 1st, 2007.

The number of participants may be limited to 500.

Topics

The following are suggestions for topics:

- The exploration of marine biodiversity: scientific and technological challenges
- Marine biodiversity and ecosystem functioning
- Conserving Marine Biodiversity
- Societal and Economic Benefits of Marine Biodiversity
- Polar Marine Biodiversity and the International Polar Year
- Response of Marine Biodiversity to Global Change

The supporting organizations are requested to suggest additional topics.

Publicity and Outreach

- press releases on the conference and the sessions
- round table discussions open to the public and involving ‘celebrities’
- an event on Oceans and Culture: Art, Cuisine, History, Music, Psychology and Well-being
- Podcasted plenary talks (or even whole conference)
- Evening events for the public (movies, presentations,)
- A big exposition on Marine Biodiversity including a) ocean habitats b) history of human exploration c) exploration and technologies d) oceans and the biosphere at the Museum of Science in Valencia

Time Schedule

- April 2007: finalizing draft conference plan
- May 2007: First electronic announcement through supporting organizations, newsletters etc.
- June 2007: Call for Sessions (closure November)
- June 2007: International Steering Committee and National Organizing Committee appointed
- October 2007: Second electronic and hard copy announcement with call for contributions by February 2008
- November 2007: Invitation to plenary and session speakers
- February 2008: Deadline for Abstracts
- March 2008: Preliminary Programme

Request #4

SCOR/IAPSO Working Group 129 on Deep Ocean Exchanges with the Shelf. This group would like to hold their next meeting in Cape Town, South Africa, expressly for the purpose of building capacity in Africa for studies related to their topic.

Request #5

Second Symposium on The Ocean in a High-CO₂ World. Studies of ocean acidification are often carried out by scientists from developed countries, although developing countries could be severely impacted by ocean acidification, particularly in relation to countries that depend on coral reefs. It is important to draw more developing country scientists into this field.

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Request #6

Dr Edward Urban
Executive Officer
Scientific Committee on Oceanic Research (SCOR)
Department of Earth and Planetary Sciences
The Johns Hopkins University
Baltimore, MD 21218, USA

OBJECT: SCOR Travel funds for developing country scientists

Dear Ed,

IMBER is planning a major scientific event (1st IMBER IMBIZO) in 2008. This event will take the form of a set of three focused workshops which will be co-located and will have joint sessions each day to encourage interaction between the participants of the three workshops. The three workshop topics will be, End to end food webs, the Mesopelagic and the Bathypelagic. The End to end food webs workshop will involve both IMBER and GLOBEC scientist and will facilitate interactions between the two projects. The overall theme of the IMBER IMBIZO will be “Biogeochemical and ecosystems interactions in a changing ocean”. The products from each of the workshops will be proceeding as special volume, and an Implementation Plan for internationally coordinated research projects. We are currently forming an organising committee for this event, which will be held late in 2008.

The organising committee is charge of raising funds to support this event which will have between 90 and 120 participants. I would like to apply for support from SCOR for travel funds for scientists from developing countries and countries with economies in transition. The amount of support needed is estimated at 10k USD. These funds would help us to support travel of valuable scientists from developing countries to the 1st IMBER IMBIZO and facilitate their contribution to the scientific develop of IMBER and implementation plans for research in food web, mesopelagic and bathypelagic research.

Please feel free to contact me if you need any further details about the 1st IMBER IMBIZO.

Yours sincerely



Dr Julie Hall
Chair
Integrated Marine Biogeochemistry and Ecosystem Research (IMBER)

Request #7

Eastern Boundary Upwelling Ecosystems - Integrative and comparative approaches (GLOBEC/IMBER/SOLAS) – See request letter in GLOBEC annual report to SCOR (Tab 3).

Request #8

SCOR has permission to use up to \$5000 each year from the NSF travel grant to pay for salaries related to administering the grant. This involves working with meeting organizers, as well as developing country travelers directly.

Request #9

PICES is very grateful for continuing support from SCOR for our Annual Meetings. The 2006 SCOR General Meeting approved US\$ 5,000 for travel of developing country scientists to PICES XVI (October 26-November 5, 2007, Victoria, Canada) for SCOR-relevant sessions/workshops, and we would like to request travel support at the level of US\$ 6,000-10,000 for scientists from countries with “economies in transition” from the Pacific Rim to attend sessions/workshops of interest to SCOR at PICES XVII to be held October 23 - November 2, 2008, in Dalian, People’s Republic of China. The overall theme for PICES XVI is *“Beyond observations to achieving understanding and forecasting in a changing North Pacific Forward to the future”*.

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5.1.4 SCOR Reports to Developing Country Libraries

Three reports were sent to developing country libraries since the 2006 General Meeting:

- GEOTRACES Science Plan
- GEOHAB HABs in Eutrophic Systems Research Plan
- SCOR Proceedings

Libraries in Developing Countries That Receive SCOR Reports

Argentina	Universidad Nacional del Sur Bahía Blanca, Argentina
Bangladesh	Library SPARSO Dhaka, Bangladesh
Brazil	FURG Departamento de Oceanografia Rio Grande, Brazil Instituto Oceanográfico Universidade de São Paulo São Paulo, Brazil Dept. of Oceanography and Hydrology University of the State of Rio de Janeiro
Bulgaria	State Fisheries Inspectorate (SFI) Fisheries and Aquaculture Department Sofia, Bulgaria
Chile	Departamento de Oceanografia Universidad de Concepción Concepción, Chile Servicio Hidrografico y Oceanografico Valparaiso, Chile
China-Beijing	Library of Ocean University of Qingdao Qingdao, China Institute of Oceanology Chinese Academy of Sciences Qingdao, China Second Institute of Oceanography

	State Oceanic Administration Hangzhou, China
Croatia	Rudjer Boskovic Institute Zagreb, Croatia
Cote d'Ivoire	Centre de Recherches Oceanologiques (CRO) Abidjan, Côte d'Ivoire
Cuba	Centro de Investigaciones Pesqueras (CIP) Ministerio de la Industria Pesquera (MIP) Habana, Cuba
Egypt	National Institute of Oceanography and Fisheries Cairo, Egypt
Estonia	Estonian Marine Institute (MEI) Tallinn, Estonia
Fiji	Pacific Islands Marine Resources Information System (PIMRIS) The University of the South Pacific Suva, Fiji Islands
Ghana	Institute of Aquatic Biology Achimota, Ghana
India	National Institute of Oceanography Goa, India Physical Research Laboratory Ahmedabad, India
Indonesia	Centre for Oceanology Indonesian Institute of Sciences Jakarta, Indonesia
Kenya	Kenya Marine and Fisheries Research Institute (KMFRI) Mombasa, Kenya
Korea	Korea Ocean Research and Development Institute (KORDI) Seoul, Korea
Lithuania	Ichthyobank Vilnius, Lithuania
Malaysia	ICLARM - The World Fish Center Penang, Malaysia
Mexico	Universidad Nacional Autónoma de México (UNAM) México, D.F., México Biblioteca CICESE Ensenada, Mexico
Morocco	Institut National de Recherche Halieutique (INRH) Casablanca, Morocco
Pakistan	National Institute of Oceanography

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	Karachi, Pakistan
Peru	Instituto del Mar del Perú (IMARPE) Callao, Peru
Poland	Institute of Oceanology Polish Academy of Sciences Sopot, Poland
Philippines	College of Science, University of the Philippines Quezon City, Philippines
Romania	Romanian Marine Research Institute Constanta, Romania
Russia	P.P. Shirshov Inst. of Oceanology Russian Academy of Sciences Moscow, Russia All Union Research Inst. of Fisheries and Oceanography V Moscow, Russia
South Africa	University of Cape Town Cape Town, South Africa
Thailand	Dept. of Marine Sciences Chulalongkorn University Bangkok, Thailand
Tunisia	Institut National des Sciences et Technologies de la Mer (INSTM) Salammbô, Tunisia
Turkey	Institute of Marine Sciences Middle East Technical University Icel, Turkey
Ukraine	Southern Scientific Research Institute of Marine Fisheries and Oceanography (YugNIRO) Laboratory of Pacific and Indian Oceans Fish Resources and Fishery Statistics Crimea, Ukraine Marine Hydrophysical Institute Ukrainian Academy of Sciences Sevastopol, Ukraine
Vietnam	National Institute of Oceanography Nha Trang, Vietnam