



INTERNATIONAL OCEAN INSTITUTE



**TRAINING PROGRAMME ON
*OCEAN GOVERNANCE: POLICY, LAW AND MANAGEMENT***

**2012
COURSE REPORT**



**Dalhousie University, Halifax, Canada
16th May – 13th July, 2012**

INTERNATIONAL OCEAN INSTITUTE

2012 COURSE REPORT

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TABLE OF CONTENTS

	Page
Introduction	1
Group Photograph	2
International Ocean Institute	3
The Training Programme	4
Syllabus	5
Course Director's Report	18
Participants	23
Funders	25
Lecturers and Field Trip Co-ordinators	38
IOI-Canada Contact Information	45

INTRODUCTION

This report provides a record of the 2012 training programme on *Ocean Governance: Policy, Law and Management*, conducted by the International Ocean Institute (IOI) at Dalhousie University, Halifax, Canada. Held from 16th May to 13th July, this was the 32nd annual course since the training programme was instituted by Elisabeth Mann Borgese, Founder of the IOI.

The programme was attended by 17 participants from a range of disciplines and backgrounds. A good balance of countries and regions was achieved, with participants from Africa, Asia, the Caribbean, Eastern Europe, South America and the South Pacific. As usual, emphasis was placed on having strong female representation among the group, with slightly more women than men in the class this year.



Lectures were delivered by about 90 speakers, and included local and international experts and practitioners. The course was organised thematically as follows:

- Module 1:** Orientation and Introduction to the Training Programme
- Module 2:** Ocean Sciences
- Module 3:** Integrated Coastal and Ocean Management
- Module 4:** Law of the Sea and Principled Ocean Governance
- Module 5:** Fisheries and Aquaculture
- Module 6:** Communication and Negotiation
- Module 7:** Maritime Security
- Module 8:** Energy
- Module 9:** Marine Transportation
- Module 10:** International Round Table
Conclusion of Training Programme

Photo credits in report (unless otherwise indicated): IOI staff/participants and Kevin Deagle

GROUP PHOTOGRAPH



Photo credit: Nick Pearce, Dalhousie University

Front row (from left to right): Rebecca Perrott, 2012 Course Co-ordinator (Canada), Juta Kaktiniece (Latvia), Marie Carmèle Joseph (Haiti), Tom Traves, President, Dalhousie University (Canada), Jacqueline Benard (Kenya), Emi Shimada (Japan), Madeleine Coffen-Smout, Programme Officer (England)

Second row: Grace Kaue (Papua New Guinea), Vu Dinh Phuc (Vietnam), Zheng Rui (China), Lucine Edwards (St Vincent & the Grenadines), Mercedes Gonzales, WWF-US representative (Panama/USA)

Third row: Wan Xiaodong (China), Nicole Parris (Barbados), Wang Haiyan (China), Tian Yuzhen (China), Godwin E.K. Dzah (Ghana), Denzil Roberts (Guyana), Prisca Mziray (Tanzania)

Back row: Mitchell Lay (Antigua & Barbuda), David Griffiths, Senior Research Fellow (Canada), Tony Charles, Senior Research Fellow (Canada), Mike Butler, Director & 2012 Course Director (England/Canada), Jennifer Barr, Finance Officer (Canada), Ahmed Al Refaei (Egypt), Dan Mombourquette, Intern (Canada)

INTERNATIONAL OCEAN INSTITUTE

IOI-Canada is a leading member of the International Ocean Institute's network of operational centres and focal points operating worldwide in over 30 countries. One of the earliest IOI centres, it was established by Elisabeth Mann Borgese in 1979 soon after she arrived at Dalhousie University in Halifax, Nova Scotia, and it has been based at the university ever since.

Registered as the "IOI-Canada Association", IOI-Canada is a not-for-profit organisation, federally incorporated under the Canada Corporations Act, and governed by a Board of Directors. It is guided by the IOI/Dalhousie Oceans Advisory Committee and staffed by an experienced team of professionals, augmented by Senior Research Fellows and interns who contribute to its activities. IOI-Canada is the regional co-ordinator of the IOI Operational Centres in the Americas, which consists of IOI-Brazil, IOI-Costa Rica, IOI-Cuba and IOI-USA, in addition to the Canadian centre. The international headquarters of the IOI have been located in Malta since being founded in 1972 by Elisabeth Mann Borgese. Information on IOI headquarters and the network as a whole can be found at www.ioinst.org.



IOI-Canada's mission is to promote responsible ocean governance and the stewardship and sustainable use of coastal and ocean resources in Canada and around the world. Our goals define what we intend to accomplish in fulfillment of the mission. We aim to encourage and develop the potential and capacity of individuals, institutions and communities to foster:

- a network of individuals dedicated to effective coastal and ocean governance;
- a network of institutions devoted to coastal and ocean governance, management, education, training, research and outreach; and,
- sustainable and prosperous coastal communities.

IOI-Canada accomplishes its mission and goals through three main activities: education and training, collaborative research, and outreach. Interdisciplinary training is its major focus, and through its flagship course, it has trained over 600 individuals from almost 100 countries.

THE TRAINING PROGRAMME

Purpose and Approach

With the support of Dalhousie University, the International Ocean Institute has offered an intensive, interdisciplinary training programme in Halifax annually since 1981. This flagship course is available through the IOI network's OceanLearn suite of programmes.

The purpose of this training programme is to:

- deepen understanding of the ever-increasing importance of the oceans and their resources in world politics and sustainable economic development;
- assist developing countries in the formation of a core of decision-makers fully aware of the complex issues of coastal and ocean management; and,
- maximise benefits to be derived from the United Nations Convention on the Law of the Sea through the proper integration of coastal and ocean management into national and international development strategies.

The course emphasises the importance of viewing the ocean as a system with varied users and multiple, often competing and conflicting, uses. It also aims to increase awareness of the fact that ocean management requires broad interdisciplinary skills, new institutional and legal infrastructures, and new forms of intergovernmental and non-governmental organisation and cooperation at the local, national and international levels.

The training programme takes place in Halifax on the campus of Dalhousie University, and consists of approximately 200 hours of intensive learning. While it is primarily lecture-based, the course also includes interactive discussions, participant presentations, exercises and simulations, field trips and an international round table.

Participants

The training programme is specifically designed to benefit developing country mid-career professionals who are responsible for some aspect of coastal or ocean governance. Given the under-representation of women in the upper echelons of administration and policy-making worldwide, particular emphasis is placed on trying to achieve equal numbers of female and male participants, and to create a forum where men and women can learn together, sharing different perspectives and examining issues from different viewpoints.

Course Content

The course is a foundational programme in a very important field of development strategy; it is not intended to provide specialised training. Participants are therefore expected to step out of their fields of specialisation and be exposed to broadly interdisciplinary work.

The 2012 training programme was organised into 10 modules and covered a wide range of different themes and issues, as set out in the following syllabus. When provided by lecturers, a brief summary of the topics to be covered in their presentation was posted on the IOI-Canada website, and these can be reviewed at <http://internationaloceaninstitute.dal.ca/2012LectureTopics.doc>.

SYLLABUS

MODULE 1 Orientation and Introduction to the Training Programme

Wednesday, 16th May

9:30 – 10:00	Introductions & Administrative Matters	Ms Rebecca Perrott (Module Leader)
10.15 – 12.00	Killam Library Tour	Ms Michelle Paon
1.30 – 3.15	Managing at University	Dr David Mensink
3.30 – 4.30	Walking Tour of Upper Campus	Ms Katherine Hay

Thursday, 17th May

10.30 – 12.00	Intercultural Awareness	Dr Patricia De Méo
1.30 – 4.00	Ethical Issues in Ocean Governance	Prof. Ian McAllister

Friday, 18th May

9.00 – 12.00	Organisation of Course Work, and Introduction to Modules & Module Leaders	Mr Mike Butler Module Leaders IOI staff
1.30 – 2.30	The Sea in Human History	Mr David Griffiths
2.30 – 2.45	Introduction to Simulation Exercise	Mr David Griffiths
4.00 – 6.00	Opening Ceremony	Ms Anita Coady All

Saturday, 19th May

All day	Free. Optional morning trip to Farmers Market
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Sunday, 20th May

All day Free

Monday, 21st May

All day Free for Victoria Day holiday

MODULE 2 Ocean Sciences

Tuesday, 22nd May

9.00 – 12.00	Introduction to Ocean Sciences, and Health of the Oceans	Dr Peter Wells (Module Leader)
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1.30 – 4.00	Introduction to Oceanography	Dr Doug Wallace
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Wednesday, 23rd May

9.00 – 12.00	Land/Sea Interface: Estuarine and Coastal Waters	Dr Graham Daborn
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1.30 – 4.00	Science into Policy	Dr Bruce Hatcher
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Thursday, 24th May

8.30 – 10.00	Ocean Weather and Forecasting	Mr Doug Mercer
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10.15 – 12.00	Eco-boundaries and Habitat	Dr John Roff
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12.30 – 5.00	Field Trip: Bedford Institute of Oceanography	Mr Bruce Anderson Dr Steve Campana Mr Kristian Curran Mr Michel Goguen Mr Tim Hall Ms Hilary Moors Ms Heidi Schaefer Dr Jacob Verhoef Dr Alain Vézina
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Friday, 25th May

9.00 – 12.00	Climate Change	Dr John Shaw
1.30 – 3.30	Remote Sensing and the Oceans	Mr Dirk Werle
3.30 – 4.00	Simulation Exercise 2	Mr David Griffiths

Saturday, 26th May

All day Free

Sunday, 27th May

All day Free

Monday, 28th May

9.00 – 12.00	Mangroves and Human Security	Dr Brad Walters
1.30 – 4.00	Marine Biodiversity: Census of Marine Life, and Ocean Tracking Network	Dr Ron O'Dor Mr Bob Branton
4.00 – 4.30	Module Wrap-up	Dr Peter Wells

<p>MODULE 3 Integrated Coastal and Ocean Management</p>
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Tuesday, 29th May

9.00 – 12.00	Introduction to Integrated Coastal and Ocean Management	Dr Larry Hildebrand (Module Leader)
1.30 – 4.00	Coastal Tourism (<i>venue: Maritime Museum of the Atlantic</i>)	Ms Heather Yule Mr Richard MacMichael

Wednesday, 30th May

9.00 – 12.00	Marine Spatial Planning	Mr Paul Macnab Mr Glen Herbert
1.30 – 4.00	Information Management	Mr Paul Boudreau Mr Andy Sherin

Thursday, 31st May

9.00 – 12.00	Environmental Economics	Mr Scott Wood
1.30 – 2.45	Coastal Framework	Mr Sean Weseloh McKeane
3.00 – 3.30	Module Wrap-up	Dr Larry Hildebrand
3.30 – 4.00	Simulation Exercise 3	Mr David Griffiths

Friday, 1st June (*venue GIS Lab*)

9.00 – 12.00	Toolbox: Introduction to GIS	Ms Jennifer Strang
1.30 – 4.00	Toolbox: GIS Applications	Mr James Boxall Mr Raymond Jahncke

Saturday, 2nd June

All day Free

Sunday, 3rd June

All day Free

<p>MODULE 4 Law of the Sea and Principled Ocean Governance</p>

Monday, 4th June

9.00 – 12.00	Introduction to Law of the Sea	Mr Hugh Williamson (Module Leader)
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1.30 – 4.00	Introduction to Law of the Sea (cont.)	Mr Hugh Williamson
4.00 – 4.30	Participant Presentation	Participants

Tuesday, 5th June

9.00 – 12.00	Precautionary Principle	Mr David Dzidzornu
1.30 – 4.00	Ecosystem Approach and Integration	Dr Lucia Fanning

Wednesday, 6th June

9.00 – 12.00	Maritime Boundary Delimitation	Prof. Phillip Saunders
1.30 – 4.00	Toolbox: Project Cycle	Prof. Ian McAllister
6.30 onwards	Oceans Film Festival (optional)	

Thursday, 7th June

9.00 – 12.00	Polluter Pays	Mr Kenneth MacInnis
1.30 – 4.00	Equity and International Fisheries Law	Ms Cecilia Engler

Friday, 8th June (World Oceans Day)

9.00 – 10.30	Simulation Exercise 4	Mr David Griffiths
10.45 – 12.00	Contemporary Issues, and Module Wrap-up	Mr Hugh Williamson
1.30 – 2.45	Toolbox: Overview of UN Agencies	Dr Daniela Diz
3.00 – 4.00	Participant Presentations	Participants
7.00 onwards	Elisabeth Mann Borgese Ocean Lecture – <i>Blue Planet Under Threat: Challenges and Opportunities at Rio+20</i> – and reception	Dr Awni Behnam Dr Susanna Fuller Ms Megan Leslie Hon. David MacDonald Dr Larry Hildebrand (chair) All

Saturday, 9th June

7.00 p.m. Optional: Oceans Concert (*venue: Halifax Waterfront*)

Sunday, 10th June

All day Free

MODULE 5 Fisheries and Aquaculture
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Monday, 11th June

9.00 – 12.00	Introduction to Module, and Fishery Governance Issues	Dr Tony Charles (Module Leader)
1.30 – 4.00	High Seas Fisheries and Marine Conservation	Dr Susanna Fuller

Tuesday, 12th June

9.00 – 12.00	Socio-economic Monitoring for Fisheries	Ms Maria Pena
1.30 – 2.45	Overview of Fisheries Management in Canada	Mr Stefan Leslie
3.00 – 4.30	Participant Presentations	Participants

Wednesday, 13th June

9.00 – 12.00	Ecosystem-based Fishery Management	Dr Nancy Shackell Dr Tony Charles
12.30	Official Class Photograph	All
1.30 – 2.30	Aboriginal Fisheries	Prof. Patricia Doyle-Bedwell
2.45 – 4.00	Community Fisheries	Dr Tony Charles
6.30 onwards	Oceans Film Festival (optional)	

Thursday, 14th June

9.00 – 10.30	Small-scale Fisheries in Latin America: Shifting Conventional Paradigms	Mr Mauricio Castrejón
10.45 – 12.00	Participant Presentations	Participants
1.30 – 4.00	Fisheries Management: Tools and Approaches	Dr Tony Charles

Friday, 15th June

9.00 – 12.00	Aquaculture	Mr David Roberts
1.00 – 1.25	Briefing on Marine Affairs Programme (optional)	Ms Becky Field
1.30 – 2.45	Fish Processing	Mr Geordie MacLachlan
3.00 – 4.30	Salmonid Fisheries	Dr Fred Whoriskey

Saturday, 16th June

All day	Field Trip to Bay of Fundy: Sustainable Fish Farming Canada Ltd, Grand Pré Historic Site, Annapolis Tidal Power Station, Annapolis Royal Marsh Nature Trail	Mr David Roberts Mr Kirk Havercroft Mr Bruce Gurnham Dr Jon Percy
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Sunday, 17th June

All day	Field Trip to Bay of Fundy: Innovative Fishery Products Inc., Fort Anne, Port Royal, Bear River First Nation Cultural Centre	Mr Doug Bertram Mr Frank Meuse Jr Ms Shalan Joudry
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Monday, 18th June

All day	Field Trip to Bay of Fundy: Acadian Seaplants, Lobster Boat Trip, Cooke Aquaculture	Mr Will Neily Mr Kevin Robichaud Mr Chris Hudson Mr Michael Johnston Mr Todd Mosher Ms Rebecca Perrott
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MODULE 6 Communication and Negotiation
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Tuesday, 19th June

9.00 – 10.30	Free time: field trip recovery!	Participants
10.45 – 12.00	Introduction to Module, and Media	Prof. Kim Kierans (Module Leader)
1.30 – 4.00	Presentation Skills	Prof. Kim Kierans Mr Tim Tracey
4.00 – 4.30	Participant Presentation	Participants

Wednesday, 20th June

9.00 – 12.00	Presentation Skills (cont.)	Prof. Kim Kierans Mr Tim Tracey
1.30 – 4.00	Communication	Mr Peter MacLellan
6.30 onwards	Oceans Film Festival (optional)	

Thursday, 21st June

8.15 – 12.30	International Conference: The Regulation of Continental Shelf Development (<i>venue: Lord Nelson Hotel</i>)	Conference Speakers
1.30 – 4.00	Theory and Preparation for Negotiation	Mr Hugh Williamson Prof. Diana Ginn

MODULE 7 Maritime Security

Friday, 22nd June

All day	Emergency Management	Ms Murielle Provost Ms Joanne Lawlor
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Saturday, 23rd June

All day Free

Sunday, 24th June

All day Free

Monday, 25th June

9.00 – 10.30	Simulation 5	Mr David Griffiths
10.45 – 12.00	Maritime Security Issues	Mr David Griffiths (Module Leader)
1.30 – 4.00	Maritime Security Issues (cont.)	Mr David Griffiths
4.00 – 4.30	Participant Presentation	Participants

Tuesday, 26th June

9.00 – 10.30	Introduction to Integrated Maritime Compliance and Enforcement (IMCE)	Cdr Bob Edwards (ret'd) Mr Glen Herbert
10.45 – 12.00	IMCE Exercise	Cdr Bob Edwards (ret'd) Mr Glen Herbert
1.30 – 4.00	IMCE Exercise (cont.)	Cdr Bob Edwards (ret'd) Mr Glen Herbert

Wednesday, 27th June

9.00 – 12.00	IMCE Exercise (cont.)	Cdr Bob Edwards (ret'd) Mr Glen Herbert
1.30 – 3.30	IMCE Exercise (cont.)	Cdr Bob Edwards (ret'd)
3.30 – 4.00	Module Wrap-up	Mr David Griffiths

MODULE 8 Energy

Thursday, 28th June

9.00 – 12.00	Introduction to Energy Module	Mr Doug Gregory
1.30 – 2.45	Introduction to Geology	Mr David Brown
3.00 – 4.00	Introduction to Geophysics	Mr Tony LaPierre

Friday, 29th June

9.00 – 10.30	Tidal Power	Mr John Woods
10.45 – 12.00	Regulation and CEAA	Mr Eric Theriault
1.30 – 4.00	Participant Presentations	Participants

Saturday, 30th June

All day Free

Sunday, 1st July

All day Free

Monday, 2nd July

All day Free: Canada Day holiday

Tuesday, 3rd July

9.00 – 12.00	Tidal Power: Environmental Aspects	Mr Joe Kozak
1.30 – 2.45	Community: Sustainable and Renewable Energy	Dr Alain Joseph
3.00 – 4.00	Wind Power	Mr Kevin Doucette
4.00 – 4.30	Participant Presentation	Participants

Wednesday, 4th July

9.00 – 12.00	Toolbox: Performance Management	Mr Michael Haley
1.30 – 2.45	Solar Power	Dr Peter Allen
3.00 – 4.00	Simulation Exercise 6	Mr David Griffiths

<p>MODULE 9 Marine Transportation</p>
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Thursday, 5th July

9.00 – 12.00	Introduction to Marine Transportation	Mr Dick Hodgson (Module Leader)
1.30 – 4.00	The Business of Shipping Trade Realities and Public Policy	Dr Mary Brooks
4.00 – 4.30	Participant Presentation	Participants

Friday, 6th July

9.00 – 12.00	Evolution of Containerisation	Mr James Frost
1.30 – 4.00	Human Elements of International Shipping	Capt. Angus McDonald

Saturday, 7th July

All day	Simulation Exercise: Preparation of Presentations	Participants
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Sunday, 8th July

All day	Simulation Exercise: Preparation of Presentations	Participants
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Monday, 9th July

All day	Field trip: HMCS Sackville, Port of Halifax, Eastern Canada Response Corporation	Mr David Griffiths Capt. Deidre Lewis Mr Addison Vickard Ms Rebecca Perrott
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Tuesday, 10th July

9.00 – 12.00	Role and Record of the International Maritime Organisation (IMO)	Mr Bud Streeter
1.30 – 3.30	Safety of Ships	Capt. Alan Knight
3.30 – 4.00	Module Wrap-up	Mr Dick Hodgson

<p>MODULE 10 International Round Table Conclusion of Training Programme</p>
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Wednesday, 11th July

9.30 – 10.45	Round Table – Panel Presentations and Discussion, Introduction to Simulation & Scenario	Dr Elizabeth De Santo Dr Dan Lane Dr Robert Rangeley Mr David Griffiths Participants
11.00 – 12.30	Round Table – Participant Presentations: National Oceans Policy Frameworks	Dr Elizabeth De Santo Dr Dan Lane Dr Robert Rangeley Participants
2.00 – 5.15	Round Table – Participant Presentations: National Oceans Policy Frameworks (cont.)	Mr Joshua Brien Dr Elizabeth De Santo Dr Dan Lane Dr Robert Rangeley Participants

Thursday, 12th July

9.00 – 12.00	Round Table – Working Sessions	Mr Joshua Brien Dr Elizabeth De Santo Dr Dan Lane Dr Robert Rangeley Participants
1.30 – 1.45	Round Table – Presentation on Commonwealth Secretariat	Mr Joshua Brien
1.45 – 4.00	Round Table – Participant Presentations: Regional Oceans Policy Framework	Mr Joshua Brien Dr Elizabeth De Santo Dr Dan Lane Dr Robert Rangeley Participants
4.30 – 6.30	Closing Ceremony and Reception	All

Friday, 13th July

9.00 – 11.30	Feedback, What Next? and Closing Remarks	Mr Michael Butler Ms Madeleine Coffen-Smout Mr David Griffiths Ms Rebecca Perrott Participants
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COURSE DIRECTOR'S REPORT

For the second year, I had the pleasure of being the Course Director, in addition to my role as Director of IOI-Canada. As in 2011, this provided further insights regarding the course content and delivery. The organization of the Training Programme and the logistics of coordinating course participants from all over the world were again a team effort, involving Madeleine Coffen-Smout (Programme Officer), Jennifer Barr (Finance Officer) and, this year's Course Coordinator, Rebecca Perrott.

The annual Training Programme continues to benefit from the skills and enthusiasm of the IOI Senior Research Fellows (SRFs), namely: Paul Boudreau, Dr Tony Charles, Dr Ratana Chuenpagdee, David Griffiths, Dr Larry Hildebrand, Dr Peter Wells and Hugh Williamson. Dr Chuenpagdee continues to chair the planning committee for the Elisabeth Mann Borgese Ocean Lecture, while the other SRFs fulfill the important role of module leaders. The other module leaders were Dick Hodgson, Rebecca Perrott and Kim Kierans. The module leaders ensure module integrity and standards, as well as lecturer-participant interactivity, and they also help to facilitate a smooth transition from subject to subject and module to module (of which there were again 10 in this year's programme).



The above personnel were all involved in the planning of the 2012 Ocean Governance Training Programme which began on Wednesday, May 16 and was officially launched on Friday, May 18 in Dalhousie University's Great Hall. The welcoming panel consisted of Professor Ian McAllister (Dalhousie University), Andrew Younger (Legislative Assembly, Province of Nova Scotia), Dr Alain Vézina (Fisheries and Oceans Canada) and Jennifer Watts (Halifax Regional Municipality). Anita Coady (*shown, left, at the reception*), member of IOI-Canada's Board of Directors, gave the keynote address entitled "Giggles and Grit: A Personal Glimpse of Elisabeth Mann Borgese". Wang Haiyan from China responded on behalf of the 17 participants.

The sequence of modules and their content were adjusted as a result of feedback provided by the participants of the 2011 course. For example, a lecture was scheduled on Canadian civic, politics and geography, and ethics became an integral part of a number of presentations. The lectures and lecturers in each module again varied, depending on the availability of the speakers. Once again they provided their time and expertise on a *pro bono* basis. Lecturers kindly permitted the copying of their PowerPoint 'decks' (other than copyrighted material) so that each of the participants could receive a copy of virtually all the lectures on a memory stick by the end of the course. Presentations by the participants – a course requirement – continue to provide an excellent learning experience for both the participants and the lecturers.



Field trips were a key component of the Training Programme and included visits to the Bedford Institute of Oceanography, Annapolis Valley and Bay of Fundy, HMCS Sackville, Port of Halifax and Eastern Canada Response Corporation. The participants were also invited to attend some of the sessions of the International Conference on the Regulation of Continental Shelf Development held in Halifax.



The course participants once again participated in Oceans Day activities on and around June 8. These included the ‘traditional’ exhibits on the Halifax waterfront; the third annual Oceans Film Festival, chaired by Madelaine Patterson of the Summerhill Group on behalf of IOI-Canada and partners; the World Oceans Day Concert, held in a large marquee by the waterfront; and the public Elisabeth Mann Borgese (EMB) Ocean Lecture. Much like the 2011 EMB Lecture, this year’s Lecture consisted of a panel of experts, chaired by Dr Larry Hildebrand (SRF, IOI-Canada), addressing the topic of “Blue Planet under Threat: Challenges and Opportunities at Rio+20”. The panelists were: Dr Awni Behnam (President, IOI), Dr Susanna Fuller (Ecology Action Centre), Megan Leslie (Member of Parliament for Halifax), and Hon. David MacDonald (Commons Group).



The host families, as always, made an important contribution to the success of the Training Programme by providing a 'second home' to the participants. We owe the host families a great deal of gratitude. A highlight of the host family-participant interaction is the potluck supper held on a weekend in the latter part of the course.



The International Round Table in the last week of the course is a key component and the conclusion of the Training Programme. Grouped in three fictitious country teams, the participants present their respective 'national' ocean management plans and the 'regional' plan, the contents of which are based on the experience of the simulation exercise, the course lectures, and individual research. David Griffiths has been responsible for further developing this sophisticated simulation model, and ably guided the participants through the course-long exercise. This year's International Panel consisted of Joshua Brien (Legal Adviser, Natural Resources, Commonwealth Secretariat), Dr Elizabeth De Santo (Professor, Marine Affairs Programme, Dalhousie University), Dr Dan Lane (Chair, OMRN, and Professor,



University of Ottawa), and Dr Bob Rangeley (Vice-President, WWF-Atlantic Region). Following the presentations by the course participants, the panellists provided critiques of the presentations and then mentored the three teams in subsequent discussions.

Following the Round Table, the Closing Ceremonies took place in the Great Hall. In continuation of the Rio+20 theme, Dr Susanna Fuller provided a retrospective of her experiences at the recent conference in Brazil. Each of the course participants was presented with an official certificate, signifying successful completion of the Training Programme. The participants were then welcomed into the fraternity of the IOI Alumni Association by Dr Dan Ricard, a graduate of the 2004 course from Canada. Jutta Kaktiniece from Latvia, and Lucine Edwards from St Vincent and the Grenadines, responded on behalf of the 17 course participants. A reception concluded an excellent evening.



None of the above would have been possible without the support of the funding agencies, all of which are listed elsewhere in this Course Report. Of particular note this year are the scholarships funded by the Ocean Science Research Foundation, the Lloyd's Register Educational Trust and the State Oceanic Administration of China. The funders, both big and small, make it possible for the course participants to attend the Training Programme with minimum cost, if any, to themselves or – in many cases – their host institutions. The securement of scholarship funds is a key goal and responsibility of the IOI-Canada Secretariat and its Board of Directors. The Directors have provided much appreciated guidance since the formal incorporation of IOI-Canada as a not-for-profit NGO in 2010.

Based on the weekly course critiques submitted by the course participants, analyzed by the Course Co-ordinator, reviewed by the IOI-Canada staff and supplemented by the extended debriefing session at the end of the course, a number of adjustments will be considered for the 2013 Training Programme. These include:

- improving the process for evaluating the components of the course by the participants;
- further developing linkages between the course modules;
- improving the overview material made available for each module;
- encouraging an increase in the use of simulation exercises and case studies, both Canadian and non-Canadian;
- providing more opportunities for interaction between the course participants and the lecturers;
- reinforcing the need for 'originality' in the preparation of the national and regional ocean governance plans by the participants; and
- facilitating the participation of Canadian aboriginals in the Training Programme.

With the aid of interns over the past two years, a great effort has been – and continues to be – devoted to the activation of the alumni association. Of particular importance are the reflections of the alumni on the value of the training program and its impact on their institution, profession and career, and ultimately their country. Many of the alumni have responded enthusiastically to our request for such information. Among a plethora of ‘deliverables’ they reference the delivery of lectures and workshops, the preparation of scientific papers and popular articles, outreach to schools, active involvement in research programs at both a leadership level and as collaborators, and involvement in boundary delimitation negotiations. Another aspect of the course which we are becoming increasingly aware of is the extent of the interactions between and among the participants, and the benefits so derived, both educationally and socially. The feedback from the alumni provides a further guide to the continuous improvement of the course content, in addition to the course debriefing exercise and weekly questionnaires described above.

As always, it has been a pleasure to work with the IOI-Canada team in the organization and delivery of the 2012 Ocean Governance Training Programme. This extensive team has included the IOI-Canada secretariat, Senior Research Fellows, interns, Board of Directors, IOI/Dalhousie Ocean Advisory Committee, host families, 90+ lecturers and, of course, our host, Dalhousie University.

Michael J.A. Butler
2012 Course Director and
Director, IOI-Canada



PARTICIPANTS

Antigua and Barbuda

Mr Mitchell Lay, Professional Fisher & Co-ordinator, Caribbean Network of Fisherfolk Organisations, New Winthorpes, St George's

Barbados

Ms Nicole Parris, Foreign Service Officer, Ministry of Foreign Affairs and Foreign Trade, St Michael

China

Mr Tian Yuzhen, Department Officer, State Oceanic Administration, Beijing

Mr Wan Xiaodong, Department Officer, Department of Science and Technology, State Oceanic Administration, Beijing

Ms Wang Haiyan, Programme Manager, First Institute of Oceanography, State Oceanic Administration, Qingdao

Ms Zheng Rui, Programme Officer, International Cooperation Department, State Oceanic Administration, Beijing

Egypt

Mr Ahmed Al Refaei, Research Assistant, National Institute of Oceanography and Fisheries, Suez

Ghana

Mr Godwin E. K. Dzah, Counsel/Associate Researcher, Constitution Review Commission, Cantonments

Guyana

Mr Denzil Roberts, Chief Fisheries Officer, Fisheries Department, Ministry of Agriculture, Bourda, Georgetown

Haiti

Ms Marie Carmèle Joseph, Fisheries Extension Officer, Department of Fisheries and Aquaculture, Ministry of Agriculture, Natural Resources and Rural Development, Port-au-Prince

Japan

Ms Emi Shimada, Staff Member, International Affairs Team, Ocean Policy Research Foundation, Minato-ku, Tokyo

Kenya

Ms Jacqueline Benard, Research Scientist, Kenya Wildlife Service, Coast Conservation Area, Mombasa

Latvia

Ms Juta Kaktiniece, Head, Legal Department, AS "SEB Banka", Valdlauči, Āekavas pagasts, Āekavas novads

Papua New Guinea

Ms Grace Kaue, Senior Legal Officer, International Law Division, Office of the State Solicitor, Waigani National Capital District

St Vincent and the Grenadines

Ms Lucine Edwards, Fisheries Officer (Conservation), Ministry of Agriculture, Rural Transformation, Forestry & Fisheries, Kingstown

Tanzania

Ms Prisca Mziray, Research Officer, Tanzania Fisheries Research Institute, Kigoma

Vietnam

Mr Vu Dinh Phuc, Line Manager, Pacific Marine Co. Ltd, Ho Chi Minh City



FUNDERS

The International Ocean Institute wishes to acknowledge the very generous support for the 2012 training programme, which it received from a number of sources. Dalhousie University continues to provide significant in-kind support for the programme. Major scholarship funding for the course was made available by The Lloyd's Register Educational Trust, as well as the Stiftung für Meereswissenschaft und -forschung (Ocean Science and Research Foundation) through both its IOI Women/Youth and the Sea Programme and the Danielle de St Jorre Scholarship. Acknowledgement is also gratefully given to the following organisations for their contributions towards individual participant expenses: Caribbean Regional Fisheries Mechanism, Government of Papua New Guinea, Leif Mutén Society, National Institute of Oceanography and Fisheries, Ocean Policy Research Foundation, Pacific Marine Company Ltd (a subsidiary of Gemadept), State Oceanic Administration, Western Indian Ocean Marine Science Association; and World Wildlife Fund – US through its Russell E. Train *Education for Nature Programme*. A brief profile of each of these organisations, listed alphabetically, is provided in the following pages.

In addition, sincere thanks are due to the various organisations which contributed to the 2012 programme by hosting the class and/or assisting with field trips or the Oceans Film Festival. These included Acadian Seaplants, Annapolis Tidal Generating Station, Bear River First Nation (through Stone Bear Tracks and Trails), Bedford Institute of Oceanography/Department of Fisheries and Oceans, Canadian Wildlife Federation, CM Hudson Fisheries Ltd, Continental Shelf Conference organisers, Cooke Aquaculture, Dalhousie University's Marine Affairs Program, Eastern Canada Response Corporation, Ecology Action Centre, Innovative Fishery Products Inc., HMCS Sackville, Maritime Museum of the Atlantic, Museum of Natural History, Port of Halifax, Sustainable Fish Farming Canada Ltd, and WWF-Canada. Finally, acknowledgement should also be given to Cape Breton University, the Centre for Resource Management and Environmental Studies, and the Commonwealth Secretariat, all of which generously contributed to the expenses of sending a staff member to lecture on the course.

Caribbean Regional Fisheries Mechanism

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Inaugurated in 2003 and headquartered in Belize, the Caribbean Regional Fisheries Mechanism (CRFM) is an intergovernmental organisation with a mission to “promote and facilitate the responsible utilization of the region's fisheries and other aquatic resources for the economic and social benefits of the current and future population of the region.” Its members are Anguilla, Antigua & Barbuda, The Bahamas, Barbados, Belize, Dominica, Grenada, Guyana, Haiti, Jamaica, Montserrat, St Kitts & Nevis, St Lucia, St Vincent & the Grenadines, Suriname, Trinidad & Tobago, and Turks & Caicos Islands.

The CRFM consists of three bodies – the Ministerial Council, the Caribbean Fisheries Forum, and the CRFM Secretariat. The Ministerial Council is the highest decision-making body of the CRFM, and is responsible for formulating the policy of the Mechanism. It is comprised of the Ministers responsible for Fisheries in each Member State. The Forum is made up of one representative from each Member, each Associate Member and each Observer. The CRFM Secretariat is the technical unit, located in offices in Belize and the eastern Caribbean (St Vincent and the Grenadines), comprising a permanent body of technical, scientific and support staff.

Under a Memorandum of Understanding with IOI, the CRFM provides funding to cover the airfares of participants from its member countries. This year's travel grants were awarded to two men and two women working within fisheries in Antigua & Barbuda, Guyana, Haiti and St Vincent & the Grenadines.

Dalhousie University

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Founded by the ninth Earl of Dalhousie in 1818, Dalhousie University has grown from being the little “college by the sea” into one of Canada’s leading research and teaching universities. Spread over nearly 80 acres in Halifax and with its recently acquired agricultural campus in Truro, it currently offers over 4,000 courses in more than 190 undergraduate, graduate and professional degree programmes, as well as an extensive continuing education programme. Due to the university’s proximity to the ocean, one of Dalhousie’s two areas of special emphasis is Ocean Studies, with the other being Health Studies.

The university has approximately 18,200 full and part-time students. These come from across Canada and from more than 110 countries around the globe, and enjoy one of the lowest student-professor ratios in the country. Dalhousie’s graduates form a powerful network making important contributions in all walks of life, and include the first female Supreme Court of Canada judge, the first American woman to walk in space, and 86 Rhodes Scholars.

Dalhousie’s teaching and research strengths go hand in hand, with a strong core of talented and dedicated researchers conducting basic and applied research. As Atlantic Canada’s leading research university, Dalhousie attracts more than \$140 million in external research grants and awards each year. Many of its researchers are nationally and internationally recognised for their work, and the university is home to 53 Canada Research Chairs – more than any other university in the region. Chairholders advance the frontiers of knowledge in their fields, not only through their own work, but also by teaching and supervising students and co-ordinating the work of other researchers.

Each year since the inception of the course in 1981, Dalhousie University has provided crucial in-kind support to the IOI training programme. With the ocean at its doorstep, and with ready access to one of the highest concentrations of marine experts in the world, the university is an ideal host for a course of this kind.

Government of Papua New Guinea

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Department of Justice and Attorney General
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The opportunity for a representative of Papua New Guinea to attend the 2012 Training Programme was made possible through the consideration of the Government of Papua New Guinea, namely:

1. National Fisheries Authority,
2. Department of Justice and Attorney, and
3. Department of Foreign Affairs and Trade.

The National Fisheries Authority (NFA) of Papua New Guinea was established under the country's 1998 Fisheries Management Act with a mission to manage PNG's fisheries and marine resources for sustainable and equitable benefits. As well as ensuring the sustainable growth of the fishing industry, the NFA actively participates in regional and international forums, in accordance with its obligations in the international arena as a party to the UN Law of the Sea Convention and related agreements, member of the Pacific Forum Fisheries Agency, Parties to the Nauru Agreement, Western and Central Pacific Fisheries Commission, FAO, INFOFISH, Secretariat of the Pacific Community, APEC Fisheries working group and others. The Authority develops and implements management of the fishery through access arrangements, management plans, observer programs and monitoring and control arrangements.

In carrying out its functions, the NFA works closely with both the State Solicitors Office of the Department of Justice and Attorney General, and the Department of Foreign Affairs and Trade to ensure the smooth facilitation of international relations and obligations within a legal framework that serves the interest of the Independent State of Papua New Guinea. The State Solicitors Office is the State Legal Advisor on all state delegations representing the Government of Papua New Guinea. It provides legal opinion and advice and issues legal clearance before the State makes any commitment in the conduct of State business, including advising on constitutional and legal implications of administrative and executive actions of the State. It is in this regard that an officer from the State Solicitors Office was nominated and funded, with the approval of the NFA, the Department of Foreign Affairs and Trade and the Department of Justice and Attorney General collectively as the Government of the Independent State of Papua New Guinea. The entire training expense of the PNG participant was covered by the Government of Papua New Guinea through its funds from the *Treaty on Fisheries between the Government of Certain Pacific Islands States and the Government of the United States of America* 1987, the consultations and negotiation meetings of which she had been actively and consistently involved in.

Leif Mutén Society

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Founded in Latvia in 1998, Leif Mutén Society was named in honour of a former rector at the Stockholm School of Economics in Riga, Leif Mutén. The organisation's aims are to promote higher education in Latvia and to provide financial support to the best performing students.

Leif Mutén Society is a registered public benefit organisation (sabiedriska labuma organizacija). It co-operates with donors in establishing and awarding scholarships and research support, as well as supporting student events. The board also considers fundraising initiatives and proposals for all kinds of projects, provided they fulfil the mission of promoting education. The society welcomes fundraising suggestions for merit scholarships and funds for research and seminar/conference attendance.

A full scholarship was provided by the Leif Mutén Society to enable a Latvian participant to attend the IOI-Canada course for the first time since its inception in 1981.

The Lloyd's Register Educational Trust

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Established in 2004, The Lloyd's Register Educational Trust (The LRET) is an independent charity based in London and operating throughout the world. Its principal purpose is to support advances in transportation, science, engineering and technology education, training and research worldwide for the benefit of all. It also funds work that enhances the safety of life and property at sea, on land and in the air.

The LRET focuses its funding on four areas:

- **pre-university education:** working through specialist organisations, to engage school children, their teachers and parents with the exciting and vital world of science, engineering and technology and to encourage them to pursue their studies and, ultimately, take up a career in this field;
- **university education:** to help high-achieving science, engineering and technology undergraduates and postgraduates reach their full academic potential by providing funds to universities and other suitable educational institutions for scholarships, awards and the provision of relevant courses;
- **vocational training and professional development:** through appropriate organisations, to help employed scientists, engineers, technologists, and people actively involved with ensuring the safety of life and property, improve their knowledge and skills through training and further study; and,
- **research:** to fund scientific, engineering and technology research programmes in international industries, particularly transportation, undertaken by academic institutions, with the results of all research to be made public for the benefit of all.

In the area of 'vocational training,' The LRET provided funding to IOI to enable participants from Antigua & Barbuda, Egypt, Guyana, Haiti and Vietnam to take part in the 2012 training programme.

National Institute of Oceanography and Fisheries

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The National Institute of Oceanography and Fisheries (NIOF) is one of Egypt's 12 national research institutions directly affiliated with the Ministry of State for Scientific Research to deal with different fields of science and technology. Dating from 1924 when it was first established as the Hydrobiological Institute of the Egyptian Fisheries Directorate, NIOF is now headquartered in Cairo and has three main branches: the Alexandria Branch (for the Mediterranean Sea) including two research stations; the Suez Branch (for the Red Sea) with a sub-branch in Hurgadah; and the Inland Water Branch (for the River Nile and lakes) including five research stations.

The mission of NIOF is to achieve the sustainable development of marine and fresh water resources through increasing their potential for food, and working towards reducing poverty and improving the standard of living by developing and introducing new techniques in fisheries and aquaculture. To this end, the institute gives high priority to applied research, focusing on the role of fisheries and aquaculture in improving the standard of living in Egypt and attaining environmental sustainability.

The main aims and objectives of NIOF are:

- I. maintaining, promoting and conserving aquatic environments and their natural resources through:
 - providing data on Egyptian aquatic areas;
 - studying and monitoring physical, chemical and biological changes in Egyptian waters;
 - designing and using new and modern technologies for examining topographic features and exploring resources under the Egyptian seabed;
 - investigating hazardous phenomena such as storm surges, tsunamis, coastal erosion and sudden sea level rise.
- II. promoting fish production as the main food source through:
 - exploiting natural resources in a rational manner;
 - discovering new fishing grounds;
 - developing fishing areas and methods for mid- and deep-water fisheries management to protect fish stocks.
- III. increasing productivity through:
 - developing and introducing new methods of fish culture in marine floating aquaculture cages;
 - developing fish hatcheries and increasing their productivity;
 - intensifying research on protecting fish against disease, and maintaining a high rate of fish production.

NIOF covered the airfare of a staff member from the Suez branch to enable him to participate in the 2012 course.

Ocean Policy Research Foundation

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The Ocean Policy Research Foundation (OPRF) is a Tokyo-based NGO with special consultative status at the UN Economic and Social Council (ECOSOC). Its mission is to make a substantial contribution, uniquely possible by a non-governmental institute, toward the solution of ocean-related issues.

The original forerunner of OPRF was the Japan Foundation for Shipbuilding Advancement (JAFSA), established in 1975 to promote Japan's shipbuilding and related manufacturing industries. It subsequently expanded its activities to include research in the whole gamut of maritime affairs, and in 1990 changed its name to the Ship & Ocean Foundation (SOF). In 2002, SOF inaugurated the Institute for Ocean Policy, SOF. This reflected its growing involvement in research projects on ocean-related issues, and in 2005, SOF adopted a new name – the Ocean Policy Research Foundation – to better illustrate its increasingly ocean-oriented activities, thereby marking a turning point in its history by transforming itself into a think-tank capable of addressing major ocean-related issues. As such, it played a key role in bringing about the enactment of Japan's Basic Act on Ocean Policy, which entered into force in Japan in 2007.

In its promotion of the principle of “Co-existence between Man and the Ocean”, OPRF is currently undertaking a wide range of activities. These include, *inter alia*:

- Ocean Policy, Maritime Traffic and Security Studies;
- Studies on Coastal Zone Management, Marine Environment, and Marine Education;
- Maritime Technology Research and International Exchange;
- Research and Development financed by the Technology Development Fund.

In conducting these activities, OPRF is committed to cross-disciplinary methods employing the combined expertise of social and natural sciences, and it aims to provide concrete proposals and useful intelligence at home and overseas as result of its research efforts. To this end, OPRF unequivocally recognizes the primary importance of collaboration and exchange of views with partners around the world, and the formation of a research network.

The OPRF funded one of its staff members to attend the IOI training programme.

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Based in Ho Chi Minh City, Pacific Marine Co. Ltd is a subsidiary of Gemadept Corp/Vinalines. Its main function is as a liner/shipping agency. Founded in 1990, Gemadept was initially a state-owned company. In line with the economic reform policy, in 1993 it became one of the first three companies to be equitised and it is currently listed on the Vietnam stock exchange.

Gemadept has now developed into one of the leading companies in Vietnamese shipping, with headquarters in Ho Chi Minh City, branch offices in seven cities around Vietnam, and subsidiary offices in Cambodia, Malaysia and Singapore. Its activities include:

- Port operation
- Container Liner Service
- Shipping and Forwarding
- Logistics
- Project cargo transport
- Real estate, economic zone
- Financial investment

Funding was provided by Gemadept to cover the airfare of a senior staff member from Pacific Marine Co.

State Oceanic Administration

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The State Oceanic Administration (SOA) is the government administrative agency in China responsible for:

- the supervision and management of sea area use, marine environment protection, marine disaster forecasting and mitigation;
- ensuring China's marine sovereignty and rights; and
- promoting research in marine science and technology.

Its main functions include:

- comprehensive coordination of marine environmental monitoring, scientific research, waste disposal and ocean resources exploitation;
- formulation of national marine strategy and policies; planning and supervising the implementation of medium and long term National Development Plans for marine issues and a National Development Plan for the marine economy;
- establishing and improving systems concerning marine management, and drafting marine laws and regulations concerning the coastal zone, islands and sea areas;
- supervision, evaluation and information dissemination on marine economic performance;
- regulating, supervising and managing sea area uses;
- island ecological protection and legitimate use of uninhabited islands;
- protection of the marine environment;
- implementing marine research and surveys, promoting marine scientific and technological innovations, undertaking research into – and application and management of – seawater use and marine renewable energy resources, and managing the marine series satellites and ground application system;
- marine environmental observation and forecasting, and marine disaster warning;
- international cooperation and exchange activities;
- safeguarding national maritime rights and interests according to international and domestic laws.

With nearly 50 years of experience, SOA has developed an administrative management system and workforce responsive to the ever-changing situation and able to meet the demands for fulfilling its mandate. Within SOA's framework, there are eight departments in its Beijing-based headquarters, three branches, seven national-level operational centres, five oceanography institutes and two offices responsible for polar affairs and international sea bed mineral resources research and exploration affairs respectively.

SOA provided four scholarships to enable staff members from Beijing and Qingdao to participate in the 2012 training programme.

Stiftung für Meereswissenschaft und -forschung (Ocean Science and Research Foundation)

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The Ocean Science and Research Foundation (OSRF) is a charitable foundation registered in Switzerland. Its general objective is to promote research in the social and natural sciences pertaining to the oceans by granting financial contributions to appropriate research and training projects. Support for the 2012 training programme included funds through both the IOI Women/Youth and the Sea Programme and the Danielle de St Jorre scholarship.

IOI Women/Youth and the Sea Programme

The IOI Women and the Sea Programme (subsequently expanded to the IOI Women/Youth and the Sea Programme) was established in 2000 to enhance the capacity and participation of women in poor developing countries in ocean and coastal affairs. The programme has involved several of the IOI Operational Centres, with activities including: training of women decision-makers (IOI-Canada); improving quality of life for women in poverty-stricken coastal communities (IOI-Costa Rica, IOI-India, IOI-Southern Africa, IOI-Senegal); development of seaweed mariculture and local fish processing (IOI-Eastern Africa, IOI-Southern Africa, IOI-Senegal); youth education on marine awareness (Operational Centres in the Black Sea/Caspian region); empowerment of women on aspects of marine ecology, conservation and fisheries (IOI-Nigeria, IOI-Senegal); education for sustainable management, conservation and development of marine resources, in cooperation with the Women and Fisheries Network (IOI-Pacific Islands); training on marine-related handicrafts for coastal women (IOI-Iran); and an outreach education programme on the oceans for women and youth (IOI-Malta). For the 2012 IOI-Canada course, this programme provided partial scholarships for female participants from Haiti, Kenya and Tanzania, as well as top-up funding for the Danielle de St Jorre scholar (see below)

Danielle de St Jorre Scholarship

The Danielle de St Jorre Scholarship was established by the IOI in 1999 to honour the memory of the late Danielle de St Jorre, Minister for Foreign Affairs, the Environment and Tourism of the Republic of the Seychelles, and a member of the Governing Board of the IOI, in consideration of all she did in her short life for the benefit of her country, the small island developing states (SIDS), and the world at large. This scholarship of Swiss Francs 10,000 annually is for women from SIDS to attend training programmes or university degree programmes in ocean affairs. Candidates are selected in consultation with the Alliance of Small Island States (AOSIS), and the scholarship is administered by the IOI Headquarters. The 2012 recipient, a Fisheries Officer from St Vincent and the Grenadines, chose to use the scholarship to enable her to participate in the Halifax training programme.

Western Indian Ocean Marine Science Association

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Western Indian Ocean Marine Science Association (WIOMSA) is a regional professional, non-governmental, non-profit, membership organisation, registered in Zanzibar, Tanzania. It is dedicated to promoting the educational, scientific and technological development of all aspects of marine sciences throughout the region of Western Indian Ocean – Somalia, Kenya, Tanzania, Mozambique, South Africa, Comoros, Madagascar, Seychelles, Mauritius, Reunion – with a view to sustaining the use and conservation of its marine resources. In pursuit of this, the Association:

- provides a forum for communication and exchange of information amongst its members that promotes and fosters inter-institutional linkages within and beyond the region;
- supports marine research by offering research grants;
- implements programmes to build the capacity of marine scientists and coastal management practitioners; and,
- works to promote policy dialogue on key topics by organising meetings and seminars on the findings and policy implications of science.

WIOMSA has approximately 1,000 individual members as well as about 50 institutional members from within and outside the region. This interdisciplinary membership consists of marine scientists, coastal practitioners and institutions involved in the advancement of marine science research and development.

WIOMSA promotes marine science research through the award of research grants under the Marine Science for Management (MASMA) and the Marine Research Grant (MARG) programmes. Support in the form of a MARG III grant was given to participants from Kenya and Tanzania to cover their airfares.

World Wildlife Fund - US

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Founded in 1961, the World Wildlife Fund (WWF) has been protecting the future of nature for over 50 years. The world's leading conservation organisation, WWF works in 100 countries and is supported by 1.2 million members in the United States and over 5 million globally. WWF's unique way of working combines global reach with a foundation in science, involves action at every level from local to global, and ensures the delivery of innovative solutions that meet the needs of both people and nature. WWF is committed to reversing the degradation of our planet's natural environment and to building a future in which human needs are met in harmony with nature.

WWF's mission is the conservation of nature. Using the best available scientific knowledge and advancing that knowledge where it can, WWF works to preserve the diversity and abundance of life on Earth and the health of ecological systems by protecting natural areas and wild populations of plants and animals, including endangered species; promoting sustainable approaches to the use of renewable natural resources; and promoting more efficient use of resources and energy and the maximum reduction of pollution.

In recognition of the fact that effective policy, education, fieldwork, and other conservation initiatives depend on sound technical knowledge and skills, the WWF's Russell E. Train Education for Nature Programme (EFN) was established in 1994. Dedicated to Russell E. Train, WWF's founding trustee, past president, and former chairman of the board, the programme aims to build a dynamic and highly qualified corps of conservation leaders in Africa, Asia, and Latin America. Through a number of initiatives that help build capacity of individuals and institutions, EFN provides potential and proven leaders with financial support for higher education, short-term training, and practical experience needed to take on conservation challenges in their home countries and regions.

Under the Russell E. Train EFN Programme, assistance was provided to the participants from Guyana, Kenya and Tanzania in the form of a contribution towards their expenses.

LECTURERS & FIELD TRIP CO-ORDINATORS

Special thanks are due to all the lecturers and field trip co-ordinators, and particularly the key individuals who acted as module leaders, for their crucial and invaluable donation of time and expertise. Their contribution to the success of the training programme is gratefully acknowledged.

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