

## PICES/ICES 2012 Conference for Early Career Marine Scientists

by Bryan Black



From April 23–27, 2012, 130 early career scientists gathered on the Mediterranean island of Majorca (Spain) to discuss emerging topics in marine science, to begin establishing international collaborations, and to build skills in communication, grant writing, and collaborative research. Generously supported by ICES and PICES, with additional contributions from the National Oceanic and Atmospheric Administration (NOAA, USA) and the North Pacific Research Board (NPRB, USA), the second ICES/PICES Conference for Early Career Scientists (CECS) followed on the success of the first event held 5 years earlier in Baltimore (USA). Underscoring the global interest in the conference, over 550 applications were received from 53 countries. With rare exceptions, all invited participants and organizers were less than 36 years of age or within 5 years of receiving a Ph.D., including graduate students, post-doctoral researchers, junior faculty, and research scientists.

CECS-2012 was organized under the theme “*Oceans of Change*” and divided into three sessions: (1) *Impact of Change of Marine Ecosystems*, which addressed physical, biological, and geochemical responses to long-term change, (2) *Human Interactions with the Marine Environment*, which dealt with anthropogenic impacts on the marine environment, and (3) *New Tools and Views in a Changing Ocean*, which focused on the state-of-the-art techniques for ocean monitoring and exploration. Each session was opened by a senior keynote speaker, Joaquin Tintoré (Spain), Anne Hollowed (USA), and Jack Barth (USA), followed by two highly-accomplished early career keynote speakers: Marta Coll (Spain), Akinori Takasuka (Japan), Monique Messié (USA), Eun Jung Choy (Korea), Abigail McQuatters-Gollop (UK), and Malin Pinsky (USA). CECS-2012 featured 89 contributed talks and 28 posters. The topics discussed were diverse and provided participants with a wide selection of current issues in marine science. Yet several recurring themes emerged, reflecting opportunities and challenges early career scientists will face in the coming years. These included: the automation of ocean monitoring and associated emerging technologies, managing and analyzing increasingly large and complex datasets, the

growing complexity and sophistication of computer modeling, managing natural resources under increased human impacts and global change, and the importance of working as interdisciplinary groups to address issues that span multiple spatial, temporal, and biological scales. Indeed, some of the most frequent keywords in the titles of contributed talks were climate, change, ecosystem, model, management, global, interactions, assessment, and acidification. The quality of presentations was superb, and after a very difficult selection process, Kristy Kroeker (*Ocean acidification affects recruitment and competition in benthic communities surrounding natural CO<sub>2</sub> vents*), Jameal Samhoury (*Risky business: Linking land- and sea-based activities to risk in coastal ecosystems*), and Robin Kodner (*Phytoplankton in a changing world: What we can learn from Metanomics Technologies*) were chosen for best oral presentations awards, while David Nicholson (*Dissolved gas tracers as new constraints for ecosystem-biogeochemistry models*) was given an award for best poster.

Two afternoon workshops were also held as part of the CECS-2012. The first of these was led by Martin Pastoors (The Netherlands) who discussed a number of helpful techniques to improve science communication with the main points of focusing on message, using the power of image, and thinking like a journalist. Next, Wojciech Wawrzynski (ICES) shared his experience at improving communication among marine researchers and managers.

The second workshop was co-led by Jack Barth and Joaquin Tintoré who addressed techniques for pursuing funding and writing proposals, with particular emphasis on writing as clearly as possible, volunteering to serve on panels, knowing success rates and levels of funding available through the given funding agency, and most importantly, never giving up! Skip McKinnell (PICES), Adi Kellermann (ICES), Poul Degnbol (ICES), Anne Hollowed (USA) and Søren Pedersen (ICES) provided an overview of life as a scientist in ICES and PICES as well as resources these organizations have to offer young scientists.



*Clockwise from top left: (1) Ignacio Catalán, local organizer, welcomes participants at Bellver Castle; (2) Welcome Reception at Bellver Castle; (3) Adi Kellerman (ICES Secretariat) and Nina Overgaard Therkildsen (Denmark) at the poster session; (4) Anne Hollowed (USA) and Marta Varela (Spain) on the Majorca north coast; (5) Dafne Eerks-Medrano (USA) and Martin Pastoors (The Netherlands) chat during the poster session; (6) Closing banquet and awards ceremony. Photos by Bryan Black and Hanna Na.*

In addition to talks and workshops, CECS-2012 included a number of social events. On the first night, a Welcome Reception was held at Bellver Castle, a 14<sup>th</sup> century fortress with spectacular views of the nighttime lights of Palma. A mid-week break allowed participants to explore the mountainous north coast of Majorca Island with a stop in the village of Valldemossa to tour its narrow cobblestone

streets and monastery where Frédéric Chopin composed his 24 preludes. Throughout the meeting, there were numerous opportunities to explore Mediterranean beaches and the towns near the conference hotel. Almost certainly, the new friendships and collaborations initiated on outings, during breaks, and at shared meals will be among the most valued and lasting outcomes of the CECS-2012.



*Clockwise from top left: (1) Participants tour Valldemossa in the mountains of Majorca; (2) Mountains of the Majorca north coast; (3) Skip McKinnell (PICES Secretariat) explains the role of PICES. Photos by Bryan Black and Hanna Na.*

The conference took 2.5 years to plan, and there are many people to thank. First, we are grateful to ICES, PICES, NOAA and NPRB for their generous financial support. Many thanks to Adi Kellermann (ICES), Søren Pedersen (ICES), and Skip McKinnell (PICES), for their help with logistics and expert advice to the CECS-2012 Scientific Steering Committee. We also appreciated the very helpful suggestions from Julie Keister, Franz Mueter and Elizabeth North (USA) based on their experiences in organizing CECS-2007. Special thanks to local organizers Ignacio A. Catalán Alemany and the Mediterranean Institute for Advanced Studies for arranging so many of the conference details, including conference facilities, accommodations, shuttles, outings and banquets. And thanks to the other members of the Scientific Steering Committee (Ignasio Catalán, Helen Findlay, Hanna Na, Nina Overgaard Therkildsen, Marta Varela, and Naoki Yoshie) for their efforts in planning the scientific program and meeting logistics. Finally, and most importantly, thanks to all the meeting participants whose enthusiasm and exceptional

scientific contributions made CECS 2012 such a wonderful and enjoyable experience!



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