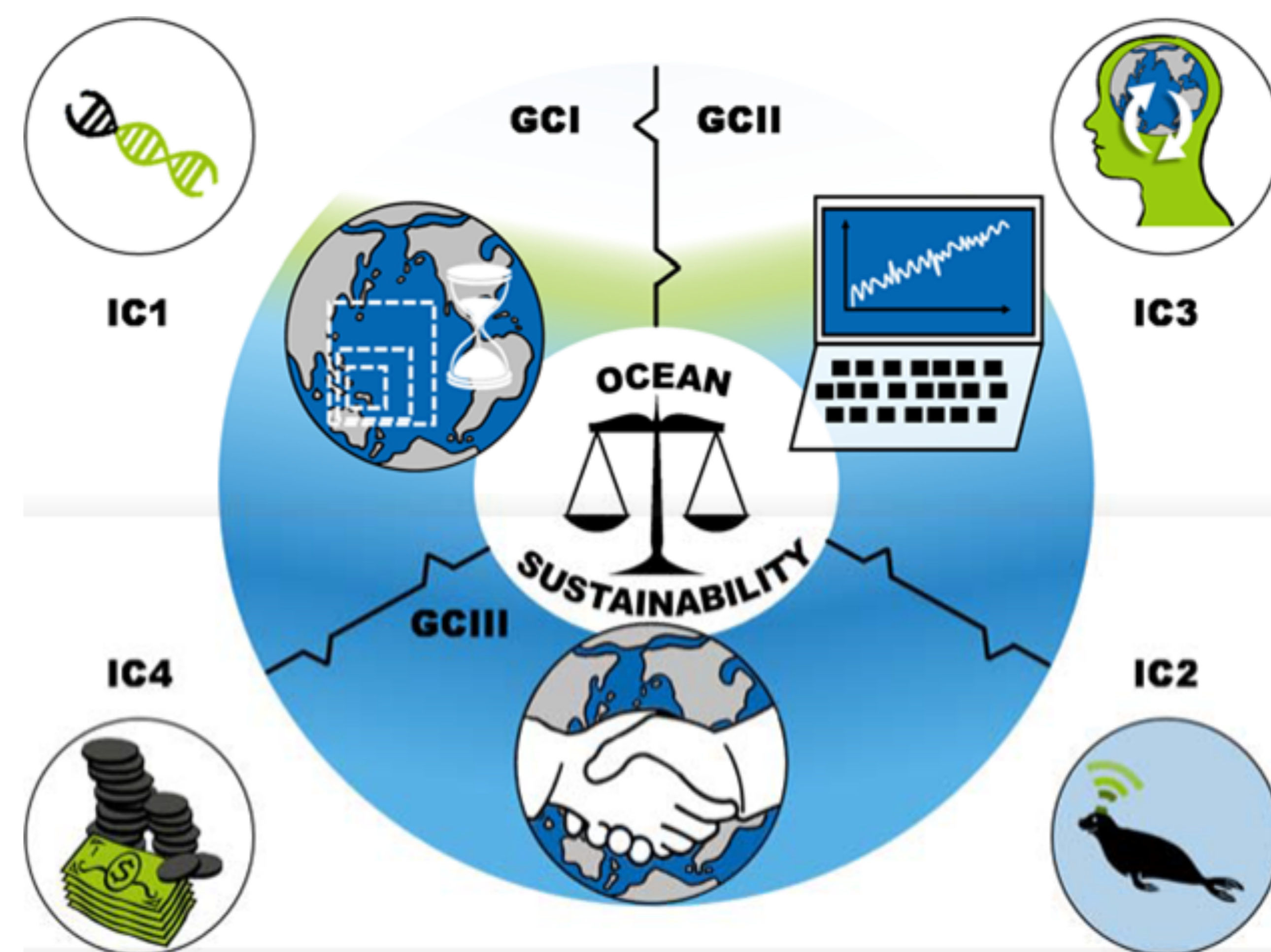
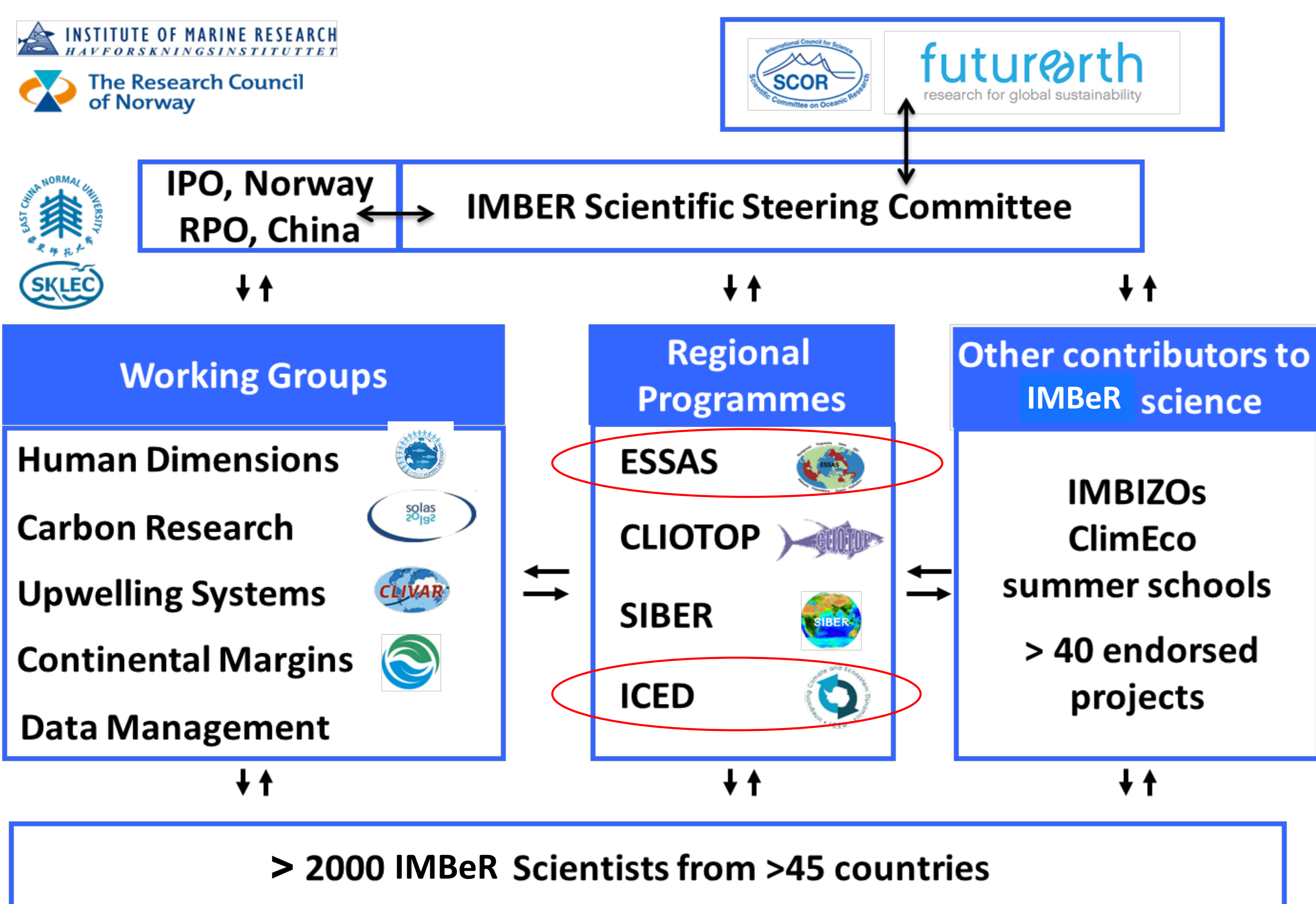


## Promoting integrated marine research

Towards sustainable, productive and healthy oceans in a time of global change, for the benefit of society

### IMBeR organization

### The IMBeR science plan



### IMBeR's unique position for polar and subpolar science:

- Dedicated regional programmes in both Arctic & Antarctic regions.
- Working groups on cross-topic natural and social science.

**ESSAS** aims to understand how climate variability and change affects the marine ecosystems and sustainability of Subarctic and Arctic seas, and in turn, how these changes affect humans.

**ICED** uses a coordinated circumpolar approach to better understand climate interactions in the Southern Ocean, implications for ecosystem dynamics, impacts on biogeochemical cycles, and the development of conservation and sustainable management procedures.

### Strengths of the IMBeR research network

- Potential for collaboration between polar regions - many similarities but also marked differences.
- Comparison of results from different regions - enhanced understanding of underlying drivers and stressors.
- IMBeR network facilitates information integration from human dimensions aspects - gives additional holistic insight for regional programmes.
- The geographic range of the regional programmes encourages flexibility and allows appropriate scale research to fit into global scale approaches.

**Grand Challenges (GCs) address the priority research questions that need to be addressed with some urgency**

- GC I:** Understand and quantify the state and variability of marine ecosystems
- GC II:** Improve scenarios, predictions and projections of ocean-human systems at multiple scales
- GC III:** Improving and achieving sustainable ocean governance

**Innovation Challenges (ICs) guide regional programmes and working groups in their investigation of research questions**

- IC 1:** Understanding role of metabolic diversity and evolution in marine biogeochemical cycling and ecosystem processes
- IC 2:** Contribute to developing a global ocean ecosystem observational and modelling network to provide eEOVs and improve marine data and information management
- IC 3:** Advance understanding of ecological feedbacks in the Earth System
- IC 4:** Advance and improve the use of social science data for ocean management, decision making and policy development

### Upcoming IMBeR events

IMBIZO 5: 2-5 October 2017, Woods Hole, USA

ClimEco 6 Summer school: August 2018, Accra, Ghana

China-Japan-Korea Symposium, 2018, Shanghai, China

2<sup>nd</sup> IMBeR Open Science Conference, 2019