## Reports to SCOR (2020)

## 1. Name of group

SCOR Working Group 154

Integration of Plankton-Observing Sensor Systems to Existing Global Sampling Programs (P-OBS)

2. Activities since previous report to SCOR (e.g., virtual or in-person meetings, email discussions, special sessions). Limit 1000 words

This is our 3rd SCOR report.

Prior to OceanObs19 we finalized a draft report to be distributed in conjunction with the meeting. We had a meeting this year in conjunction with the OceanObs19 meeting the Saturday before where we discussed our report and future plans.

On that Sunday we presented our to GO-SHIP report to the GO-SHIP steering committee. It was very well received.

Our members participated in several SCOR relevant white paper associated with the meeting where plankton measurements were emphasized.

Following the meeting GO-SHIP US asked us to organize a community proposal to make biological measurements on GO-SHIP. Collaborating with OCB a call to scientists (particularly early scientists) went out and a team was formed. That team (headed by Adam Martiny) submitted a proposal to NSF that is currently waiting decision.

Following a period of public comments we published the GO-SHIP report to the Ocean Best Practice and obtain a DOI.

3. Documents published since previous report to SCOR (e.g., peer-reviewed journal articles, reports, Web pages) and should be limited to publications that resulted directly from WG activities and which acknowledge SCOR support

SCOR Working Group 154 (2020) Recommendations for plankton measurements on the GO-SHIP program with relevance to other sea-going expeditions. SCOR Working Group 154 GO-SHIP Report. Scientific Committee on Oceanic Research, 70pp. DOI: http://dx.doi.org/10.25607/OBP-718

4. Progress toward achieving group's terms of reference. List each term of reference separately and describe progress on each one. Limit 1000 words

Identify current technologies (sensors as well as water sample analyses) that can be integrated into existing observing infrastructure to provide input and guide studies of plankton for marine ecosystem and biogeochemistry studies -- Finalized

Provide the necessary details associated with every technology/measurement proposed (e.g., power, cost, and human effort). -- Finalized

Document potential applications, including science case studies and lists of publications, and document measurement protocols. Develop adequate protocols when these are not available. – *in progress* 

Identify synergies with specific measurements done from other observing programs (e.g., BGC-Argo, space-based measurements, Continuous Plankton Recorder surveys) to provide cross-calibration and a better representation of the 4-D distribution of the parameter measured. – *Finalized* (in Lombard et al., 2019)

Identify technological limitations and/or gaps, and identify areas of priority investments to develop and implement the required observation technologies and tools for specific needs. – *Finalized (in Lombard et al., 2019)* 

Outreach activity – We see our involvement in the creation of a proposal to US GO-SHIP as a major outreach accomplishment. We are interested to do more.

5. WG activities planned for the coming year. Limit 500 words

In person meeting in Halifax in Sep. 2020 if possible. Draft a report for OCEAN-SITES by fall 2020 and finalize it after a period of public comments by the end of the year.

6. Is the group having difficulties expected in achieving terms of reference or meeting original time schedule? If so, why, and what is being done to address the difficulties Limit 200 words

No difficulties at this time.

7. Any special comments or requests to SCOR. Limit 100 words.

None

Additional information can be submitted and will be included in the background book for the SCOR meeting at the discretion of the SCOR Executive Committee Reporter for the WG and the SCOR Secretariat.