

Towards Sustainable Global Marine Omics Observation and Coordination Detailed Agenda

January 13, 2026

Conference Webpage

<https://www.mbari.org/event/towards-sustainable-global-marine-omics-observation-and-coordination/>

Goals of the Workshop

- Further globally coordinated, scientifically robust, sustainable, and policy-relevant eDNA sampling and analytical strategies/best practices by identifying where interoperability already exists, where it does not, and what is required to achieve it at-scale in alignment with the BBNJ treaty and UN Decade frameworks
- Leverage UN Decade initiatives such as OBON and Antarctica InSync, as well as other large-scale initiatives such as Neptune, Genoscope, etc., to:
 - document current, mainstream modes of eDNA sample acquisition, handling, processing and data visualization;
 - understand interoperability/intercomparison of different sample acquisition methods;
 - advance a suite of common sample processing protocols that result in calibrated/comparable results;
 - agree on essential data/metadata record keeping and sample repositories needed to support long-term reuse, transparency, and integration across programs;
 - establish a federated reference library of sample materials that are shared freely for non-profit research purposes and for sample processing methodology intercomparisons;
 - develop a list of near-term studies needed to inform upcoming eDNA collections and analyses, in particular with respect to Antarctica InSyn.
- Develop a synthesis white paper that documents outcomes and recommendations stemming from the workshop.

Hotel Accommodations

[Victorian Inn](#)¹, Monterey

Meeting Location

Monterey Bay Aquarium Research Institute ([MBARI](#)), Moss Landing, California USA

Shuttle service between the hotel and MBARI will be provided

Detailed Agenda

Monday February 2:

Arrival and evening welcome reception

5:30 PM – 7:30 PM [Wave Street Studios](#)², Monterey

Tuesday February 3

8:00 AM Shuttle service departs hotel for MBARI; arrive ~8:30

8:30 – 9:30 Breakfast

9:30 AM – 12:30 Session 1: Global Context and Current Practice

9:30 – 9:45 Welcome – introductions, logistics, workshop intent and goals

Session framing across all days: Presentations and discussions should address implications for interoperability, comparability, scalability, and long-term use of marine eDNA observations, where relevant.

9:45 – 12:30 Exemplary large global programs: partners, scope, planned operations related to eDNA collections

09:45 – 10:10 Neptune – Jean Marc Daniel

10:10 – 10:35 OBON – Katie Pitz

10:35 – 11:00 OBIS/BBNJ and marine genetic resources – Stephen Formel

11:00 – 11:20 Break

11:20 – 11:45 Revolutionising marine conservation with eDNA – Mike Bunce

11:45 – 12:10 Tara and eDNA Abyss/Genoscope – Patrick Winker

12:10 – 12:30 Antarctica InSync – Charlotte Havermans

12:30 – 1:30 Lunch

1:45 – 3:00 Session 2: Sample Acquisition Strategies

1:45 – 2:10 Manual (all manual, best practices) – Eily Allan

2:10 – 2:35 Semi- to fully autonomous – Kevan Yamahara

2:35 – 3:00 Open Discussion

3:00 – 3:15 Break

3:15 – 5:00 Session 3: Sample Processing and Data Analysis/Visualization

3:15 – 3:40 Sample handling/processing and curation of extracts – Susie Theroux

3:40 – 4:05 Data processing pipelines and visualization tools – Sarah Tucker

4:05 – 5:00 Open discussion: Review of the day's presentations; planning for Day 2

5:15 – 7:30 Reception at the Haute Enchilada, Moss Landing

7:30 – Shuttle departs the Haute Enchilada for hotel

Wednesday February 4

8:00 AM Shuttle service departs hotel for MBARI; arrive ~8:30

8:30 – 9:30 Breakfast

9:15-12:00 Session 4: Working group discussions #1

9:15 – 9:30 Recap Day 1, brief for Day 2, working group assignments

9:30 – 12:00 Break out group discussions; methodological and procedural intercomparisons/compilations:

Each participant is invited to bring a 3-slide lightning talk (5 min max) for their working group: What examples, highlights, advice, images would you like to showcase and contribute for use in a white paper stemming from this workshop?

Note: all materials presented are for workshop participant's consideration only and will not be used outside of the meeting (e.g., for developing a publicly accessible white paper) without the contributor's expressed permission.

What is known / well established. What needs further investigation?

Group 1. Sample acquisition – Leads: Charlotte Havermans and Kevan Yamahara

Group 2. Sample processing and archival – Susie Theroux and Patrick Winker

Group 3. Data processing and curation – Mike Bunce and Katie Pitz

12:00 – 1:30 Lunch

1:30 – 2:30 Session 5: Working group initial reports

Initial findings, observations, impressions? What is the proposed focus for the afternoon's discussion that will lead to the group's presentation/synthesis of findings and recommendations (10 min presentation, 10 min discussion)?

1:30 – 1:50 Group 1. Sample acquisition

1:50 – 2:10 Group 2. Sample processing and archival
2:10 – 2:30 Group 3. Data processing and curation

2:45 – 4:45 Session 6: Working group discussions #2

Break out groups draft synthesis of findings and prepare presentation of recommendations, needs, gaps for the Thursday morning plenary session

- What is well established?
- What needs further development/consideration?
- What are the opportunities and gaps?
- What are the recommendations for moving forward?

5:00 Shuttle departs MBARI for hotel

6:30 – 9:00 Reception and dinner at the [Monterey Bay Aquarium](#)³

Thursday February 5

8:00 AM Shuttle service departs hotel for MBARI; arrive ~8:30

8:30 – 9:30 Breakfast

9:30 – 12:00 Session 7: Plenary discussions and workshop conclusions

9:30 – 9:45 Day 3 briefing and goals

Final group reports: Towards advancing interoperability/calibration of tools, techniques, approaches (10 min presentation, 10 min discussion).

9:45 – 10:05 Group 1
10:05 – 10:30 Group 2
10:30 – 10:55 Group 3

10:55 – 11:10 Break

11:10 – 12:15 Open discussion

- Needs and opportunities for advancing intercalibration studies/tests prior to the start of Antarctica InSync / Neptune-specific focused activities, such as method intercomparison, establishment and sharing of reference sample materials/data, etc.?
- Equipment and platforms (e.g., automated samplers, ASVs, AUVs, etc.)
- eDNA analytics business cases and start-ups; opportunities and risks
- Compile reports from working groups
- Summarize next steps/action items/leads

- Agree on framework for a white paper that documents outcomes of the workshop: section leads, time line, how this relates to and helps bolster other global initiatives envisioning sustainable, global, eDNA observations.

12:15 – 1:45 Lunch and adjourn

1:45 – 3:00 Optional: MBARI walking tour

Links:

[Victorian Inn](https://www.victorianinn.com/)¹ <https://www.victorianinn.com/>

[Wave Street Studios](https://www.wavestreetstudios.com/)² <https://www.wavestreetstudios.com/>

[Monterey Bay Aquarium](https://www.montereybayaquarium.org/)³ <https://www.montereybayaquarium.org/>