



# CENTER FOR CHEMICAL CURRENCIES OF A MICROBIAL PLANET

## OPEN SCIENCE POLICY

### Value Statement

We value accessibility, integrity, nimbleness, communication, reproducibility, and transparency. We have developed this policy to incorporate our values into the transfer of C-CoMP knowledge.

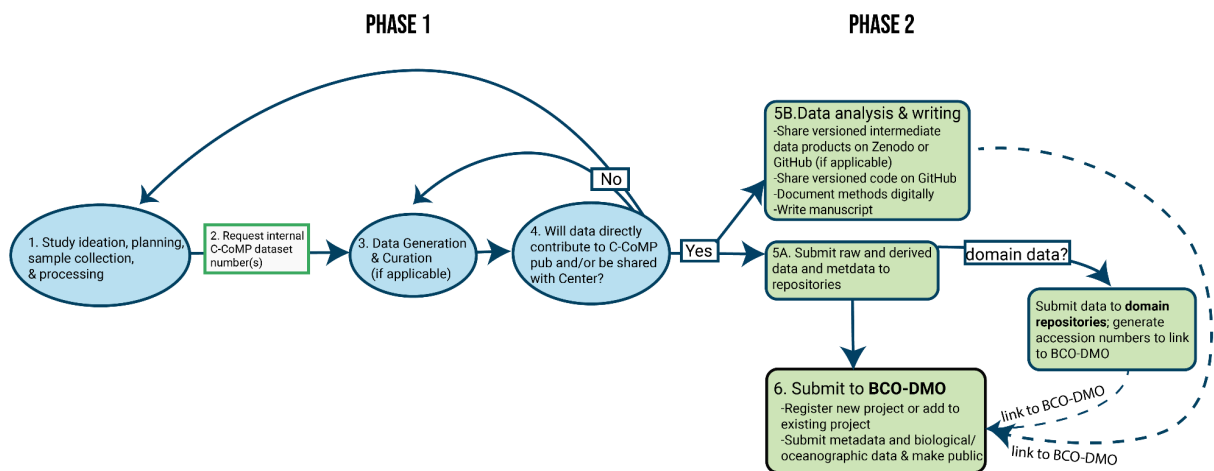
### Community Vision

Our vision is to share knowledge promptly to support transparency, accessibility, reproducibility, and integrity in our scientific process. We will support this vision by sharing data, protocols, code, and software, engaging with the community about our research products by advertising their availability on the C-CoMP website and on social media, and publishing open access versions of articles. Commitments of our open science policy are outlined in our comprehensive plan below.

### Comprehensive Plan

The C-CoMP Data Roadmap outlines how and when we will share our research products (e.g. raw and derived data, metadata, data products, code) within the context of the research cycle.

### C-CoMP DATA ROADMAP



**Fig 1. C-CoMP Data Roadmap.** The roadmap is divided into two phases to differentiate between initial study ideation/preparation (steps 1 - 4) and data analysis and deposition (steps 5A and 5B).

## Commitments

These open science commitments apply for all C-CoMP research. In cases where multiple funding sources support the research, the most open data policy will apply.

### *Open Data, Protocols, and Software*

1. All raw and derived data and relevant metadata generated via C-CoMP (excluding human subjects data) are submitted to online repositories and made publicly available during the data analysis phase of the research cycle (5B-1, 5B-2).
2. Versioned, intermediate research products (data products, code, and methods) are made publicly available prior to or at the onset of writing (5A-1, 5A-2).  
Authors can share these materials using the following options:
  - a. Permit full, unrestricted access to research products as soon as they are available.
  - b. Permit mediated access on Github or Zenodo (e.g. research products are submitted to Zenodo using the 'restricted access' setting at first; restricted access is lifted at the onset of writing).
3. Biological and Chemical Oceanography Data Management Office (BCO-DMO) dataset landing pages are created for all datasets (excluding human subjects data) and numerical models generated by C-CoMP (5B-3).
  - a. Metadata and tabular data are submitted to BCO-DMO after measurements have been collected and accession numbers have been generated at domain specific repositories (if applicable).
  - b. Intermediate data products, methods, and code generated during data analysis are linked to BCO-DMO dataset landing pages when these materials are ready to be shared.
4. Human subjects research that is deemed releasable will be fully anonymized and otherwise compliant with [Institutional Review Board](#) (IRB) regulations.
5. All datasets are assigned Digital Object Identifiers (DOI) and/or accession numbers.
6. Deposition of digital protocols is encouraged using platforms like protocols.io or GitHub.
7. If possible and applicable, open format versions of data are deposited to eliminate usage barriers.
8. Software is accessible at GitHub and/or Zenodo and fully reproducible bioinformatics pipelines are shared using Docker containers, Jupyter notebooks, or GitHub for platform independence and ease-of-use.

*Open Access Articles*

9. C-CoMP strongly encourages submission of manuscripts to preprint servers (e.g. bioRxiv).
10. C-CoMP strongly encourages publication of open access articles by providing funding through the C-CoMP open access fund.

If questions or concerns arise about adhering to the Open Science policy after its formal adoption, please contact Laura Gray (C-CoMP Digital Coordinator).