

Accession Policy

Part of the NCMA core mission is to receive and curate algae that are interesting or valuable to the scientific, educational and business communities. ***The NCMA maintains the largest and most diverse collection of publically available marine algal strains in the world.*** The algal strains in the collection have been obtained from all over the world, from polar to tropical waters, marine, freshwater, brackish, and hyper-saline environments. New strains (50 - 100 per year) are added largely through the accession of strains deposited by scientists in the community. A stringent accession policy is required to help populate the collection with a diverse range of strains.

Our accession decision matrix focuses on increasing taxonomic, geographic, and ecological strain diversity; reducing redundancy in the core collection (i.e. avoiding multiple strains of the same species unless a good reason is presented), accepting strains that are easy to cryopreserve (inexpensive to maintain), have been published, or have had their genomes/transcriptomes sequenced will always be a priority. The NCMA has implemented a cryopreservation program, and we have by far the *largest collection of cryopreserved marine algae in the world*. As of September 9, 2013, we have 1,698 cryopreserved algal strains maintained only in liquid nitrogen (vapor phase), and we have 181 of the most popular strains successfully cryopreserved that are also maintained as perpetually transferred strains (since they are ordered so frequently).

Accession Priorities

1. Habitat (marine strains are a priority, though we will accept algae from all habitats if they meet two (2) or three (3) of our other priorities).
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3. Strains that are easy to cryopreserve.
4. Strains that are published.
5. Strains that have had their genome or transcriptome sequenced and the data is publically available.
6. Special Interest, e.g.
 - Toxin producer
 - High lipid
 - Unusual pigmentation
 - Other unusual natural products
 - Helps in the study of taxonomy or biodiversity (prioritizing groups listed below)
7. Taxonomic gaps. We strive to be relevant and current regarding algal taxonomy and tree of life initiatives, taxonomic philosophy, etc. Therefore it is essential that we request newly described groups and species from the phycological community, and engage the phycological community for recommendations. Some gaps already described include newly described species and missing link species such as *Paulinella*, *Apicomplexons* and *Apicomplexon*-like organisms, and *Euglenoids* such as *Rapaza viridis*
8. Ecological gaps including but not limited to:
 - Polar cyanophytes
 - Polar dinoflagellates
 - Open ocean organisms that are not picoplankton
 - Extremophiles
9. Geographical gaps including but not limited to:
 - Bay of Bengal

- Hudson bay
 - Bay of Alaska
 - Tierra del Fuego
 - Sea of Okhotsk
 - Mozambique Channel
 - Southern upwelling areas such as French Southern and Antarctic, Southern Ocean east of New Zealand
 - Greenland
 - Northern Russia
 - Northern Scandinavia
 - Northern Canada
10. Other (primarily marine) groups will be dealt with in a future accession strategy and will be gradually added to a wider microbiota collection; [please enquire](#) for details.
- Bacteria (already accepting strains)
 - Archaea (already accepting strains)
 - Non-Photosynthetic Protists (already accepting strains)
 - Seaweeds (already accepting strains)
 - Viruses (will accept isolates soon)
 - Fungi (in discussion)

Reasons, but not limited to, for *not* accepting a strain:

1. It is a duplicate of a species already held in the collection.
2. It is one of several isolated from the same location and the organism is not otherwise deemed interesting enough to have multiple strains.
3. It is not from a habitat or geographic location that is new or unusual.
4. It has not been used in a publication and appears unlikely to be used in a publication.
5. It is badly contaminated by a fungus or other eukaryotic co-habitant (NCMA only distributes uni-algal strains).

Terms and Conditions of Marine Algal Strain Accession and Culling

Potential depositors must acknowledge and agree that accepting or not accepting a marine algal strain for accession into the marine algal strain collection maintained by the NCMA shall be within the sole and exclusive discretion of the NCMA.

The “culling” of marine algal strain(s) currently being stored/maintained by the NCMA is also within the sole and exclusive discretion of the NCMA. We will use reasonable efforts to inform the original depositor of stored/maintained marine algal strain(s) of the NCMA’s “to-be-culled” decision. If we have not received a reply from the original depositor within 30 days of notice that they wish to provide funding for other storage/maintenance arrangements, e.g., either within the NCMA or otherwise to prevent the culling, then the NCMA will cull (destroy) the stored/maintained marine algal strain(s).