

# Methods and Madness in Sea Ice Biogeochemistry

## Intercomparisons of Observational Techniques

SCOR working group 140 on Biogeochemical Exchange Processes at the Sea-Ice Interfaces (BEPSII) task group on methodologies



Sea-ice biogeochemists use a variety of methods, making it difficult to compare and synthesize results

### The Problem

- Community composition
- Photosynthesis
- Bacterial production
- Nutrients
- Organic matter
- Gases
- Sulfur cycle
- CO<sub>2</sub> system
- Trace metals
- Air-ice fluxes
- And...

Stay tuned for: Miller et al., submitted to *Elementa: Science of the Anthropocene*. Methods for Biogeochemical Studies of Sea Ice: Where We Are and Where We Are Going.

**The Tests**  
Intercomparison and intercalibration experiments

### ON SHIPS:

Chl a intercomparison on Polarstern, 2013



### IN CAMPS:

Saroma-Ko, Japan



Alert, Canada



Ny Ålesund, Svalbard

### IN LABS:



### The Solution

A manual of best practices

- A paper?
- A book?
- A website?
- A wiki?
- 8-Track tapes?
- Stone tablets?

Let us know what would work best for you

Want to get involved? Contact BEPSII task group II leaders Lisa Miller (lisa.miller@dfo-mpo.gc.ca) and Lynn Russell (lmrussell@ucsd.edu)