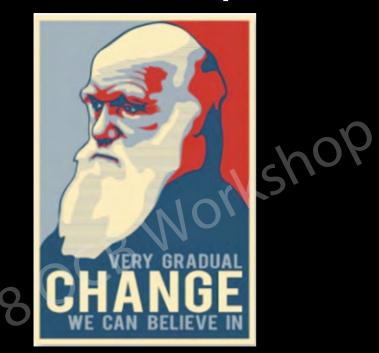
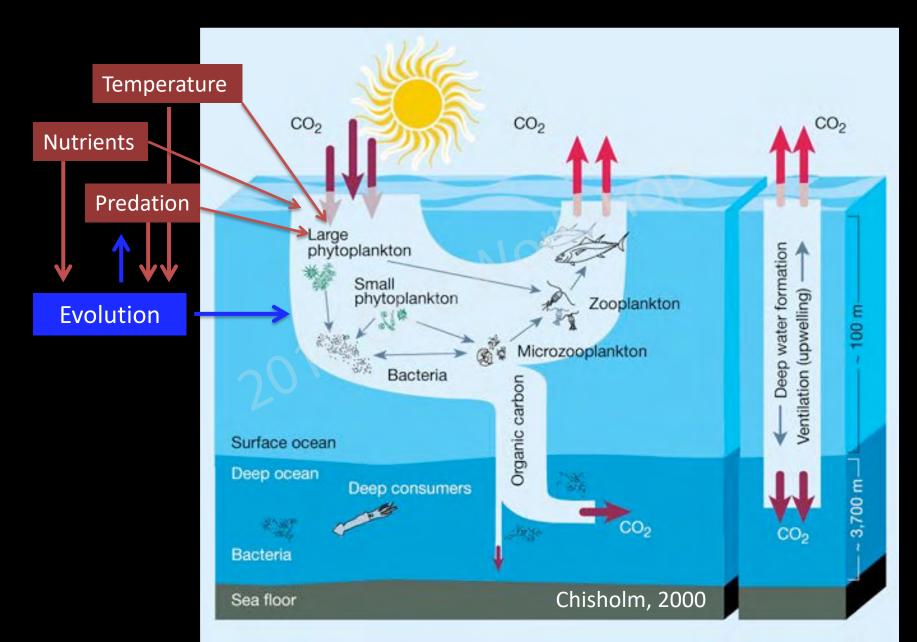
A field guide to contemporary evolution in the plankton:



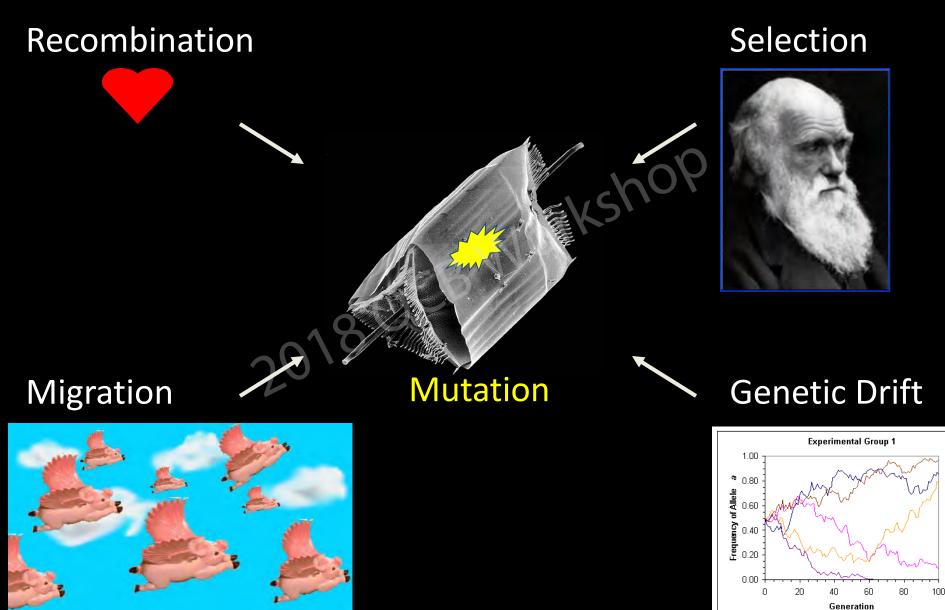
# The importance of knowing (at least glancingly) that evolution is hard at work

Tatiana Rynearson University of Rhode Island, Graduate School of Oceanography

### Carbon Cycling: The biological pump



## The main ingredients....



#### Roadmap to this morning's session

#### Experimental Evolution in the lab

- Controlled selection
- Types and rates of mutation
- Measure fitness

Single species (SCHAUM)

Species interactions (MORRIS)

1801

Spatio-temporal patterns of contemporary evolution

- "Standing stock" of diversity
- Results of selection

Single species (RYNEARSON) Emergent "species" in silico (COLES)

