

Rob Edwards

Department of Computer Sciences, SDSU

Argonne National Laboratory  
(Department of Energy)

# Microbial Genomics & Bioinformatics

- What microbes (Viruses, Bacteria, Archaea, Eukarya) are in different environments ?
- What are they doing ?
- How are they doing it ?

# Department of Energy Microbial Focus

- Biofuels

There are alternatives to ethanol,  
e.g. phytoplankton, cyanobacteria,  
etc.

No need for fertilization ( $N_2$   
fixation), growth in vats, etc

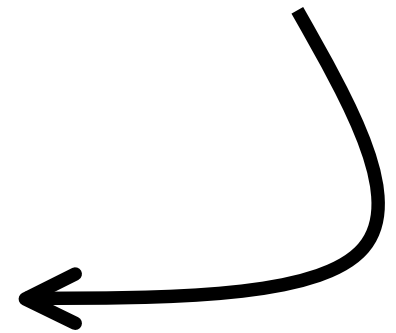
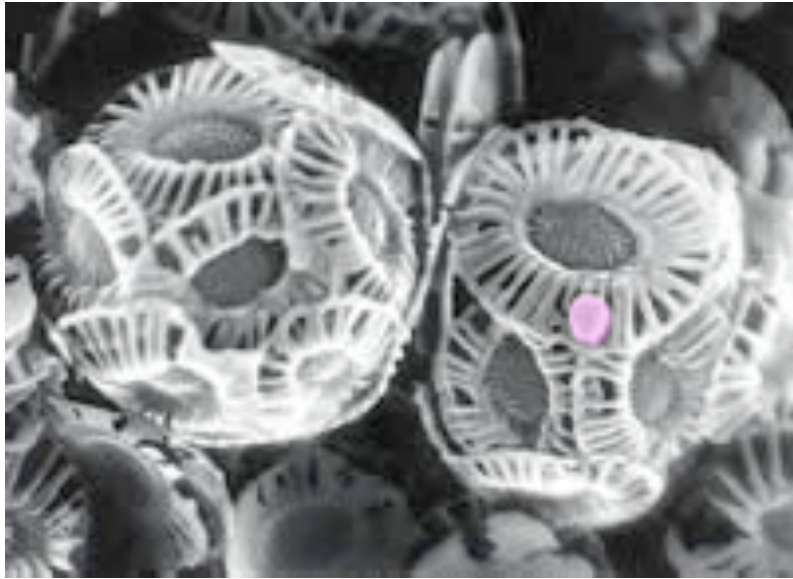
# Department of Energy Microbial Focus

- Carbon Sequestration

Most discussion about physical sequestration

Marine based, biological carbon sequestration is also possible

# Microbial communities have dramatic geochemical impact



# Wild-fires, 2007

(thanks Eric Frost)

