

#### Welcome to Live from IPY!

With Sarah Diers and the DOM team in Antarctica

Sarah Diers, PolarTREC

Dr. Christine Foreman, P.I., MSU

Dr. Yu-Ping Chin, Co-I., OSU

Dr. Diane McKnight, Co-I., CU

Dr. Birgit Sattler, Univ. Innsbruck

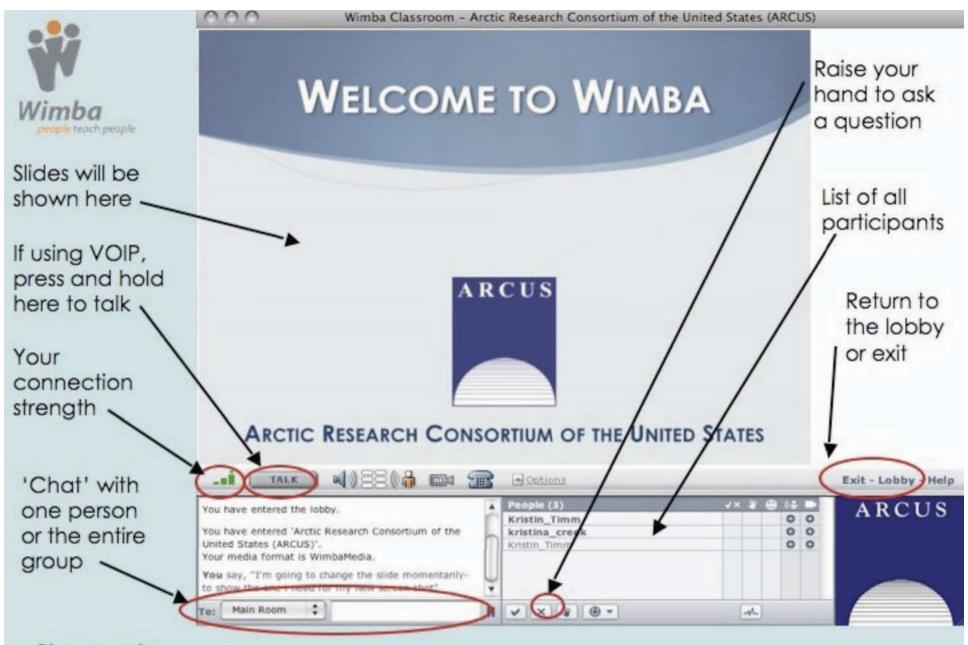
Dr. Mike San Clements, CU

Dr. Chip Kilduff, R.P.I.

Heidi Smith, MSU

Collin Ward, OSU





#### Please note:

- Participant using the telephone can mute/unmute by pressing \*6 on the phone.
- Today's event will be recorded and archived.

# Roll Call

When called, please state your:

- ✓ Name
- ✓ School / Institution
- ✓ The number of students participating with you in the same location



#### International Polar Year (IPY)

The International Polar Year (2007-2009) is an exciting scientific campaign focusing on the world's polar regions!

IPY is a time for discovery, science, learning, and awareness about the polar regions with activities for youth, scientists, and the public.

www.ipy.org



#### What is PolarTREC?

PolarTREC is a professional development experience in which K-12 teachers are paired with researchers in authentic polar research experiences.

In the next three years over 40 teachers from around the United States will join scientists in the Arctic and Antarctica in celebration of the International Polar Year!

www.polartrec.com

# Dissolved Organic Matter in the Cotton Glacier, Antarctica

Sarah Diers, PolarTREC

Dr. Christine Foreman, P.I., MSU

Dr. Yu-Ping Chin, Co-I., OSU

Dr. Diane McKnight, Co-I., CU

Dr. Birgit Sattler, Univ. Innsbruck

Dr. Mike San Clements, CU

Dr. Chip Kilduff, R.P.I.

Heidi Smith, MSU

Collin Ward, OSU



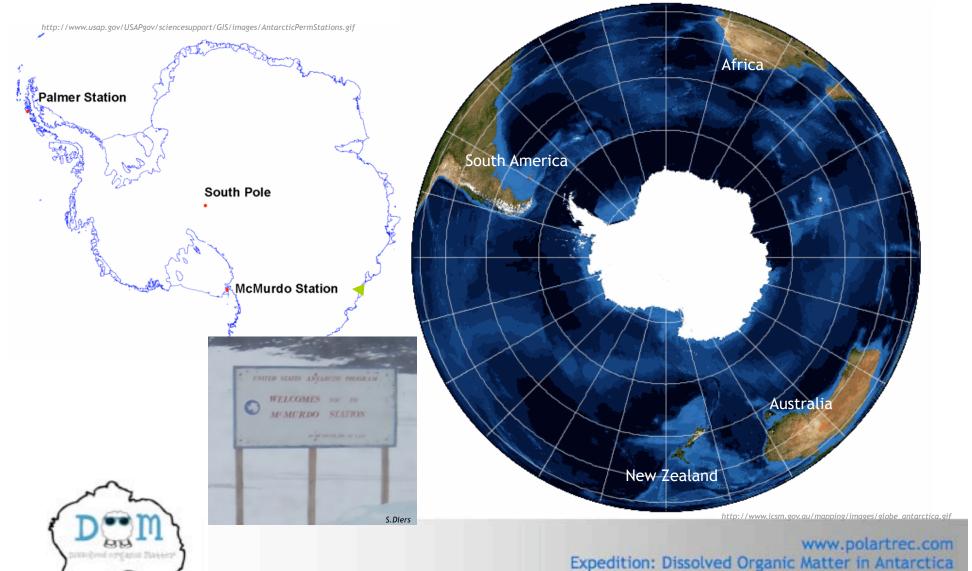
#### The DOM Team



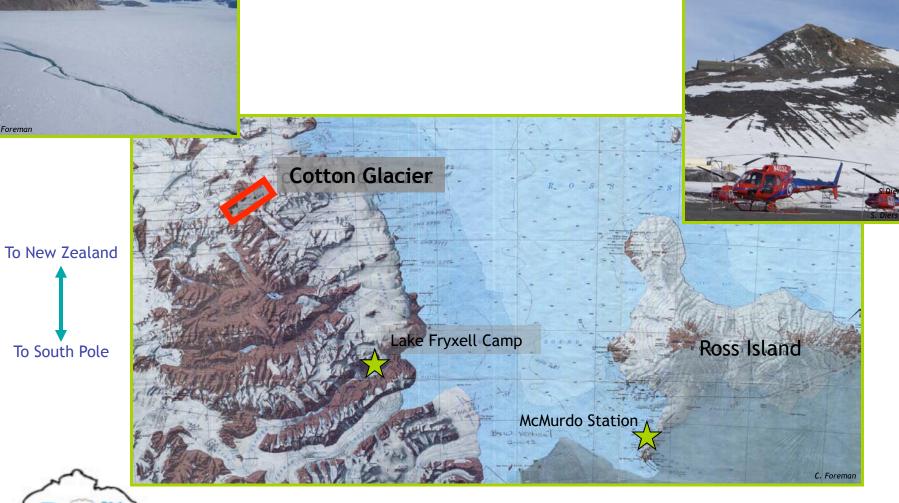
Not pictured- Yo, Chip, & Diane



## Where is Antarctica?



#### Where are we?





# Lake Fryxell Camp



# **Cotton Glacier**











# What are we studying?



The BIG Idea:

- The relationship between bacteria living in liquid water within the Cotton Glacier, Antarctica and the dissolved organic matter (DOM) they rely upon for food and nutrients.

To do this the DOM team will:

- Compare collections of DOM and bacteria collected from streams at the base of the glacier and from "surpraglacial" streams formed on top of the glacier.



# Global Climate Change



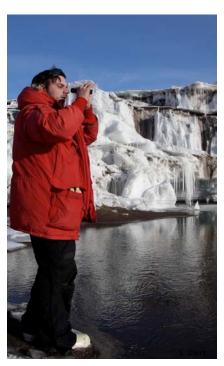
 How will DOM and carbon locked in glaciers respond to global climate change?



#### Research Methods

Field- Cotton Glacier
& Lake Fryxell

McMurdo- Crary Lab



Chemical & Biological Sampling





# Preparations for Camp

Happy Camper School, ATV Training, lots & lots of trips to the BFC, Helicopter Training, and plenty of organizing and





Preparation of Lab





# WE WELCOME YOUR QUESTIONS!

Feel free to ask them now or post a question to "Ask The Team"

on the DOM PolarTREC website!

www.polartrec.com/dissolved-organic-matter-in-antarctica

Thank you for joining our webinar.

Keep on following the DOM team's adventures!



# **Antarctic Animals!**





Register for Upcoming Live Events at: www.polartrec.com!

# Thank You!

The archive of this event will be available shortly at: www.polartrec.com!

If you have further questions, please contact us at: info@polartrec.com or call 1-907-474-1600

