

# Welcome to ***PolarConnect***

With Kevin McMahon and the  
Atmospheric Conditions and Arctic  
Climate Expedition

**Wednesday 19 July 2011**

9:00 a.m. AKDT

(10:00 am PDT, 11:00 am MDT, 12:00 pm CDT, 1:00 pm EDT)



Raise your hand to ask a question

List of all participants

Return to the lobby or exit

Slides will be shown here

If using VOIP, press and hold here to talk

Your connection strength

'Chat' with one person or the entire group

The control bar includes a connection strength indicator, a 'TALK' button, and icons for audio, video, and chat. The chat window shows a message: "You have entered the lobby. You have entered 'Arctic Research Consortium of the United States (ARCUS)'. Your media format is WimbaMedia. You say, 'I'm going to change the slide momentarily- to show the one I need for my new screen shot?'". The participant list shows three people: Kristin\_Timm, kristina\_creek, and Kristin\_Timm.

**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 and adults participating with you in the same location



# What is PolarTREC?

PolarTREC is a professional development experience in which K-12 teachers are paired with researchers for 2-6 week research experiences in the polar regions.

From 2010-2013, nearly 50 teachers from around the United States will join scientists in the Arctic and Antarctica to learn about science, the polar regions, and to share what they have learned with their students and communities.

# Questions

## **To Ask a Question:**

- ✓ Raise your hand with the “hand button”
- ✓ Type your question in the text chat box
- ✓ Speak loud and clear and directly into the phone to ask your question.

# Atmospheric Conditions and Arctic Climate

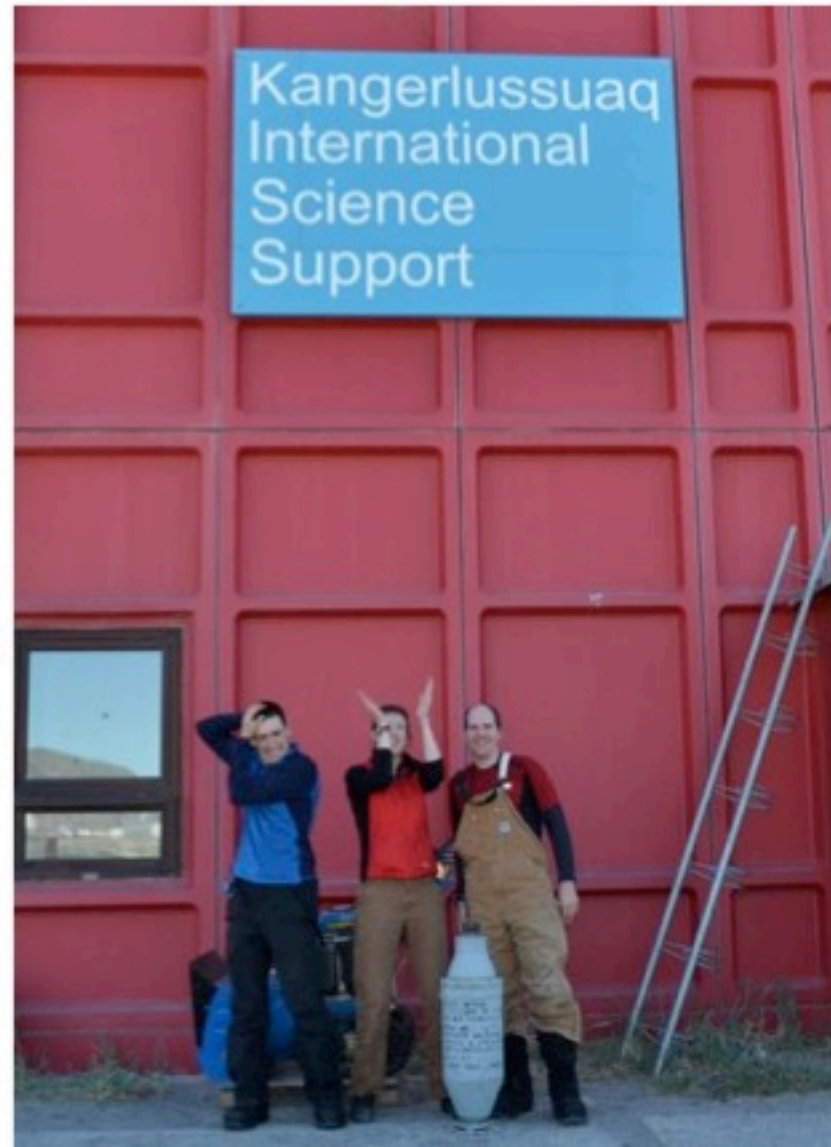




# Our Research Team

- Brandon Strellis,  
Masters Student,  
Georgia Institute of Technology
- Hannah James,  
a recent graduate of St. Lawrence  
University
- Kevin McMahon,  
PolarTREC Teacher from Renfroe  
Middle School, Decatur, GA
- Mike Bergin, professor in the School of  
Civil and Environmental Engineering at  
Georgia Institute of Technology

Enjoying arctic mosquitoes in Kangerlussauq



# Where Are We? (Yellow Dot)





# How Did We Get Here?







# The Edge of The Ice Sheet





# Melt Water Ponds







# Why are we here?

# Why is this work important?

Picture taken at 12:30 a.m.  
The sun never set when we were here.  
Can you see the satellite camp on the horizon?



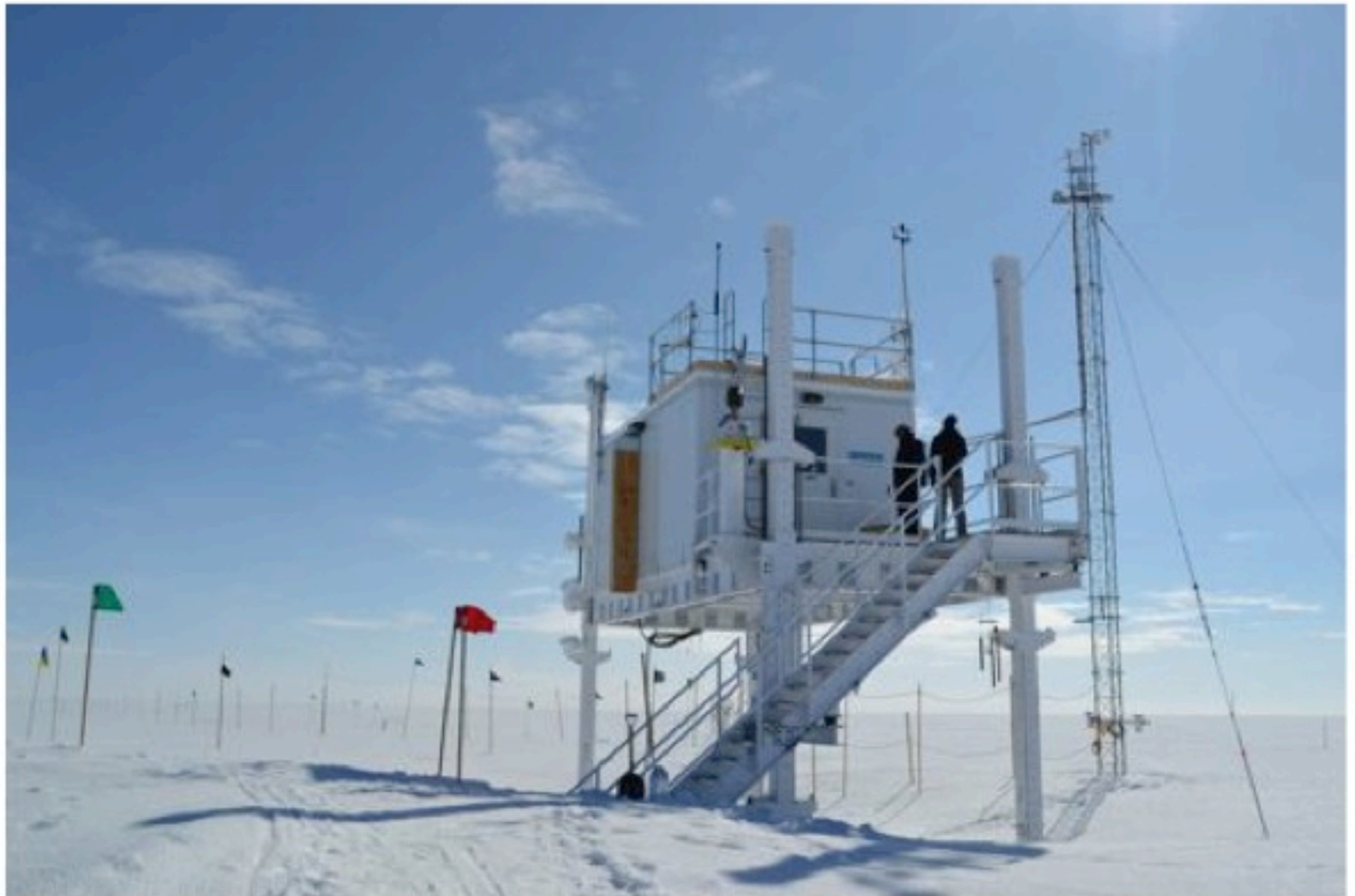
# How Do We Collect Aerosol Information from the Snow?



## Our Filter for Melted Snow



# How Do We Collect Aerosol Information from the Air?





# Air Sampling (Aerosols)

- How big are these particles?

What are these particles made of?

- How many of these particles can form clouds?



# What Have We Found Out So Far?



# Helping Out With Other Research







# What is it like to live and work on the Greenland Ice Sheet?

- Sleeping
- Eating
- Working
- Camp size
- 24 hours of sunshine!







# How Does this Expedition Help Me As A Teacher?

- Learning About How Scientists in the Field Collect Data
- Learning about Current Climate Research
- Being a Model of Life-Long Learning
- Broadening The Horizons of Students



# Ways to Use the PolarTREC website in your classroom



Follow an Expedition...  
**VISIT THE *Virtual Base Camp!***

## Find a Team Member

Use the text field above to locate a PolarTREC member.

Locate



**Learning Resources**



**PolarConnect**

## Upcoming PolarConnect Event!

Talk to Kevin McMahon and the research team live from the [Atmospheric Conditions and Arctic Climate Expedition at Summit Station, Greenland!](#)

DATE: Wednesday, 20 July 2011

[More Information and Sign Up!](#)



**Polar Profiles**



**Fast & Fun Facts**



1 2 3 4 5 6