

**ARCUS: Connecting Arctic Research Across Boundaries Since 1988** 

# PROJECT MANAGEMENT FOR ARCTIC RESEARCH AND DECISION MAKING:

CRITICAL INSIGHTS FROM THE
ARCTIC RESEARCH CONSORTIUM OF THE UNITED
STATES (ARCUS)







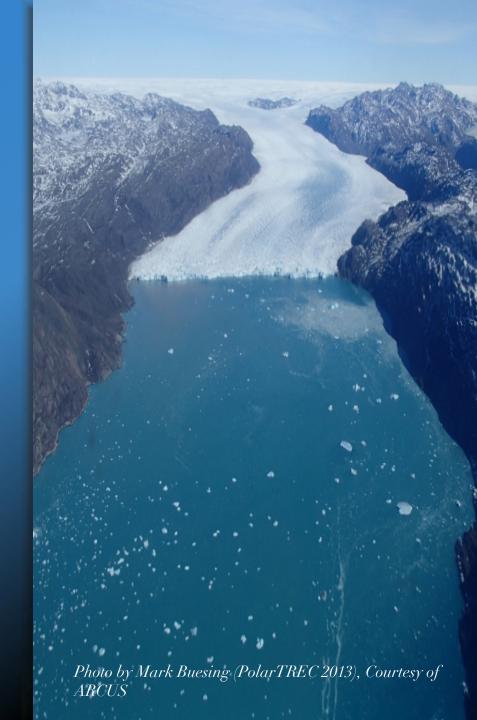




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# WHAT TO EXPECT

Our story
An integrated project management model
What we have learned
How we do it



# **OUR STORY**



## ARCUS VISION

"ARCUS: Where Arctic Research Connects"

Communication
Coordination
Collaboration







## ARCUS HISTORY

#### 1958

First suggestion of a university polar consortium

#### 1988

A dozen institutions met in Boulder organizing ARCUS & first executive director hired.

#### 1989

First ARCUS grant from NSF, resulting in ARCSS

#### 1990

ARCUS incorporated as a non-profit institution

#### 1998

First Arctic Forum

#### 1994

First ARCUS cooperative agreement with NSF

#### 1993

First Witness the Arctic produced

#### 1991

ARCUS Testimony to Congress results in \$6.3 million added to NSF budget for Arctic science.

#### 2002

First SEARCH funding

#### 2004

PolarTREC begins with Arctic focus

#### **2010 IPY**

Sea Ice for Walrus Outlook begins & ARCUS hosts State of the Arctic conference

#### 2013

Sea Ice Prediction Network begins

#### **Future**

Arctic Forum to resume

Arctic synthesis collaboratory

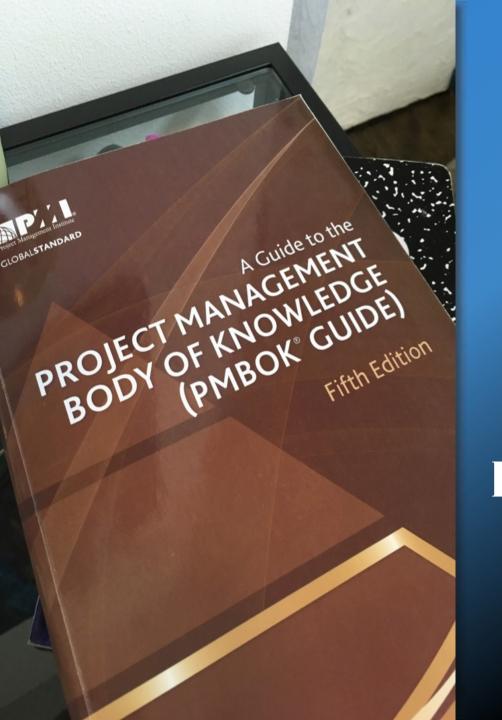
Broader, deeper, more engaged membership

Indigenous knowledge and community-based research workshops

Witness the Arctic monthly community updates

#### 2016

Awarded funding for The Arctic in the Classroom



# AN INTEGRATED MODEL OF PROJECT MANAGEMENT

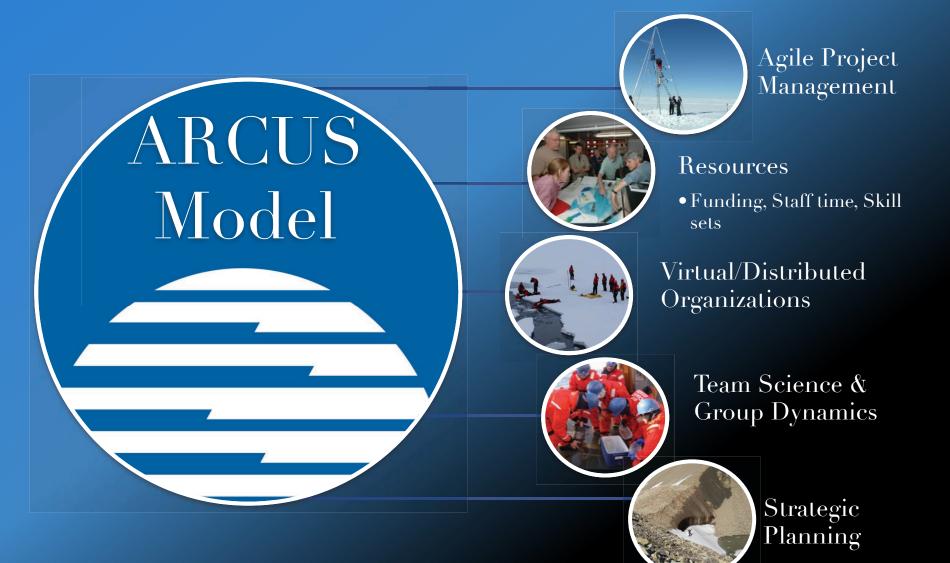
# WHY DO WE NEED THIS MODEL?

# Arctic Research & Education are:

- Inter- and transdisciplinary
- Highly Collaborative across sectors
- Less Controlled
- Crosses geography and cultures



# PROJECT MANAGEMENT



# AGILE PROJECT MANAGEMENT

- Use many techniques from discipline of project management
- Agile project
   management = more
   flexible & interactive





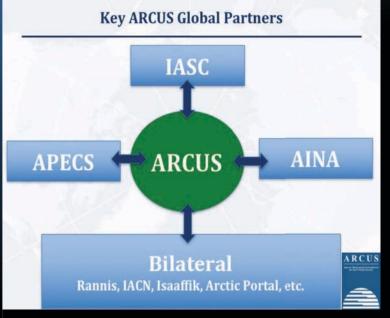
# RESOURCES

- Funding
- Time
- Skillsets

# VIRTUAL & DISTRIBUTED ORGANIZATIONS

- Arctic science & education communities are distributed
- Need to understand characteristics of successful "Virtual Organizations"







# TEAM SCIENCE & GROUP DYNAMICS

A growing body of literature on characteristics of successful science teams

Photo by Ken Williams (PolarTREC 2013), Courtesy of ARCUS

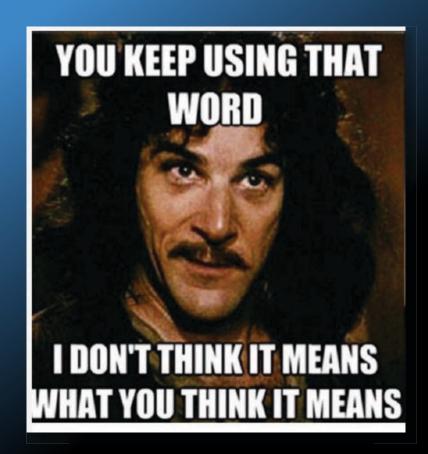
# STRATEGIC PLANNING

 Keep the big-picture vision and goals in mind



### WHAT WE HAVE LEARNED

- 1. Cultural
- 2. Language
- 3. Shared Expectations
- 4. Embedded Assumptions
- 5. Ephemeral Nature of Funding
- 6. Need to Patch Together Evolving Emphasis to Reach Big Goals



### WHAT WE HAVE TO DO

- 1. Know the cultural landscape
- 2. Have worked with different knowledge communities
- 3. Clarify expectations at the outset
- 4. Refuse to assume
- 5. Include project managers w/interdisciplinary skills
- 6. Have funding contingency plans
- 7. Plan for project management explicitly early on
- 8. Have staying power and a long history of working to connect Arctic research

# THANK YOU

### **QUESTIONS?**



We are here to help you to connect and succeed in all your projects!

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Photo by Melissa Barker (PolarTREC 2012), Courtesy of ARCUS