

A Brief Introduction to the Arctic Research Consortium of the United States

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ARCUS: Connecting Arctic Research since 1988

ARCUS: Connecting Arctic Research

1. Arctic research is important.
2. Arctic research is timely.
3. Arctic research is hard.
4. Arctic research is rewarding.

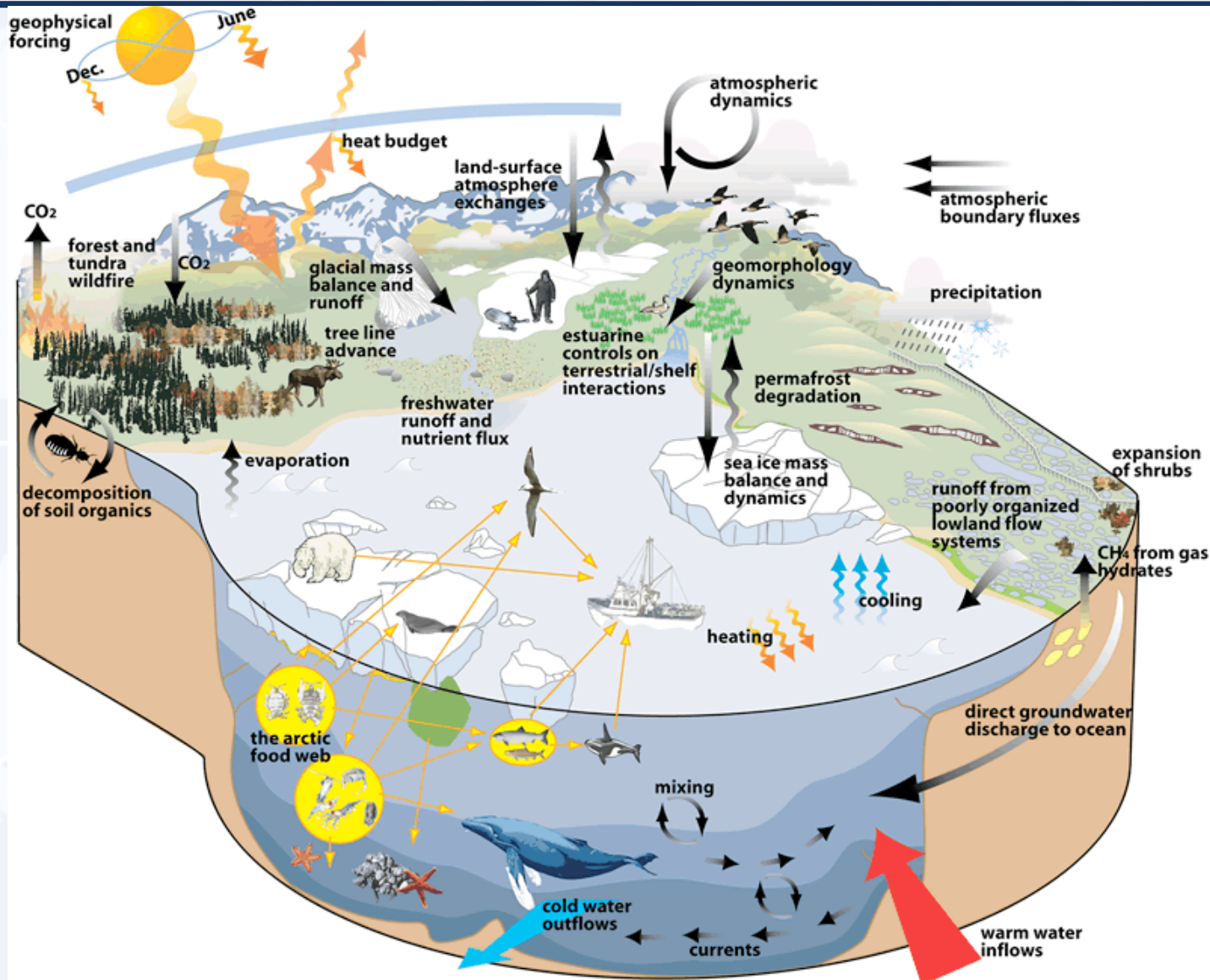
And...

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The Arctic is a Complex, Interdependent System



Source: SEARCH, 2005



Understanding the Arctic Requires Connecting Across Boundaries

Sector Boundaries

- Academic
- Government
- Industrial
- Indigenous
- Non-Governmental Organizations
- Public and Society

Geographic Boundaries

- International / Circumpolar (National Boundaries)
- Arctic Residents / Global Population (Regional Perspectives)

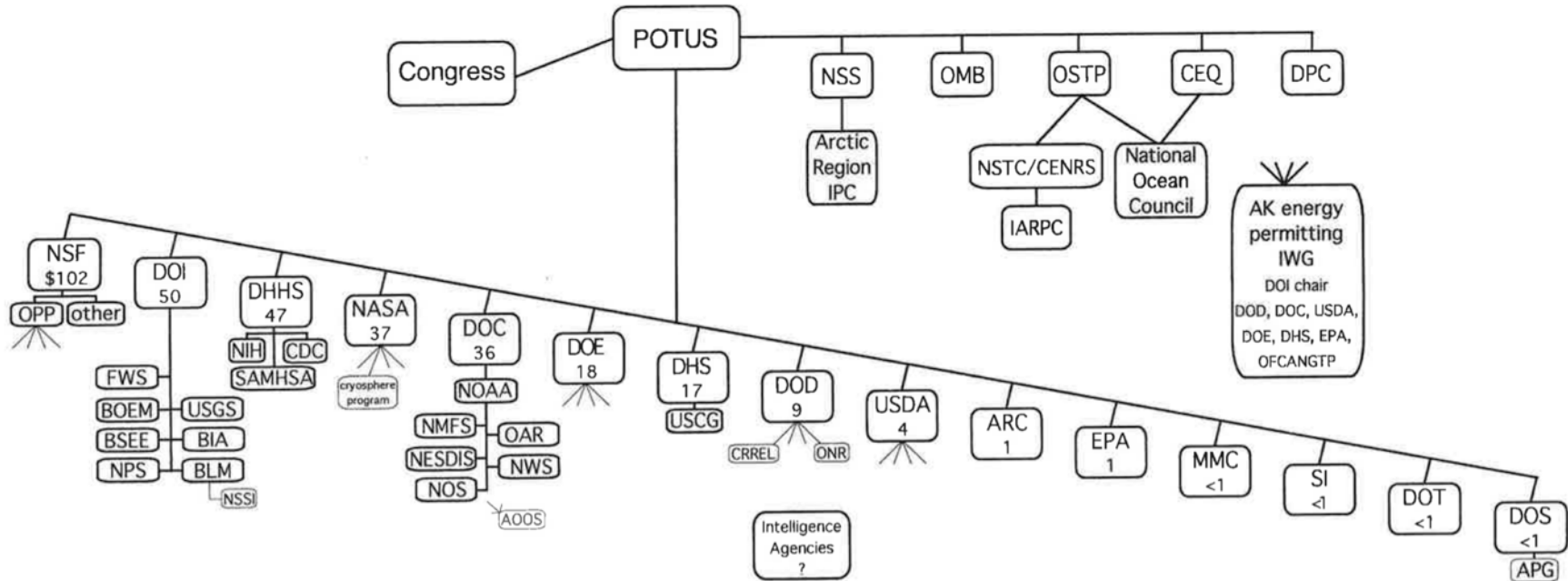
Disciplinary Boundaries

- Physical Science
- Life / Natural Science
- Engineering
- Social Science
- Education
- Community Development



Understanding the Arctic Requires Connecting Across Boundaries

Arctic research in the Federal government



Budget figures, in million \$, are for FY05, as self-reported by IARPC members and reported in "Arctic Research of the US" vol. 20, published by NSF in 2006

Source: John Farrell, USARC, 2011



ARCUS History



The Arctic Council planning a search for Sir John Franklin by Stephen Pearce, 1851

1958

First suggestion of a university polar consortium

1984

USARC and IARPC established

January 1988

A dozen institutions met in Boulder to begin organizing ARCUS

1991

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

1989

First ARCUS grant from NSF resulting in ARCSS

9 October 1988 ARCUS officially inaugurated as nonprofit, first part-time executive director hired

1994

First ARCUS cooperative agreement with NSF

2002

First SEARCH funding

2005

PolarTREC begins

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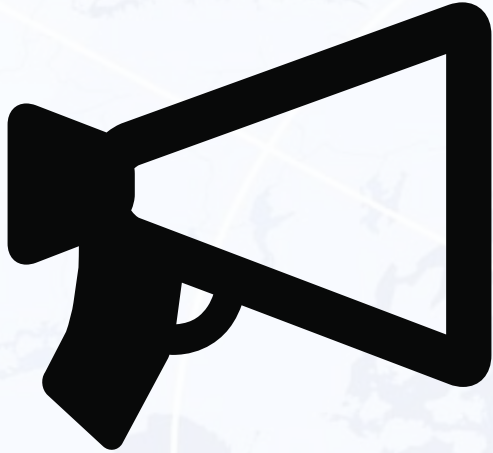


ARCUS Vision

ARCUS envisions strong and productive linkages among international Arctic researchers, educators, communities, and other stakeholders that promote discovery and understanding of the Arctic and inform sound decisions related to the Arctic.

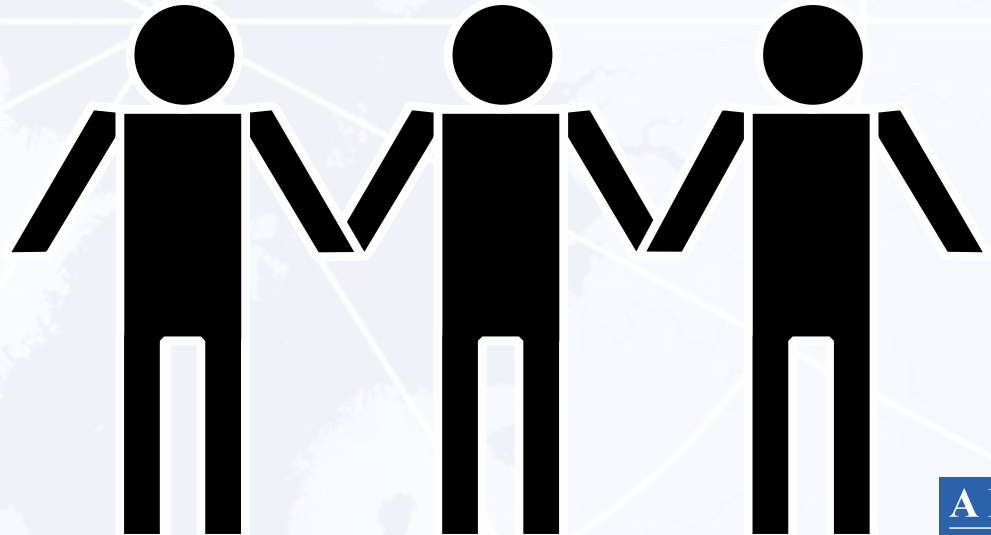


What Does “Connecting Arctic Research” Mean?



- **Communication**

- **Coordination**



- **Collaboration**



Key ARCUS Partners in the U.S.

NSF

USARC

IARPC



NAS PRB

NSSI



Key ARCUS Global Partners

IASC

APECS

ARCUS

AINA

Bilateral

Rannis, IACN, Isaaffik, Arctic Portal, etc.

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Communication: Electronic

ArcticInfo

Community job, meeting, and resource announcements

More than 6,000 subscribers – **You could be one**

Witness the Arctic

Publication issued 3 times per year

More than 12,000 subscribers – **You could be one**

Directory of Arctic Researchers

Online resource for scientific contacts and collaborators

Contains more than 4,000 individuals – **Are you included?**

Arctic Calendar

Community events schedule

More than 350 events annually posted – **Is your event listed?**

Other ARCUS Communication Vehicles

Twitter: @ArcticResearch

Polar Education Email List, Web-Based Resources, Images, Videos

You can subscribe and explore

Photo by Tech. Sgt. Donald L. Wetterman, USAF

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Communication: Meetings

- Anchorage Arctic Research Day
- Arctic Science Summit Week 2017
 - Panel: Multiple knowledge systems to understand a dynamic Arctic Model Project Management for Arctic Research and Decision Making
- Arctic Research D.C. Seminar/Webinar Series
 - April 14 – Mia Bennett, University of California, Los Angeles
 - May 3 – Robert Corell, University of Tromsø
 - Sign up at www.arcus.org/research-seminar-series
- AGU Fall Meeting:
 - Arctic Community Meeting Rooms
 - ARCUS Annual Meeting and Arctic Research Community Reception
- International Workshop to Reconcile Northern Permafrost Region Methane Budgets

Photo by ARCUS staff.

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Communication: Informal Meetings and Conversations:

At ARCUS, we work to:

- Promote communication, coordination, and collaboration
- Apply resources to advance the research
- Connect organizations, individuals, and activities
- Inform participants about other related activities
- Trigger creativity and innovation
- Support IARPC awareness, capacity to engage
- Help in outreach and education
- Understand concerns and challenges, bring other resources to bear

Bottom Line: The community is often fragmented and ARCUS can provide connections across boundaries.

Coordination: Sea Ice Prediction Network

Sea Ice Outlook & Sea Ice for Walrus Outlook



Photo by Cristina Galvan (PolarTREC 2009)

- Ever-increasing record numbers of submissions each month to Sea Ice Outlook
- Produces reports in June, July, and August each year



Photo by Dave Withrow, Courtesy of Robyn Staup (PolarTREC 2007)

- SIWO: Collaborative project with NWS, NOAA, coastal Arctic communities
- Pursuing expansion to other places



Collaboration: Study of Environmental Arctic Change (SEARCH)

- Generates and synthesizes **research findings**
- Identifies **emerging issues** in Arctic environmental change.
- Provides **scientific information** to stakeholders
- **Facilitates research** activities, supports decision-makers.
- Collaborates with **national and international** programs.
- Regularly solicits **research community input**.

Current SEARCH Focus Areas

- **Sea Ice**
- **Land Ice/Glaciers/Greenland Ice Sheet**
- **Permafrost: Carbon, Infrastructure, and Ecosystems**
- **Coastal Resilience**
- **Arctic Future Scenarios**



Study of Environmental Arctic Change (SEARCH)

Arctic Answers

- Bringing research to bear on the key questions affecting policy and resource management
- Different levels designed for various stakeholder audiences

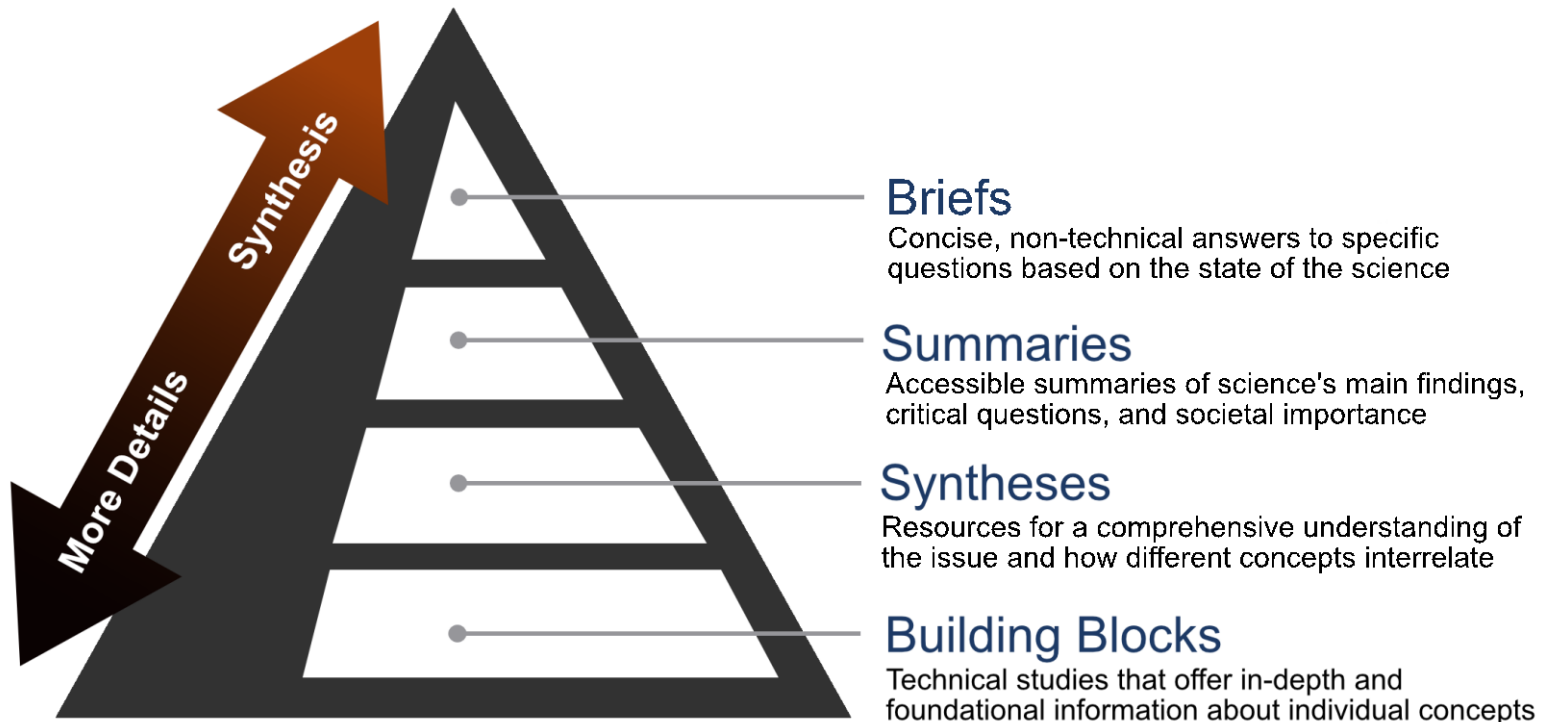


Photo by Ute Kaden (TREC 2005)

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Collaboration: Educational

PolarTREC

- Connecting teachers and researchers to build educational leaders
- Bringing K-12 educators and polar researchers together
- More than a decade of positive impact on researchers, teachers, students, the public

The Arctic in the Classroom

- Connecting Arctic Alaska teachers, their students and communities with research

Photo by Lauren Watel, Courtesy of Regina Brinker (PolarTREC 2014)

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ARCUS: By the Numbers

- **35** Arctic research organizations worldwide
 - Universities
 - Government Agencies
 - Companies
 - Not-for-Profits
 - Indigenous Organizations
 - Colleges, Departments
- **93** Individual members
- **15** professionals in seven U.S. states
- A grantee of the U.S. National Science Foundation and other agencies
- Dedicated to “**Connecting Arctic Research**” since 1988



ARCUS Key Competencies

General

- Longstanding relationships across Arctic stakeholder groups
- Core of participating academic research organizations
- Neutral third-party who can bring people together
- Strong ties/respect with indigenous groups
- Excellent project management
- History of successful programs
- Educational leadership position within Polar educators community

ARCUS Key Competencies

Collaboration

- Collaborative Project Management
- Facilitation

Coordination

- Project Office Support & Administration
- Federal Grants Management
- Workshop, Conference & Meeting Planning

Communication

- Electronic Communications
- Website/Social Media Management

ARCUS Team



ADA BOWER
Business Manager
2008



JUDY FAHNESTOCK
Project Assistant
2008



MILA MALYSHEVA
Accountant
2016



BRIT MYERS
Project Manager
2015



RONNIE OWENS
Director of
Web Development
2004



JOED POLLY
Video/Online Media
2001



ZEB POLLY
Systems Administrator
2000



ROBERT RICH
Executive Director
2015



LISA SHEFFIELD-GUY
Project Manager
2015



ASMA SHETHWALA
Executive Admin
Assistant
2016



STACEY STOUTD
Project Assistant
2016



BETSY TURNER-BOGREN
Project Manager
2010



JANET WARBURTON
Project Manager
2000



HELEN WIGGINS
Director of Programs
2003



JENNIFER ZOLKOS
Director of Community
Development
2016

ARCUS Anchorage Area Members

- University of Alaska, Anchorage
 - ABR, Inc. Environmental Research and Services
 - Fairweather Science, LLC
 - North Slope Science Initiative
 - U.S. Arctic Research Commission
 - University of Alaska, Fairbanks
 - University of Alaska System
-
- Carolina Behe, Russell Hood, Gunnar Knapp, Veronica Padula, Robert Seitz, Robert Winfree



Broadening the ARCUS Network

- **All Organizations and Individuals Can Join!**
 - **You can join, becoming a connector of Arctic research**
- **We are seeking collaborative partners to leverage our impact**
 - **We can be your partner in efforts connecting Arctic research and education**
- **We'd like to know about your related activities, and to help promote them**
 - **Our communication networks are available to help**

See www.arcus.org for more details



Scientific Cooperation

- The Arctic research community needs to work across all of the many boundaries
- ARCUS is here to support this communication, coordination, and collaboration

- You are invited to join with us in “Connecting Arctic Research”

Photo by Robert Harris (PolarTREC 2007)

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ARCUS: Connecting Arctic Research Since 1988

How can we help you to connect?

You are invited to join our global consortium

@rrich

bob@arcus.org

www.arcus.org

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