



National Science Foundation Arctic Research Opportunities & NEESPI



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The National Science Foundation (NSF) supports Arctic research and education through the Office of Polar Programs (OPP), Division of Arctic Sciences (ARC). ARC has four programs that are relevant to NEESPI:

- ❖ Arctic System Science Program (ARCSS)
- ❖ Arctic Natural Sciences Program (ANS)
- ❖ Arctic Social Science Program (ASSP)
- ❖ Arctic Research and Education Program

In addition to these programs, OPP has occasional special, targeted calls for proposals, e.g., International Polar Year (IPY). The *Arctic Observing Network (AON)* was one of three research focus topics of the 2006 IPY proposal solicitation. *Understanding Change in Polar Regions* is one of the research focus topics of the 2007 IPY proposal solicitation.

For more information: <http://www.nsf.gov/dir/index.jsp?org=OPP>



Recent OPP-ARC Awards Relevant to NEESPI



IPY: Collaborative Research: Carbon, Water and Energy of the Arctic Landscape at Flagship Observatories and in a Pan-Arctic Network.

PI: *Gus Shaver, Marine Biological Laboratory.*

- One of the observatories is at Cherskii.

IPY: A Community Genomics Investigation of Fungal Adaptation to Cold.

PI: *Don Taylor, University of Alaska Fairbanks.*

- Fungi and soil carbon pools; latitudinal transect in Eurasia.

IPY: Development of a Network of Permafrost Observatories in North America and Russia: The US Contribution to the International Polar Year.

PI: *Vladimir Romanovsky, University of Alaska Fairbanks.*

- Self-explanatory.

IPY: Is the Arctic Human Environment Moving to a New State?

PI: *Jack Kruse, University of Alaska Anchorage.*

- Russian collaborators include RAIPON.



Recent OPP-ARC Awards Relevant to NEESPI



Big River Microbiology: Bacterioplankton Diversity and Community Dynamics of the Six Largest Rivers in the Arctic Ocean Watershed.

PI: *Byron Crump, University of Maryland.*

- Includes the Ob', Yenisey and Kolyma rivers.

Student-PARTNERS: A Pan-Arctic Science and Education Collaboration.

PI: *Max Holmes, Woods Hole Research Center.*

- Biogeochemistry and hydrology studies of large northern rivers, including Yenisey, Lena, Ob', involves students, teachers and scientists (collaboration with Big River Microbiology).

Thermal State of Permafrost (TSP): The US Contribution to the International Permafrost Observatory Network.

PI: *Vladimir Romanovsky, University of Alaska Fairbanks.*

- Includes Russian boreholes.

Heterogeneity and Resilience of Human-Rangifer Systems: Circumpolar Social-Ecological Synthesis.

PI: *Gary Kofinas, University of Alaska Fairbanks.*

- Includes case studies in the Yamal and Taimyr regions.



Tiksi



- NSF is working with NOAA to upgrade facilities at Tiksi.
 - NSF rebuilt Tiksi Weather Station in 2006 (see photo' above).
 - Construction of new research facility planned to begin in 2007.
- <http://www.esrl.noaa.gov/psd/psd3/arctic/meetings/tiksi/>