

**Joint Russian-American Long-term Census of the Arctic (RUSALCA)
Research Program in the Bering and Chukchi Seas**

Dear Colleague:

This is an Announcement of Opportunity (AO) and Call for Proposals for the joint U.S.-Russia RUSALCA Program in the Bering and Chukchi Seas. Proposals are requested for work to begin in 2007 or 2008 for a period of up to five years. Proposals must be received at the appropriate address no later than 5:00 p.m. on 14 April 2006. This AO can also be found on the CIFAR web site at <http://www.cifar.uaf.edu/>. Please forward this announcement to other interested members of the research community.

Thank you.

John Walsh
Director, CIFAR

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Announcement of Opportunity

I. INTRODUCTION

Proposals are requested for participation in a joint U.S.-Russia research program in the Bering and Chukchi Seas, focused on sampling and instrument deployment in both U.S. and Russian territorial waters. This activity is known as the Russian-American Long-term Census of the Arctic (RUSALCA), and operates under the auspices of two Memoranda of Understanding between NOAA and, respectively, the Russian Academy of Sciences and Roshydromet. The RUSALCA objectives are to support NOAA’s Climate Observation and Analysis Program and the Russian interagency Federal Target Program “World Ocean.” It also provides some of the Arctic components of international and national climate observing systems including GEOSS, GCOS, and IOOS. RUSALCA has also contributed to the U.S. interagency Study of Environmental Arctic Change (SEARCH) Program <http://www.arcus.org/search/>, NOAA’s Office of Ocean Exploration <http://www.oceanexplorer.noaa.gov>, and the Census of Marine Life (CoML).

The RUSALCA program is focused on gathering long-term observations towards understanding the causes and consequences of the reduction in sea ice cover in the Northern Bering Sea and the Chukchi Sea in the Arctic Ocean. Models suggest that the expected changes in sea ice and albedo in this area will translate to significant alterations in water column structure and flow and in associated ecosystems. Thus measurements of the state and flux of ocean dynamics, nutrients and ecosystems in this region are

encouraged. The program began in summer 2004 with a multi-disciplinary cruise to investigate water column physics, nutrient chemistry, pelagic and benthic biology, methane flux and baseline Arctic atmospheric chemistry. Oceanographic moorings were deployed in the western portion of the Bering Strait in 2004. These moorings were recovered and redeployed in 2005 and another servicing is scheduled for 2006. A limited number of CTD and benthic biology stations were completed in 2005 and are planned for 2006.

For 2007 and beyond, NOAA and CIFAR intend to continue the RUSALCA Program with an annual cruise focused on physics in the Bering Strait region. It is anticipated that a multi-disciplinary and geographically more extensive cruise will be sponsored every 2 to 4 years, in the Northern Bering and Chukchi Seas depending on resources.

II. SPECIFIC GUIDANCE FOR ACTIVITIES TO BE PROPOSED

This call for proposals is being released by the Cooperative Institute for Arctic Research (CIFAR) for response by scientists from any scientific research organization in the United States. Collaborating scientists from the Russian Federation will be identified through other means.

The primary study area will be the Northern Bering Sea (north of 60 degrees North Latitude) and the Chukchi Sea (Long Strait/Wrangel Island to Point Barrow and north toward the Chukchi Plateau). Field operations are expected to occur annually in late summer on a Russian ice-strengthened or ice-breaking research ship. Cruise durations will vary depending on annual objectives.

A. All Proposals Must Support NOAA Mission Requirements

RUSALCA is supported by the Climate Observations and Analysis Program of NOAA. The primary goal of this program is:

To develop climate-quality observations, and associated data ingest, archiving, and dissemination systems.

These observations are used to document the state of the climate system and support climate analyses, forecasts, and descriptions of change in key climate variables such as atmospheric temperature and water vapor; precipitation over land; temperature, salinity, and carbon in the oceans.

To become a continuing part of the NOAA Climate Observations and Analysis Program, RUSALCA must be a source of long-term climate-quality data, suitable for climate change detection and modeling. There should be a continuing analysis component that produces regular updates.

The performance of RUSALCA will be judged through a set of “performance measures.” These are program-defined measures that represent the primary activities of the program. To view some possible performance measures, see

http://www.cifar.uaf.edu/aboutus/NOAA_performance.measures.pdf and
http://www.cifar.uaf.edu/aboutus/RUSALCA_performance.measures.doc.

B. Proposals to Provide Temporal Extension to Established Mooring Program

Proposals to conduct the mooring program must propose to re-occupy mooring locations and CTD transects established in 2004 and 2005 and must propose instrumentation that provides data that can be compared directly and harmoniously with physical and nutrient data collected during 2004-2006. It is acceptable to propose alternate or advanced observational technologies, as long as the new approach meets the comparability requirement. Details of the 2004-2006 mooring and CTD activity can be found at <http://www.cifar.uaf.edu/aboutus/RUSALCA.2004.station.list.xls>. Proposers should assume that starting in 2007, there will be an annual cruise in late summer to the study area departing from Nome, or possibly Barrow, Alaska.

C. Proposals to Provide Temporal Extension to Established Multi-disciplinary Ocean Climate Observations

Proposals for this portion of the RUSALCA Program must propose to re-occupy water column and/or benthic stations established in 2004 and either, to perform sampling and analysis that provides data that can be compared directly and harmoniously with data collected in 2004, or to propose a different or additional sampling and analysis approach that offers a better chance of achieving the mission requirements. Details of the 2004 operations can be found at <http://www.cifar.uaf.edu/research/rusalca.php>. Proposers should assume that work under this section will be conducted in late summer 2008 and be repeated in 2012. NOAA may adjust this schedule if resources permit, and if so, will ask to renegotiate awards.

D. Proposals to Develop a Model-based Analysis Capability

NOAA desires to support an atmosphere-ice-ocean modeling effort focused on the Northern Bering and Chukchi Seas. The model should be of high resolution to capture key processes in this region and to further understanding of the causes and consequences of the reduction of sea ice in the region. The ocean component of the model should allow for inclusion of biological processes. Proposers must demonstrate how they would work collaboratively with observationalists to improve model results and aid in analysis of observational data.

III. GENERAL INFORMATION

The availability of funding from NOAA will be limited and dependent on FY2007 and beyond appropriations. Based on recent funding levels, NOAA expects to make no more than 10 awards from this announcement. Proposals should assume a start date of 1 April 2007 and a duration of no more than 5 years. However, NOAA may offer to renegotiate duration, scope, and funding amounts based on program priorities and financial resources. While CIFAR will coordinate the review of proposals and may serve as a vehicle through which NOAA provides funds to some RUSALCA projects, CIFAR's

Cooperative Agreement ends on 30 June 2008. If this agreement is not renewed, alternative mechanisms for funding of projects previously administered through CIFAR and continuing beyond 30 June 2008 will be implemented.

Because RUSALCA is a collaboration between the United States and the Russian Federation, U.S. investigators are encouraged to seek collaborations with scientists from the Russian Federation, and to seek cost-sharing whenever possible.

Proposals will be selected that best support NOAA's objectives, complement other projects proposed by both U.S. and Russian scientists, and fit NOAA's logistic and funding constraints. All proposals will be subjected to peer review. At its discretion, NOAA may allow proposers to respond to reviewers' comments when those comments are of less-than-fatal nature. Some of the selected scientists may be invited to join in joint U.S.-Russia planning meetings. Travel support for these meetings will be provided separately.

IV. ELIGIBILITY

Proposals may be submitted by scientists from any governmental, academic, or non-profit research organization located or chartered in the United States of America. Russian collaborators should submit their proposals to:

Dr. Mikhail Zhdanov
Group "ALLIANCE"
13, Mal. Kozikhinskiy per.,
123001 Moscow, RUSSIA

V. PROPOSAL PREPARATION INSTRUCTIONS

A. Full Proposal Format

Proposals should not exceed 15 pages in text and illustrations (not including cover page, references, budget page and curriculum vitae). Proposals should have 2.5-cm (1-inch) margins at the top, bottom and on each side. The type size must be clear and readily legible, in a standard font size of 10-12 point. The original signed copy should be clipped together (not stapled) and printed on one side of each sheet only. An additional 10 copies of the proposal are required, and may be printed on both sides. These 10 copies should be stapled in the upper left-hand corner, but otherwise be unbound. Additionally, an electronic version (PDF or Microsoft Office formats) of the proposal and all of its parts and attachments must be submitted on a CD-ROM.

B. Sections of the Full Proposal

1. Cover page.

The cover page should include a title, the Principal Investigator's name(s) and affiliation(s), complete address, phone, fax and e-mail information, the budget summary

broken out by year, and the date submitted. It must be signed by the investigator's authorized institutional official.

2. Abstract (on a separate page).

This should list the nature of the proposed work (e.g., sampling or observation scheme, hypotheses to be tested, the relationship of the proposed studies to NOAA's mission and a summary of the key approach).

3. Project Description.

This section presents the problem or opportunity to be addressed by the project, and states the questions, hypotheses, and project objectives, clearly relating them to the goals of this competition. Proposals should summarize the approach that will be used to address the questions, hypotheses and objectives; describe how the PIs and co-PIs would contribute to the overall study approach; describe the methods to be used; and present expected results.

4. Data Plan.

The proposal must include a plan on how the data generated by the proposed research will be made available to other scientists (e.g., web pages) and deposited in a recognized data archive. NOAA recommends that the National Snow and Ice Data Center be used as the archive. It is the responsibility of the PI to contact the data archive and arrange for submittal of data in a format accepted by the archive.

5. References cited.

6. Milestone chart for the project.

7. Statement of the project responsibilities of each Principal Investigator and key participant.

8. Biographical sketch.

This is limited to two pages for each Principal Investigator and should be focused on information directly relevant to undertaking the proposed research.

9. Budget.

Budget details should be provided in a format consistent with the NOAA budget guidelines, which are available at <http://www.ago.noaa.gov/grants/BUDGTGUD.PDF>. Budget categories include the following: salaries & wages, fringe benefits, equipment, travel, materials and supplies (expendable), publication costs, consultant services, computer services, sub-awards, tuition, other expenditures, and indirect costs (facilities & administration). Detailed budgets for sub-awards must also be provided. Do not include costs for ship time in your proposal. Do include costs for shipping and travel to either Nome or Barrow, Alaska, to transfer to and from the research vessel. Travel to a data synthesis meeting in years two through five should be included; assume the meeting will be in Moscow, Russia for budget purposes. Travel expenses need to be broken down by airfare, per diem and other expenses. Please include a copy of your institution's negotiated agreement for facilities and administrative costs and staff benefits.

10. Required Forms:

SF-424 Application for Federal Assistance
SF-424A Budget Information – Non-Construction
SF-424B Assurances – Non-Construction Programs

The required budget forms can be found at <http://www.ago.noaa.gov/grants/appkit.shtml>.

11. Federal assurances, certifications and representations (submit one copy with original proposal only).

SF-LLL Disclosure of Lobbying Activities, and Form CD-511 Certifications Regarding Debarment, Suspension and other Responsibility Matters: Drug-Free Workplace Requirements and Lobbying.

VI. SUBMISSION AND REVIEW SCHEDULE

Full proposals due:	14 April 2006
Decisions announced:	15 June 2006
Funds available:	1 April 2007 or later

VII. PROPOSAL SUBMISSION INSTRUCTIONS

It is preferred that academic scientists associated with any NOAA Joint or Cooperative Institute submit their proposals through that Institute, but this is not a requirement. All proposals from non-Federal organizations must be sent to the CIFAR Office. Federally employed scientists should submit their proposals to the NOAA Arctic Research Program.

Full Proposal Submission: One (1) original and ten (10) copies, along with an electronic version on CD-ROM, must be received no later than 5:00 p.m., 14 April 2006, at the CIFAR Office (non-governmental investigators) or NOAA Arctic Research Program Office (Federally employed investigators) (addresses below).

FY2007 CIFAR/NOAA Competition
Cooperative Institute for Arctic Research
306 IARC, 930 Koyukuk Drive
P.O. Box 757740
University of Alaska Fairbanks
Fairbanks, AK 99775-7740
ATTN: Dr. John Walsh
907-474-5818

FY2007 CIFAR/NOAA Competition
NOAA Arctic Research Program Office
1100 Wayne, Suite 1225
Silver Spring, MD 20910
ATTN: Dr. John Calder
301-427-2348

VIII. CONTACT INFORMATION

For further information, contact:

Dr. John A. Calder or Dr. Kathleen Crane
Arctic Research Program
Climate Program Office
Office of Oceanic and Atmospheric Research
National Oceanic and Atmospheric Administration
1100 Wayne Ave. Suite 1225
Silver Spring, MD 20910

John.Calder@noaa.gov Phone: 301-427-2348
Kathy.Crane@noaa.gov Phone: 301-427-2335

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306 International Arctic Research Center
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Fairbanks, AK 99775-7740

jwalsh@iarc.uaf.edu Phone: 907-474-2677

IX. NONDISCRIMINATION

The National Oceanic and Atmospheric Administration provides awards for research in the sciences. The awardee is wholly responsible for the conduct of such research and preparation of the results for publication. NOAA, therefore, does not assume responsibility for such findings or their interpretation. CIFAR welcomes proposals on behalf of all qualified scientists and engineers, and strongly encourages women, minorities, and persons with disabilities to compete fully in any of the research and research-related programs described in this document. In accordance with Federal statutes and regulations, and NOAA policies, no person on the grounds of race, color, age, sex, national origin, or disability shall be excluded from participation in, denied the benefits of, or be subjected to discrimination under any program or activity receiving financial assistance from NOAA.