



Request for Pre-Proposals – FY 2009

Due October 31, 2008

The West Coast & Polar Regions Undersea Research Center in NOAA's Office of Ocean Exploration and Research invites pre-proposals for technological innovation and research beginning in FY 2009. There are three program themes for this period: (1) U.S. Arctic shelf ecosystems, (2) role of the oxygen minimum zone in ocean ecosystems and (3) regional oceanographic data from sensors on pelagic marine organisms. It is anticipated that a limited number of full proposals will be requested from those submitting pre-proposals, with funding decisions in early spring of 2009.

The Center

The West Coast & Polar Regions Undersea Research Center is a regional center in NOAA's Office of Ocean Exploration and Research (created by a merger of the National Undersea Research (NURP) and Ocean Exploration Programs). The Center supports highly-rated, peer-reviewed proposals to conduct technologically innovative undersea research in the polar waters of the Arctic and Antarctic, including the Bering, Beaufort and Chukchi Seas, and in offshore and nearshore waters of Alaska, California, Oregon and Washington and the northeastern Pacific Ocean.

The West Coast & Polar Regions Undersea Research Center supports NOAA's national and regional priorities by providing an improved understanding of the Nation's underwater resources to enable effective ecosystem-based management. Our primary responsibility is to engage academic- and government-based science and technology experts in developing solutions to problems facing the region, NOAA, and the Nation. Projects approved by the Center must further NOAA's mission by addressing these themes, and must incorporate a strong component of technological innovation (defined as development of new technologies and techniques or innovative use of existing technologies).

2008 Programmatic Themes

Theme 1) U.S. Arctic Continental Shelf Ecosystems

Arctic environments are experiencing both climate change and increased human activity. Progress in understanding these extreme and remote regions depends strongly on technological innovation that will improve access to, and enhance our ability to understand, the physical, chemical, geological and biological processes of the polar seas.

For 2009, the Center solicits technologically innovative proposals that will contribute to our understanding of nearshore and/or continental shelf ecosystems of the U.S. Arctic. To maximize the return from our limited budgets, the Center welcomes proposals from U.S. scientists to contribute to multi-investigator field programs, including those aboard foreign research vessels and "piggy-back" proposals on ships of opportunity. Marine studies from land-based field camps may also be eligible.

Theme 2) Ecosystem Effects of the Oxygen Minimum Zone

Little is known of marine ecosystems within the oceanic oxygen minimum zone, their interaction with adjacent regions of the ocean, or the potential consequences of upward migration of the zone boundaries. The Center solicits proposals that will involve or lead to technically innovative advances in understanding this important feature.

Theme 3) Regional Oceanographic Data from Sensors on Pelagic Marine Organisms

A few studies to date have recovered valuable oceanographic data from instruments carried by marine mammals and other pelagic species. The Center solicits proposals to further develop these innovative, low-cost oceanographic techniques.

2008 Pre-Proposals

The Center invites pre-proposals for projects that involve development and application of technology to ecosystem studies and are broadly consistent with the above guidelines. Theme 1 is specific to the U.S. Arctic Ocean. Theme 2 and 3 proposals will be accepted for work in any part of the Center's region.

Center-supported projects will usually address a specific scientific need, and must incorporate an "innovative technology" component. This component may, for example, involve development and application of new or improved technologies or techniques, design and/or testing of new instruments or sensors, or adaptation of existing technology to new applications. The Center will continue to provide support for undersea support systems, including SCUBA/NITROX techniques, manned, remotely operated, or autonomous underwater vehicles, or other systems as appropriate to the work proposed, as described below.

PIs are encouraged to discuss potential projects with Center staff prior to submission.

Requirements:

- The proposed research must address one or more of the 2009 Programmatic Themes and must incorporate an innovative technology component.
- Field work must be located within the Center's region: the U.S. West Coast including California, Oregon, Washington, and Alaska; the northeast Pacific; and the Arctic and Antarctic regions.
- The lead PI must be a scientist at a U.S. institution, either government (federal, state, local, tribal), academic, or not-for-profit. Scientists from other countries are welcome as collaborators, but the proposal must be submitted through a U.S. institution.
- The lead PI must participate in any funded field work.

Restrictions:

Project Duration. One-year projects are generally preferred. Two-year projects will be considered but, due to Center commitments in 2010, a second year of funding is not guaranteed and may be deferred to 2011.

Charters. PIs requiring ship time are urged to contact the Center staff before submitting a pre-proposal. Due to budget constraints and the short lead time available for scheduling, we do not anticipate being able to charter major deep-diving vehicles (ROV, AUV, manned submersible) or larger research ships in 2009. Proposals involving the use of such assets will only be considered if prior approval is obtained from the Center Director or Science Director. Small boat or vehicle charters and ancillary (piggyback) programs on a ship or vehicle already scheduled for another project are not included in this restriction. Prospective PIs are encouraged to discuss ship and equipment needs with Center staff at any time.

Budget guidelines. Pre-proposals for 2009 should be limited to ~\$100,000, including field support.

Funds provided through NOAA are subject to applicable Federal cost principles. In addition, program-specific restrictions include the following: 1) Federal agencies may not charge salary or indirect costs. 2) Requests for Center sponsorship of meetings, symposia, or workshops may not include indirect costs.

Note: Proposals for low-cost “Developmental” funding, up to \$20,000, may be submitted at any time during the year. Developmental funding is intended to support proof-of-concept activities or development that is likely to lead to a full proposal. It is not intended for projects that simply have a modest budget; those should be submitted through this call for pre-proposals.

Format:

The pre-proposal must be submitted electronically as a single PDF or MS Word file. The text may be up to 3 pages long; a 4th page may be added to show a location map and/or other key figures. The following must be included:

- Project title.
- Full list of PI and co-PIs, with affiliations and website addresses if available. Include phone and email contact for the lead PI only.
- Research outline.
- Project field location.
- Relevance to one or more of the 2009 Programmatic Themes.
- Aspect(s) of proposed research that involves innovation in technology and/or techniques.
- Budget total, with a short descriptive summary of costs to be covered by support requested from the West Coast & Polar Regions Undersea Research Center. PIs are cautioned to propose a realistic budget total. Project cost will be one of the criteria for selection and full proposals will normally be limited to the budget level of the pre-proposal.

Selection Process

Pre-proposals should be submitted electronically (by email attachment) to westnurc@guru.uaf.edu. Pre-proposals are due by **October 31, 2008**. They will be reviewed internally by Center staff. Requests for full proposals will be issued to lead PIs in mid-November, 2008 and full proposals will be due in mid-January, 2009. Provisional funding decisions are expected in March, 2009; final decisions will depend on the timing of the federal budget process for FY09. We will endeavor to keep short-listed PIs informed as the situation evolves and questions will be welcome at any time.

WEST COAST & POLAR REGIONS UNDERSEA RESEARCH CENTER

Global Undersea Research Unit
School of Fisheries & Ocean Sciences
University of Alaska Fairbanks
P.O. Box 757220 - 209 O’Neill
Fairbanks, AK 99775-7220

phone: (907) 474-5870
fax: (907) 474-5804
email: westnurc@guru.uaf.edu
web: www.westnurc.uaf.edu

| | | | |
|-----------------------|-------------------|----------------|--|
| Center Director: | David Christie | (907) 474-7836 | dchristie@guru.uaf.edu |
| Science Director: | Jennifer Reynolds | (907) 474-5871 | jreynolds@guru.uaf.edu |
| Staff Scientist: | Brenda Konar | (907) 474-5028 | bkonar@guru.uaf.edu |
| Regional Coordinator: | Geoff Wheat | (831) 633-7033 | wheat@mbari.org |