NATIONAL CENTER FOR
ECOLOGICAL ANALYSIS AND SYNTHESIS

Special Call for Proposals
Gulf of Alaska Long-Term Synthesis
Long-Term Synthesis within the Gulf of Alaska

Since 1995, the National Center for Ecological Analysis and Synthesis (NCEAS) has been advancing the state of ecological and environmental knowledge through synthetic and collaborative research that aims to discover general patterns and principles based on existing data. The premise at NCEAS is that many decades of data have been collected that can be synthesized to produce novel insights into important scientific and societal issues, and that the expertise and information resources necessary to accomplish these syntheses are latent but distributed throughout the science community.

Following the Exxon Valdez Oil Spill in 1989, the oil-impacted areas of the Gulf of Alaska have been extensively monitored to examine impacts of the spill on the ecosystem and to assess and promote recovery of impacted species. NCEAS has collaborated with investigators from Gulf Watch Alaska and the Herring Research and Monitoring program to collate historical data from a quarter century of monitoring studies on physical and biological systems impacted by the spill. In addition, Gulf Watch Alaska is currently conducting a comprehensive monitoring program covering benthic and pelagic systems, environmental drivers, and the effects of lingering oil. These data collected prior to and in response to the Exxon Valdez oil spill encompass a spatial region from the Alaska Peninsula to the eastern side of Prince William Sound (see map from AOOS). The data are diverse and range from long-term, automated sensing of oceanographic and atmospheric conditions, to short-term, experimental, monitoring, and behavioral studies of biological components of the system. The scientific data collected in these studies includes data on population trends, behavior, physiology, disease, and genetics of many species, as well as oceanographic, chemical, and meteorological data at both regional and local scales.

Through this Call for Proposals, NCEAS seeks two synthesis Working Groups and two Postdoctoral Associates to commence Summer 2014 and conclude Autumn 2016. Successful proposals will utilize data collated by NCEAS along with other existing information that researchers gather to conduct and publish holistic synthesis and analyses of driving processes and perturbations within this large and complex ecosystem. We expect groups might, for example, develop and test important ecological ideas and theories, elucidate the use of sound science in policy and management decisions, or investigate sociological issues that pertain to the science of ecology. Previously, a lack of integrated data impeded holistic analysis but the currently compiled data open new avenues for synthesis. For example, there are pressing questions about the interaction between the oil spill and larger drivers such as ocean regime shifts as well as temporal and spatial variability within the ecosystem. Such a holistic synthesis is critical to guide future monitoring and recovery initiatives, which are expected to continue for decades, and to inform monitoring and policy for future events. Proposed products from these syntheses can be diverse, and can include academic papers and reports supported by openly accessible, synthesized data, archived models and analyses, and archived model outputs.

Postdoctoral Associates that are selected will be expected to collaborate with the two Working Groups that are selected as well as pursue independent synthesis of the available data.

Timetable and Deadlines

- March 5, 2014: Call for Proposals released
- May 1, 2014: Synthesis proposals and Postdoctoral Associate applications due
- July 1, 2014: Postdoctoral Associates and Synthesis projects announced and projects can commence activities (distributed over 2 years)
Data Availability
The rich set of data already collated for these activities are available through the Gulf of Alaska Data Portal:

- Long-term historical data: https://goa.nceas.ucsb.edu/
- Current and regional data: http://data.aoos.org/maps/search/gulf-of-alaska.php

The Center is committed to making the data and materials derived from NCEAS activities available to the broader scientific community. Proposals must include a brief summary of anticipated derived data products (data resulting from analyses from which the original data cannot be reconstituted) and timetable for making derived data publicly available. Postdoctoral Associates and Working Groups must agree, before initiating NCEAS research activities, to making derived data publicly available. Furthermore, we strongly encourage researchers to document their original data and make it publicly accessible. Please read the NCEAS Data and Information Policy for details on NCEAS’ data sharing and intellectual property requirements.

The NCEAS scientific computing staff will contact Working Group leaders prior to the start of their first group meeting and assist with the development of a realistic plan and timeline for the archiving of data and software products from the Working Group. NCEAS can provide some staff assistance with data management and analysis.

Overview of NCEAS
The National Center for Ecological Analysis and Synthesis was initiated in 1995 to promote synthesis, analysis, and multidisciplinary collaboration directed toward addressing important questions in ecology and allied disciplines. The Center seeks projects that address the development and testing of important ecological ideas and theories using existing data, cutting-edge analysis of ecological information, use of sound science in policy and management decisions, and investigating sociological issues that pertain to the science of ecology.

The Center provides comprehensive in-house computing capabilities, including support and training for resident and visiting scientists. As a result, NCEAS scientists become familiar with information management and develop a sense of its importance to their research. Training is enhanced because the Center is often viewed as a neutral party, dedicated to the general notion of data access rather than focusing on one type of data or approach.

It is critical that proposed activities take advantage of the Center’s unique resources. NCEAS provides:

- an intellectually stimulating environment,
- exceptional scientific support and computing facilities,
- excellent linkages to a wide array of institutions and organizations dealing with similar issues, and
- access to UCSB’s large pool of expertise in the ecological and environmental sciences.

Who Should Apply
Proposals may be submitted by individuals of any nationality who hold a position in an academic institution, free-standing research institution, scientific society, governmental or policy agency, nongovernmental organization, or a consortium of such institutions. Proposals are welcome from first-time applicants and from scientists and social scientists from fields other than ecology. Proposals may involve activities with partial support from matching funds or one or more other institutions or agencies.
What We Do Not Fund

- NCEAS does not fund projects if the activity is not synthetic
- NCEAS typically does not fund collection of new data or field research.
- NCEAS does not fund proposals requesting overhead or funds to be spent by the investigator at the investigator's home institution.

Residency at NCEAS

NCEAS is located in scenic downtown Santa Barbara, California. The Center is known for fostering interaction and collaboration, a characteristic that leads to the success of its visiting scientists. Research will be conducted at the Center except in unusual circumstances that have been approved beforehand by the Director. There are very few expectations for scientists at NCEAS beyond those associated with conducting scholarly research. However, we do expect Postdoctoral Associates to spend the vast majority of their time in residence at the Center and to interact with the other scientists while here. In return for NCEAS support, we expect that Associates will contribute their knowledge, interests and enthusiasm to the intellectual atmosphere.

Acknowledgement of Funding Source

It is important to acknowledge both NCEAS and the Exxon Valdez Oil Spill Trustees Council for its support of your activities. We ask that you use the appropriate acknowledgment in your publications and products.

Reporting

The primary responsibility of NCEAS scientists – visitors and residents – is to fulfill their goals regarding the scholarly activities undertaken at the Center, but we will also ask for brief summaries of activities to be used on our website and in our reports to funders. Details will be communicated in decision letters.
**Guidelines for Proposals**

NCEAS proposals are short (fewer than 2000 words, excluding cover sheet, references, figures, and CVs) and yet need to include enough information in an effective form to allow for an accurate evaluation. Include the following information:

<table>
<thead>
<tr>
<th><strong>COVER SHEET</strong></th>
<th><strong>Working Groups</strong></th>
<th><strong>Postdoctoral Associates</strong></th>
</tr>
</thead>
<tbody>
<tr>
<td>Date of Submission</td>
<td>✓</td>
<td>✓</td>
</tr>
<tr>
<td>Proposal Type - Indicate Working Group or Postdoctoral Associate</td>
<td>✓</td>
<td>✓</td>
</tr>
<tr>
<td>Descriptive Title</td>
<td>✓</td>
<td>✓</td>
</tr>
<tr>
<td>Short Title – Two or three words for use as a project name (25 characters max)</td>
<td>✓</td>
<td>✓</td>
</tr>
<tr>
<td>PI Name(s) and complete contact information</td>
<td>✓</td>
<td>✓</td>
</tr>
<tr>
<td>Project Summary – A brief scientific abstract of your project</td>
<td>✓</td>
<td>✓</td>
</tr>
<tr>
<td>Expected Date of Ph.D. Completion (if applicable)</td>
<td>✓</td>
<td></td>
</tr>
<tr>
<td>Proposed Start and End Dates – Proposed start and end date of your project (month, year)</td>
<td>✓</td>
<td>✓</td>
</tr>
<tr>
<td>Proposed Data Release Date – Date you expect to submit data set(s) to NCEAS (month, year)</td>
<td>✓</td>
<td>✓</td>
</tr>
<tr>
<td>Is this a resubmission? – Yes/No (If yes, provide date(s))</td>
<td>✓</td>
<td>✓</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th><strong>BODY OF PROPOSAL</strong></th>
<th><strong>Working Groups</strong></th>
<th><strong>Postdoctoral Associates</strong></th>
</tr>
</thead>
<tbody>
<tr>
<td>Problem Statement – Clear and concise statement of what is to be done, why it is important, and how it will be accomplished</td>
<td>✓</td>
<td>✓</td>
</tr>
<tr>
<td>Anticipated Results and Benefits</td>
<td>✓</td>
<td>✓</td>
</tr>
<tr>
<td>Proposed Activities – Description and justification of synthesis methods</td>
<td>✓</td>
<td>✓</td>
</tr>
<tr>
<td>Names of Participants</td>
<td>✓</td>
<td></td>
</tr>
<tr>
<td>✓ Indicate whether participants are <strong>confirmed</strong></td>
<td>✓</td>
<td></td>
</tr>
<tr>
<td>✓ Identify a technical liaison with considerable analytical expertise and responsibility for ensuring that the requirements of the NCEAS Data and Information Policy are met</td>
<td>✓</td>
<td></td>
</tr>
<tr>
<td>✓ Identify at least one graduate student participant – This person should be a full intellectual participant, not a technician.</td>
<td>✓</td>
<td></td>
</tr>
<tr>
<td>Timetable of activities (for Working groups, max 60 person-trips to NCEAS spread over 2 years – see template)</td>
<td>✓</td>
<td></td>
</tr>
<tr>
<td>Literature Cited</td>
<td>✓</td>
<td>✓</td>
</tr>
<tr>
<td>Curriculum Vitae for each PI – Two (2) page maximum for each</td>
<td>✓</td>
<td>✓</td>
</tr>
<tr>
<td>Letters of Recommendation – Three (3) letters are required and should be sent directly by each referee as an email attachment to <a href="mailto:proposal@nceas.ucsb.edu">proposal@nceas.ucsb.edu</a>. An email confirming receipt will be sent to the referee within 24 hours.</td>
<td>✓</td>
<td>✓</td>
</tr>
</tbody>
</table>
Formatting and Submission Instructions

Proposals can be submitted at http://www.nceas.ucsb.edu/rfpform. Proposals should be uploaded as a PDF file. Proposals, including the cover sheet, should be submitted as single, complete documents, formatted to standard letter size (8.5” W by 11” L) with graphics embedded directly in the document. The body of the proposal should follow the cover sheet. Information to be included in the cover sheet and body of the proposal is provided in the table above. Please do not upload compressed collections of files, such as .ZIP files.

If you have difficulties submitting your proposal, please email proposal@nceas.ucsb.edu or call (805) 892-2500 with the lead PI's name and proposal title and we will follow-up with you shortly. Please contact proposal@nceas.ucsb.edu for extenuating circumstances that would prevent you from submitting a digital copy of your proposal by the deadline.

For answers to questions not addressed on this Call for Proposals, email proposal@nceas.ucsb.edu, visit the NCEAS website, or call (805) 892-2500.

Proposal Review Process
Proposals are evaluated for their scientific merit, novel approaches, and rationale for involving NCEAS. The Center will convene a Proposal Review Panel to review proposals and make recommendations to the Director (Frank Davis) who, in consultation with the project PI (Matthew Jones), makes the final decisions about which proposals to support. Review Panelists will recuse themselves from proposal review when there might be a conflict of interest.

A synopsis of reviews written by panel members will be returned to the PI(s) without revealing the names of the reviewers.

Proposals that are clearly inappropriate or unresponsive to this call (e.g., those requesting overhead, funds to be spent at the investigator's home institution, or funds intended to fund new data collection, etc.) will not be reviewed.

Proposal Development Tips
To help you develop successful proposals, following are a few rules of thumb to guide your proposal preparation:

- Proposals are evaluated primarily on the significance and novelty of the idea(s) under consideration and should be question-driven (i.e., not purely descriptive).
- Provide a clear rationale for why this should be, or can only be, done at NCEAS.
- Be clear and concise. Give brief examples of major points you are making or approaches you are using. “Trust me” proposals are not effective.
- For Working Group proposals include a diverse array of participants who are committed to the project. Pay attention to gender balance and include individuals from underrepresented institutions and groups. For each participant, specify the expertise brought to the project and whether he/she has agreed to participate.
- Indicate where the data used in your project will come from and its availability.
- If the results are designed or imagined to be useful to resource managers, make clear, valid statements about why and how that is so.
Working Groups

Description

- An extended collaboration of groups of up to 20 scientists who work at NCEAS for a few days to a few weeks at a time (generally smaller groups and longer stays are most effective), concentrating on specific issues that require in depth analysis of data and synthesis of ideas. Each Working Group typically meets 1-3 times a year, with a maximum of 30 person trips per year. These trips can be arranged to best suit the project (two meetings in a year of 15 people each, or 3 meetings of 10 people, etc.), but plan to work with NCEAS staff to craft a reasonable timetable. The Center facilitates the meetings by making local arrangements.

- It has been the experience at the Center that Working Groups of 15 or fewer individuals meeting for at least 5 days are the most productive. Thus, we STRONGLY suggest that applicants consider these thresholds. Deviations from these levels should be discussed with the Director and soundly justified in the proposal.

- Working Group proposals must designate at least one participant with considerable analytical expertise who will serve as the liaison with the NCEAS technical staff.

- Working Groups should also identify one or more participants who will be responsible for ensuring that the requirements of the NCEAS Data and Information Policy (http://www.nceas.ucsb.edu/datapolicy) are met.

- An important characteristic of NCEAS emerges from the interactions that take place among the resident scientists (Postdoctoral Associates and Center Associates) and the visiting scientists in Working Groups. Thus, in the evaluation of proposals, we consider aspects of the proposed research and the nature of the participants that might promote effective interactions. This is inherently subjective, but we believe it is an important component of what makes the NCEAS model effective.

- It is expected that all Working Groups will involve a diverse group of participants, including women and members of under-represented communities.

- NCEAS is particularly interested in increasing opportunities for graduate student participation in the Center’s activities. It is expected that all Working Groups will involve one or more graduate student participants. Graduate students should be full intellectual participants in Working Group activities and are not expected to serve in a support role for the group.

- Funding occurs through a grant from the Exxon Valdez Oil Spill Trustees Council to UC Santa Barbara (http://www.ucsb.edu), which reimburses actual expenses (i.e., the Center does not award grants to other institutions). Applicants are encouraged to consider additional funding sources to leverage NCEAS resources.

Financial Information

Support includes reimbursement for actual travel, lodging and per diem expenses. No salary support is provided, except in the case of Postdoctoral Associates. Participant costs, including airfare, hotel and per diem expenses, are paid by NCEAS. Working Group leaders are responsible for preparing lists of the names, addresses, and contact information for participants invited to their meetings. If a Working Group is inactive for a period of 12 months, we will assume the project has been completed, unless appropriate reasons for a delay are provided.
Timetable Template*

Use this template to describe the working meetings planned for your group at NCEAS. It is not necessary to submit a detailed budget for these activities.

<table>
<thead>
<tr>
<th>Meeting</th>
<th>Dates*</th>
<th>Expected number of participants</th>
<th>Total visitor days**</th>
</tr>
</thead>
<tbody>
<tr>
<td>WG Meeting #1</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>WG Meeting #2</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>WG Meeting #3</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>WG Meeting #4</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>(add rows as needed)</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

§ Timetable should have a maximum of 60 person trips to NCEAS over two years, and is subject to availability of funds

* We expect meetings to be spread over two years, with completion of all activities by Autumn of 2016. Please enter approximate dates; actual dates will depend on the availability of NCEAS facilities.

** Number of visitor days = Number of visitors x Number of travel days

Postdoctoral Associates

Description
Via this Call for Proposals, the Center will support two Associates to work in residence at NCEAS on Gulf of Alaska synthesis. Associates are appointed for one year with a second year available under normal circumstances. As with Working Groups, proposals for Associates must also include a description of proposed activities and a justification of why these are appropriate. Associates must plan on allocating their time to synthesis, and plan to be in residence at NCEAS for the full period of their appointment. In addition, Associates are expected to participate in the activities of selected Working Groups in order to develop collaborations and facilitate synthesis in these groups.

Financial Information
Associates receive a salary of approximately $48,000.00 plus benefits and access to all NCEAS and UC Santa Barbara facilities.

It is not necessary to submit a budget in proposals for Postdoctoral Associates.