LONG TERM ECOLOGICAL RESEARCH NETWORK OFFICE (LNO)



Call for Synthesis Working Group Proposals

All the information needed to submit a proposal to the LTER Network Office can be found at: https://lternet.edu/synthesis/current-request-proposals/

> LTER Network Office National Center for Ecological Analysis and Synthesis 1021 Anacapa Street, Suite 300 Santa Barbara, CA 93101-5509 Tel (805) 893-2500 <u>https://lternet.edu</u>

Last update: 6/27/2022

Overview

The LTER Network Office (LNO) fosters enhanced communication, collaboration, synthesis, training, and engagement across the <u>LTER Network</u>. To promote analysis and synthesis of LTER data, the LNO requests proposals for 'Full Synthesis Working Groups' and smaller, 'SPARC' workshops, with both types of groups to begin in February 2023. The LNO is operated out of the National Center for Ecological Analysis and Synthesis (<u>NCEAS</u>) at UC Santa Barbara. The Center provides excellent meeting facilities and support for both virtual and in-person meetings; comprehensive in-house computing capabilities; and consultation and training for synthesis participants on analytical workflows, open and reproducible science practices, collaboration skills, and communication of results.

Types of proposals and working groups:

- 1) Full Synthesis Proposals: Funding is available for 2-4 projects of up to 2 years in duration. The project selection committee is most interested in proposals anticipated to return high impact results in the seven core LTER thematic areas¹, but proposals in other areas will also be considered. Full working group budget requests should not exceed US\$110,000 total, unless the proposers can bring additional funds from non-LNO sources. This level of funding is generally adequate to support a working group of 12 individuals meeting for four days twice per year in Santa Barbara. Working group costs may vary depending on group size, number of international participants, number of in-person vs. virtual meetings, and meeting duration.
- 2) NEW THIS YEAR. Scientific Peers Advancing Research Collaborations (SPARC) proposals. Funding is available to offer up to 3 small awards (up to \$20,000), each of which would cover travel expenses, logistical, and analytical support for a single, small-group workshop (up to 12 people) to plan new research or complete a nearly finished effort. Proposals should identify most participants and expected outcomes, which may take the form of papers, planning or research coordination efforts.

All proposers are encouraged to review the results of prior LTER synthesis working groups <u>here</u> and to review the linked <u>synthesis resources</u> and <u>data analysis resources</u>. The LNO will hold an informational webinar for anyone interested in learning more about the proposal process (see key dates below). Registration details and webinar recordings will be accessible on the LTER Network website (Iternet.edu). Principal investigators should also feel free to contact the LNO (Jenn Caselle: <u>caselle@ucsb.edu</u> or Marty Downs: <u>downs@nceas.ucsb.edu</u>) for questions or to discuss research ideas).

Key Proposal Dates and Deadlines

Informational Webinar #1	Wed. August 3 at 9 am PST
Proposal Due Date	Wed., October 12, 5pm PST
Awards announced	early January, 2023
Projects begin	February, 2023

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, non-governmental organization, or a consortium of such institutions. Working group members should include one or more LTER

¹ Primary production, population studies, organic matter dynamics, mineral cycling, disturbance patterns and processes, land use and land cover changes and human-environment interactions.

researchers who are familiar with the LTER sites and data that will be used in the analysis. Synthesis research generally requires a large effort to integrate multiple datasets, thus, for **Full Synthesis proposals**, inclusion of an LTER site information manager or other participant who is deeply familiar with LTER datasets is required (see Data Science Liaison below). **SPARC proposals** do not have this requirement.

Full Proposals: Working group budget requests should not exceed US\$110,000, unless the proposers can bring additional funds from non-LNO sources. This level of funding is generally adequate to support four working group meetings of 12 individuals for four days in Santa Barbara. Working group costs may vary depending on group size, number of international participants, number of in-person vs. virtual meetings, and meeting duration.

SPARC proposals: SPARC proposals (new this year) are for a single workshop to be held at NCEAS. Budgets of up to US \$20,000 are being accepted which will support a group of up to 12 people for 4 days in Santa Barbara. Virtual preparatory and followup meetings for SPARC workshops are encouraged and the LNO can provide logistical support for those.

For both types of proposals, funding is intended to offset meeting travel, lodging, and per diem expenses and may not include salary or home-institution expenses.

COVID has demonstrated the opportunities and the limitations associated with virtual meetings. For full synthesis proposals, we recommend at least two in-person meetings at NCEAS in Santa Barbara, CA where the LNO can provide substantial logistical, technical, and analytical support. Blending in-person with virtual meetings can extend budgets, reduce greenhouse gas emissions, and maintain momentum between in person meetings. The LNO will provide training and facilitation recommendations for both virtual and in-person meetings.

For both Full and SPARC proposal types, research may involve activities with partial support from other institutions or agencies, and co-funding is welcomed but not required. Please download and use this template to estimate your <u>working group budget</u>.

What We Will Not Fund

- The LNO will not fund collection of new data or field research.
- The LNO will not fund projects that primarily address the goals of another organization.
- The LNO will not fund proposals requesting overhead or funds to be spent by the investigator at the investigator's home institution.

Data Expectations

We expect Full synthesis working groups to use existing LTER data. *Analysis and synthesis of data from more than one site is required*. Beyond that, we welcome the inclusion of data from other sources (e.g. datasets from individual researchers) or other networks (e.g. CZO, NEON, OBFS, ILTER) where appropriate to the questions being proposed. SPARC workshop proposals that involve data analysis are also required to include LTER data sources but there are no minimum requirements for the number of sites.

The LNO, the Environmental Data Initiative (EDI), and NCEAS are committed to developing means to locate, access, analyze, and make data broadly available, and to encourage an ethic of information-sharing. To this end *all awarded working groups must agree to document and make derived data publicly available on a data repository* according to the LTER Network Data Access Policy.

Diversity Expectations

Working groups that include a **diverse** array of participants who are committed to the project will be favored. While assembling a group, please consider gender balance, career stage, and opportunities to include individuals from underrepresented institutions and groups. Please feel free to contact the LNO staff to discuss mechanisms for ensuring broader participation. If slots are reserved for to-be-determined participants, the outreach and selection process for filling those slots should be specified. Working group members must agree to the <u>LTER</u> and <u>NCEAS</u> codes of conduct, whether meeting in Santa Barbara or elsewhere.

Data Science Support

LNO/NCEAS provides a supportive and modern technology infrastructure for accomplishing your analytical and other computing/network-based needs. We have dedicated in-house staff to handle your queries and requests, ranging from set-up of collaborative tools (e.g. shared drive, mailing list) to accessing shared analytical servers. General training in reproducible workflows and remote collaboration techniques is available to funded working groups. More detailed information on this support can be found on the <u>NCEAS data science support page</u> and at the <u>NCEAS Learning Hub</u>.

Data Science Liaison

Each full synthesis working group will be required to designate a *data science liaison* to work with NCEAS' data science support team on the group's computing needs, including collaboration capabilities (project management, mailing list and collaborative workspace), data management and processing, as well as analytical needs (modeling, and metadata development and distribution). This person should be closely involved with the data preparation and analytical aspects of the project. The data science liaison could be one of the PIs, an LTER site Information Manager (IM), an early career researcher, or any other working group member who has agreed to fulfill this role. Support and training will be provided (see below). SPARC proposals do not require a data science liaison, however we strongly encourage PIs to reach out to our data science support team at the beginning of their project to discuss data and computing needs

Reporting

Principal investigators on approved projects will be expected to provide a project abstract of research objectives, anticipated work, and desired outcomes that will be posted on the LTER Network website shortly after funding approval. LNO support should be cited in publications, as described in the guidance for synthesis group PIs, and copies of articles accepted for publication should be sent to the LNO Communications Officer. Questionnaires requesting updates on synthesis working group experience and products are sent quarterly to PIs and are very important to measuring the success of LNO synthesis working groups. PIs may also be asked to participate in periodic synthesis webinars and other outreach engagements.

Helpful Links

Synthesis Resources (https://lternet.edu/synthesis/synthesis-resources/)

Guidance for Working Group Pls (https://lternet.edu/synthesis/guidance-working-group-pis/)

Diversity. Equity and Inclusion Resources (https://lternet.edu/network-organization/diversity-resources/)

Scientific Support at NCEAS (https://www.nceas.ucsb.edu/programming-support)

LTER Network Data Access Policy (https://lternet.edu/data-access-policy/)

LTER Code of Conduct (https://lternet.edu/lter-code-of-conduct/)

Prior LTER synthesis working groups (https://lternet.edu/working-groups/)

Return to Top of Document Guidelines for Proposals

The main body of the LTER synthesis working group proposals is relatively short (fewer than 2000 words **excluding** Cover Sheet, Figures, Tables, Literature Cited) but we require a number of supporting tables and documents (Table of Participants, Table of Datasets, CVs, Budget) that are described below. Please follow the formatting and submission instructions provided below. **Please note where certain documents are optional or not required for SPARC submissions.**

Include the following in your proposal, where applicable:

COVER SHEET (1 page, not included in proposal body word limit)

Date of Submission

Is this a Full Proposal or SPARC submission?

Descriptive Title

Short Title – Two or three words for use as a project name (25 characters max)

Working Group Leaders' Name(s), position(s), and complete contact information. If more than three PIs are included, please indicate a primary point of contact.

Project Summary – A brief scientific abstract of your project (200 words maximum)

For Full Proposal submissions, list Proposed Start and End Dates (month and year).

For SPARC submissions - list potential dates of meeting (month in 2023).

Is this a resubmission? - Yes/No (If yes, provide date(s) of previous submission(s).)

TABLE OF PARTICIPANTS (See <u>suggested template</u>. Not included in proposal body word limit. Optional for SPARC proposals)

Names and affiliations of participants (maximum of 18). Please indicate what expertise they bring to the project (scientific and analytical), their role in or contributions to the project, career stage, and their participation status (confirmed, invited but not confirmed or to be invited)

Data Science Liaison. Identify a liaison(s) in the working group for LNO/NCEAS computing staff. This participant should have analytical expertise and may in some cases serve as an information manager at an LTER site. See above for description of the role of Data Science Liaison. (**Not required for SPARC**).

Identify the person(s) who will be in charge of archiving the produced data. (This could be the Data Science Liaison or another participant.)

TABLE OF DATA SOURCES (See <u>suggested template</u>. Not included in proposal body word limit. **Optional for SPARC proposals**)

Brief summary of key datasets to be used in the project (e.g. ecosystem type, taxonomic group, key metrics or processes, time series length, location, number of sites or studies)

Source of the data: include URL/doi when publicly available and/or a person of contact (data owner)

Status of the datasets (for example, "will still need to be downloaded/acquired", "'raw' datasets are in-hand", "some exploration of datasets has been done", "extensive harmonization of datasets has already been completed")

List any anticipated legal or practical constraints associated with acquiring, using, and sharing project data.

BODY OF PROPOSAL (Not to exceed 2000 words, excluding figures and tables, literature cited). *REQUIRED FOR FULL AND SPARC SUBMISSIONS.*

Problem Statement: Clear and concise statement of what is to be done, why it is important, and how it will be accomplished. Provide a clear rationale for why this research would benefit from LNO/NCEAS support.

Proposed Activities: Brief description of methods and why they are appropriate.

Description of Data Sources: if not fully described in the Data Sources table (above).

Anticipated Results: Include description of expected outcomes, data products and software products.

Is this proposal (or a closely aligned proposal) under consideration elsewhere? If so, please briefly describe the circumstances.

Does this proposal build on data and/or code products created from a previous LTER or other synthesis project?

Anticipated Benefits: Identify key stakeholder/audiences/potential external collaborators for working group outputs with as much specificity as possible.

Working group management: Please summarize how the PIs intend to 'manage' the project to support productive collaboration. This could include (but is not limited to): methods for communication between in-person meetings, group facilitation, project management tools. Please include contingencies for a case where all meetings are virtual. See <u>Synthesis Resources</u> on the LTER Network website for guidance.

Timetable of Activities including rough timing for all in-person and virtual meetings.

Working Group Diversity: Brief summary of specific efforts to achieve working group diversity and maintain an inclusive culture.

OTHER REQUIRED DOCUMENTS (not included in proposal body word limit)

Curriculum Vitae for each working group leader: Three (3) page maximum, NSF-style biosketch

Budget (use provided budget template)

Formatting and Submission Instructions

Proposals will be accepted in digital format only, as a PDF file. Proposals should be submitted as a single, complete document, 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, followed by tables (Participants, Datasets) and CVs. Budget tables should be last in the pdf. Do not send compressed collections of files, such as .ZIP files.

Send the proposal document as an email attachment to <u>proposals@lternet.edu</u>. All those who submit proposals will receive an email confirming receipt within 24 hours of submission. If you do not receive a confirmation email, please call (805) 892-2500 with the lead PI's name and proposal title. NCEAS administrative staff will follow-up with you. Please contact <u>proposals@lternet.edu</u> if you have difficulty submitting your proposal, or if you have extenuating circumstances that would prevent you from submitting a digital version of your proposal by the deadline.

For answers to questions about how to submit that are not addressed here, please email proposals@lternet.edu or call (805) 893-2500.

For questions about proposal content, please contact Jenn Caselle (<u>caselle@ucsb.edu</u>) or Marty Downs (<u>downs@nceas.ucsb.edu</u>).

Proposal Review Process

Proposals are evaluated for their scientific merit and novel approaches as well as their contribution to LTER Network science. Proposals will also be evaluated for appropriate expertise (both scientific and technical), as well as plans for inclusion of researchers from underrepresented groups (URGs). *Special consideration will be given to proposals that incorporate data from marine and coastal sites in a meaningful way.*

The proposal review panel includes both LTER scientists and non-LTER scientists. At the request of the panel, the LNO may obtain additional reviews from other individuals with expertise of special relevance to the proposed research.

The final decision on which proposals to fund will be made by the LNO Executive Director in consultation with the Chair of the LTER Science Council. Based upon panel discussions, the LNO may request some modifications to the proposal (e.g., adjustments to working group size or composition, inclusion of additional data resources) before funding is awarded.

Proposals received after the deadline will be returned without review. Proposals that are clearly inappropriate for LNO funding (e.g., those that are only peripherally related to LTER, requesting overhead, funds to be spent at the investigator's home institution, or funds intended to collect new data, etc.) will also be returned without review.