

# Emerging Challenges in Tropical Science Workshops

## ECTS-W

### OTS Grant Competition -

## Overview

### Emerging Challenges in Tropical Science

The Organization for Tropical Studies (OTS) program on “Emerging Challenges in Tropical Science” is designed to catalyze research in three main areas of tropical science and draw together scientists across a range of disciplines, institutions, and geographies to holistically address these three specific issues:

- *How do tropical ecosystems respond to a changing climate?*
- *How do natural and human-dominated systems interact?*
- *How can we restore tropical ecosystems and increase ecological value to their landscapes?*

Through this program, OTS aims to advance multi-disciplinary, multi-scale efforts working on cutting-edge research to understand and address these three broad challenges. This program seeks to catalyze research conducted in and around OTS research stations in Costa Rica.

**Emerging Challenges in Tropical Science Workshops (ECTS-W)** provide a venue for engaging scientists and educators, along with key nationally and internationally recognized experts, to address these three grand challenges in a transformative way. This program supports 5-7 day working group activities that are modeled after those hosted by the NSF-sponsored National Center for Ecological Analysis and Synthesis (NCEAS). The program targets scientists and students from OTS member institutions, but national or international experts and students may be invited as participants. **The central objective of the ECTS-W Program is to encourage the generation of new research projects in OTS field stations and/or educational content for new courses taught at the stations. Hence, we expect workshops to result in the submission of research proposals to the US National Science Foundation or similar funding organizations, curricular materials for field courses, and at least one manuscript or synthesis paper that identifies new lines of research to be published in a peer reviewed journal.**

### What OTS Funds Will Support

ECTS-W support will fund working groups that emphasize the collaborative development and testing of important ideas and theories, cutting-edge analysis of existing data and information,

and the use of sound science policy and management decisions that address the three Emerging Challenges noted above.

ECTS-W typically will support 8-10 scientists or educators who work collaboratively for 5-7 days on their proposed challenging issues. OTS funds support international airfares to Costa Rica and Costa Rica in-country travel, plus lodging and meal expenses at one of the OTS stations. In addition, conference rooms and Internet access are provided. OTS does not provide transportation costs or travel expenses outside of Costa Rica.

ECTS-W grants are not intended to fund the collection of new data or field research.

### **Who Should Apply**

Researchers of all nationalities working on tropical issues may apply for an ECTS-W grant. However, the lead investigator must be affiliated with an [OTS member institution](#). Post-docs are encouraged to submit as co-PIs.

### **Proposal Deadline**

The proposal deadline is **February 15<sup>th</sup>, 2016 (and the first Monday in February in subsequent years)**. Proposals may be submitted at other times after consultation with the Co-Chairs of the OTS Science Committee (William Michener [william.michener@gmail.com](mailto:william.michener@gmail.com) and Susan Cordell [scordell01@fs.fed.us](mailto:scordell01@fs.fed.us)). Proposals will be given a response by mid-April.

## **Expectations for ECTS-W Scientists**

**Timing of workshops.** Groups are expected to hold their workshops between August 1<sup>st</sup> and May 15<sup>th</sup> of their award year.

**Preliminary work:** Groups are encouraged to conduct preliminary activities in preparation for their workshops, to maximize their contact time. These may include: webinars to familiarize the group with everyone's skills and points of view or creation of on-line platforms to share documents and hold discussions.

**Reporting and Evaluation.** Within two weeks of completion of the meeting, the ECTS-W lead investigator must write a summary report of the ECTS-W efforts and outcomes. Workshop participants will be provided with an evaluation and assessment questionnaire that should be completed before the conclusion of the ECTS-W working group session.

**Tracking of Science Products.** To evaluate the effectiveness of the ECTS-W program, the ECTS-W lead and all participating scientists will be asked periodically to provide the OTS with resulting proposal submissions related to the ECTS-W topic, the result or success of those proposals, and relevant publication citations to publications arising from the ECTS-W.

**Funding Source Acknowledgement.** Acknowledgement of the funding source is requested and should be formatted as: "This work was conducted as a part of an Emerging Challenges in Tropical Science Workshop supported by the Organization for Tropical Studies."

# Writing an ECTS-W Proposal

## Content

- ECTS-W should focus on a topic related to the three emerging challenges in tropical science that define the overall [ECTS program](#).
- Proposals should indicate how this work is likely to result in innovative and multi-disciplinary proposals to the National Science Foundation and other appropriate research sponsors.
- Proposals should indicate how the proposals will include research at OTS stations.
- ECTS-W activities should be question-driven and product-oriented.
- Proposals are evaluated on the collaborative and synthetic nature of the ideas.
- ECTS-W proposals should specify what external proposal and publication outcomes are expected, including the specific grant or NSF program targeted.
- ECTS-W proposals should indicate briefly how they will share their experience and results to the OTS consortium and broader scientific community.
- A complementary educational component or output is encouraged.

## Requesting more than one convening session

- Proposals should request only one ECTS-W convening session. However, a successful ECTS-W may request funds in subsequent OTS proposal solicitations to convene again for follow up or continued development on the topic.

## Participants

- ECTS-W of 8 – 10 individuals working for 5 full days have been shown to be the most productive.
- ECTS-W should include a diverse array of participants and pay attention to gender balance and participation by underrepresented institutions or groups and nationalities.
- At least two consortium institutions must be represented and participation from three or more is encouraged.
- One or more graduate students and/or post docs should be involved.

## Location

- The ECTS-W working group session should be held at one of [OTS' three stations](#) (La Selva, Las Cruces, or Palo Verde Research Stations).

## Management

- The ECTS-W proposal should designate who will be responsible for: managing participant information, evaluation and assessment materials, and submission of the final report.

# Guidelines for Proposals

## Formatting and Submission

Proposals should be submitted in digital format in MS Word, Open Document Format (ODF), or as a PDF file. They should be submitted as a single complete document with graphics embedded in the document.

Please submit the proposal document by email to:

Emerging Challenges in Tropical Science  
[ects@tropicalstudies.org](mailto:ects@tropicalstudies.org)

If you have questions regarding infrastructure available at the Stations for holding the proposals, please visit our web page ([www.ots.ac.cr](http://www.ots.ac.cr)) or contact directly the Director of the station where you plan to hold the workshop.

For general questions regarding the proposal or the program, please write to:  
Emerging Challenges in Tropical Science 2016, [ects@tropicalstudies.org](mailto:ects@tropicalstudies.org)

## Proposal Preparation

ECTS-W proposals are relatively short (max. 7 pages) but must include all the information requested below.

- **I. Proposal Title Page** 1 p.
  - Proposal Title
  - Lead Investigator, Co-Investigator(s) with affiliation and contact information
  - Date of Submission
  - Name of person designated to collect participant demographics and evaluation and assessment questionnaires
  - Table with the names of all confirmed individual participants, institutional affiliation indicating which represent an OTS-affiliated institution, and career status (e.g., faculty or researcher level, postdoctoral fellow, graduate student)
- **II. Project Summary Page** 1 p. Half-page summary statement
- **III. Project Description Pages** 3 - 4 p.
  - Problem statement
  - Scientific questions/hypotheses addressed
  - Proposed ECTS-W topic and activities
  - Timetable of activities including pre-session coordination, tentative working group agenda, and post-session deliverables
  - Description of pre-workshop coordination and preparation activities and post-workshop activities and follow up
  - Statement of anticipated outcomes and benefits, including details related to prospective future proposal, research or curricular development

- **IV. Budgetary information Page 1 p.**
  - ECTS-W convening dates and OTS station.
  - List of proposed participants and city and country where they will be travelling from and returning to (if different). Due to budgetary restrictions, the program limits the number of travelers from Europe and Asia to one per group.
  - All support will be in-kind. ECTS-W grants do not provide overhead or funds to be spent by the lead investigator or participants.

### **Proposal Review**

Members of the OTS Science Committee and additional external reviewers will review proposals. Proposals are reviewed for merit, innovative concepts and novel approaches, and relevance to OTS station research and education goals. Review criteria include:

- Intellectual merit and transformative nature of the project
- Likelihood the ECTS-W will result in new research to be conducted in one of the OTS field stations or in a new field course
- Likelihood that the ECTS-W will result in peer-reviewed publications
- Topic aligned with OTS station research and education
- Degree to which the ECTS-W is question-driven, innovative and multidisciplinary
- Product and outcome orientation, and clarity of outcomes
- Presence of a sound plan for achieving desired outcomes
- Affiliation of project leaders with OTS consortium member institutions
- Diversity of institutions including new collaborations. A minimum of two consortium institutions must be represented.
- Significant participation by members of underrepresented groups and balanced gender participation
- Participation of postdoctoral scholars and graduate students