

PROJECT SUMMARY

Overview:

The Thwaites Program Science Coordination Office will aim to coordinate the several funded projects to deliver the best possible science for the funding agencies and the public of both the US and UK. Its primary mission will be to integrate the individual grants under a shared vision and plan, look for and propose adjustments to the science field data activities to maximize the effectiveness of the Program as a whole, and to assist in the coordination of media outreach, web content and education products for the program.

Intellectual Merit:

A series of reviews of recent Antarctic research on changing climate and ocean impacts on the ice sheet have identified Thwaites Glacier as a research target of high importance to future forecasts of sea level rise. In response to this suggested focus of activity, both the US NSF-PLR group and the UK NERC funding agencies are initiating a new research call: 'NSFPLR-NERC Thwaites: The Future of Thwaites Glacier and its Contribution to Sea-level Rise'. The Program will spend approximately US\$25M on several research efforts selected by peer review, and in addition, commit considerable logistics resources. Properly done, coordination and inter-project communication for the funded research will integrate the research delivered under the Program increasing its scientific scope and impact, and improve the results of the individual research projects as well, while emphasizing a collaborative and collegial relationship among the funded PIs, early-career associates, and ensuring strong links with the external science community.

The major goals requested in the proposal call for this Thwaites Program SCO are:

- enhancing integration among projects
- facilitating planning, data sharing, and synthesis.
- serving as a unifying hub for the individual project outreach and education activities
- representing the program at conferences and meetings
- organizing conference sessions at major research symposia
- organizing Thwaites Program meetings for the research PIs and teams
- support early-career and student development under the Program
- facilitating data management and discovery

These are addressed in work packages for Science Coordination, Internal Communications, External Communications, Data Coordination and Sharing, and Synthesis and Promotion. We will implement a Program Leadership Team (PLT) in the first weeks of the SCO activities, and begin to work with the funded PI groups to refine and enact our proposed work plan. The level of effort outlined is comparable to past SCO awards for other research.

Broader Impacts:

Outreach to the public and providing information and media resources for them is a key desired goal of the Thwaites Program, and an essential step in the process of integrating the knowledge that will be gained by the program into policymaking. The Thwaites Program is a truly international effort, and international coordination and outreach will be delivered. Moreover, an education program that engages new sections of the public community (via cell phone apps, Twitter, Facebook, and other venues) is a part of broad dissemination of the results, reaching an audience that will shape the discussion in the future. This project is requesting field deployment in Antarctica as a part of delivering effective outreach and promoting a collaborative, whole-program plan for science, data gathering, and data sharing.