

**Meeting Report of the
U.S. Advisory Committee for Scientific Ocean Drilling (USAC)**

25-27 July 2016

**American Museum of Natural History,
New York, NY**

**U.S. Advisory Committee for Scientific Ocean Drilling
July 25-27
American Museum of Natural History, New York, NY**

Meeting Participants

USAC Members

Beth Christensen (Chair)
Hugh Daigle
Liviu Giosan
Matt Hornbach [regrets]
Barbara John
Lawrence Krissek
Sandra Passchier
Amelia Shevenell
Evan Solomon
Joseph Stoner

Adelphi University
University of Texas at Austin
Woods Hole Oceanographic Institution
Southern Methodist University
University of Wyoming
Ohio State University
Montclair State University
University of South Florida
University of Washington
Oregon State University

USSSP Staff

Carl Brenner
Sharon Cooper
David Goldberg
Maureen Raymo [regrets]
Angela Slagle
James Spencer

Director
Education and Outreach Officer
Co-PI
Co-PI
Science Program Officer
Logistics Coordinator

Guests

Thomas Janecek

National Science Foundation

USAC Action Items and Consensus Statements
Summer Meeting, July 25-27, 2016
American Museum of Natural History, NY NY

Action Item 1607-01

USAC is concerned that there is an apparent low moratorium-based (old EOR) expedition proposal submission level to NSF MGG. We ask USSSP to survey recent expedition scientists to provide insight into the reason behind low submission rate during the moratorium period, and immediately following .

Action Item 1607-02

USAC asks NSF to determine the total amount of funding going to IODP for post-expedition research through time, from before Sea Change through today. While we understand that it may be difficult to identify all IODP-related proposals submitted to the NSF, we ask NSF to reach out to Core programs in the Geoscience and Biological Sciences for data on proposals submitted during the moratorium and soon after. We further ask NSF to evaluate if the amount of funding is consistent with the goals of Sea Change, to reallocate funding from facilities to science.

Action Item 1607-03

USAC asks USSSP and NSF to reach out to other PMOs to learn their proposal funding rate (in dollars and numbers funded), if possible. There is concern that the US members of the science party are not as competitive with other member nations because of difference in both the amount of post-cruise funding available, and the timing of distribution of funds.

Action Item 1607-04

USAC is concerned that the percentage of Assistant Professors who sail is low, and the percentage of senior faculty high. We wonder if the lower percentage may be related to the shorter time in position (i.e., junior faculty are generally only Assistant Professors for 6 or 7 years), or if there is another reason. USAC asks USSSP to evaluate this apparent pattern to determine if the percentage begins at the application stage or if it is related to selection rates.

Consensus Statement 1607-01

USAC recommends staffing continue to favor qualified assistant professors and other early career scientists. Staffing should tend toward a more equal distribution of early career (assistant professors and post-doctoral students), mid-career, and senior scientists. Based on the statistics of past expeditions, this will likely require increasing the number of assistant professors who sail. USAC still believes that sailing 1-3 graduate students is a priority.

Consensus Statement 1607-02

USAC supports the revision of the PEA grant system discussed at the Summer 2016 meeting. However, it is concerned that the amount of post-cruise funding (PEA) available (currently \$15k) is insufficient to produce the pilot data required for competitive core proposals. Nor, in our opinion, is funding readily available for developing the small datasets that are not necessarily the foundation of a major proposal, but are necessary to flesh out the expedition goals. USAC suggests that funding for PEA be raised to at least \$25k. We also recognize there is a need to

fund overarching datasets for the science party (e.g., up to \$75k) which shipboard scientists can jointly determine how to best utilize. The funding would help facilitate 1) meeting primary expedition objectives, or 2) developing basic hypotheses needed to submit moratorium-period proposals based primarily on shipboard data

Action Item 1607-05

USAC is concerned that more funding is required for rapid post-cruise analysis to help facilitate Expedition objectives and science party needs. There is also concern that the U.S. funding system puts U.S. scientists at a competitive disadvantage. To better address this issue, USAC asks USSSP to work with the JRSO publications office to determine 1) the breakdown of lead authorship on Expedition-related publications, by PMO, and member nation office (e.g., German IODP); 2) which countries regularly publish expedition-related papers first; and 3) in which journals.

Action Item 1607-06

Standard measurements are defined to ensure fundamental data, and by the existing document (<https://iodp.org/jr-facility-policies-procedures-guidelines/117-jr-measurements-final/file>) define standard and supplement measurements. Supplemental measurements are required for successful completion of some legs, and will change through time, and by expedition. We understand XRF measurements are currently being assessed as a new supplemental measurement, and we ask the JRFB and JRSO to expand the definition of supplemental measurements to include appropriate resolution oxygen isotope analyses, and remain open to the addition of other measurements that are fundamental to accomplishing the mission objectives. We recommend that the JRSO provide a mechanism for expedition leaders to identify discipline-specific fundamental measures prior to the start of the expedition.

Action Item 1607-07

USAC is concerned that while the time for implementation of the PEA awards post-expedition has improved, it is still not optimal. We have heard of some PEA awards that have taken over 5 months to be awarded after leaving the ship, and have not yet received notice of when it will be delivered. In order to better understand the delay, USAC requests USSSP quantify the length of time required for the most recent sets of PEA proposals to go from submission to review, and from review to implementation. We recognize that some of the issues may be resolved with the proposed changes to the PEA proposal form but believe these data may also be helpful in monitoring the success of the proposed changes.

Action Item 1607-08

The USAC Education Subcommittee was pleased to play a role in selecting education officers by making recommendations. USAC would like to have a broader understanding of the recruitment strategies and selection criteria, and requests a report from USSSP on the recruitment venues, total number of applicants, who was selected, why, what they proposed to accomplish as an EO, and, depending on the timeline for delivery of the report, copies of any EO product.

Action Item 1607-09

The USAC Education Subcommittee is interested in learning more about the goals of programs such as School of Rock, and how the participants will help achieve those goals. We ask USSSP

to prepare a report on the number of applicants, number of participants, their proposed outcomes, and, if the applicant is a K-12 teacher, the relationship of those outcomes to state standards. The report should also include set of products and the implementation history in order to reconcile the most recent and future SOR with our recommendation that the emphasis of education and outreach move towards the undergraduate level.

Action Item 1607-10

USAC recommends that applications for the School of Rock and Onboard Outreach Program are expanded to include information on how their project relates either to their university/ department mission, or if K-12 teachers, to describe how their project relates to state standards. This will greatly facilitate review by USAC. An added benefit is the data will aid in reporting metrics to the NSF and ultimately, the NSB.

Action Item 1607-11

USAC recognizes applicants for School of Rock and Onboard Outreach program may have little experience with IODP. Thus we recommend that USSSP prepare a set of basic introductory materials on IODP in general, and the upcoming expeditions in particular, suitable for teachers, as well as other participants such as community college instructors or geoscience/ environmental science/ marine science faculty who have limited or no experience with the program.

Action Item 1607-12

USAC asks USSSP to update the Best Practices document to include the 10th science party member and details concerning funding and selection criteria. We also ask USSSP to rename the document to become a living “guidelines” document, and if practical, present revisions to USAC for approval along with minutes, or at the following USAC conference call or meeting.

Consensus Statement 1607-03

USAC congratulates USSSP on a strong performance in their first full year of operation. We are particularly impressed by the cooperative and transparent spirit of the office. Additionally, their willingness to review and revise procedures to guarantee optimal outcomes for ocean drilling science is commendable. We look forward to continuing to work with USSSP on the major upcoming initiatives such as Denver II.

Consensus Statement 1607-04

USAC thanks Larry Krissek, Evan Solomon and Barbara John for their outstanding service to the panel, and thanks them for agreeing to extend their service.

Consensus Statement 1607-05

USAC thanks Joe Stoner and Sandra Passchier for their service on the panel. We remind them that external reviews are always in demand, and look forward to continued collaboration in the near future.