#### NSF Response to the *JOIDES Resolution* Science Operator Site Visit Panel Report February 24-16, 2016

The National Science Foundation's Division of Ocean Sciences, Ocean Drilling Program welcomes the recommendations of the *JOIDES Resolution* Science Operator Site Visit Panel Report, noting that they are prudent, fiscally conservative, and thus potentially implementable.

NSF was pleased to receive the determination that "The *JOIDES Resolution* Science Operator Site Visit Panel concludes that the facility is being managed exceptionally well by the JRSO, and that it is also being overseen effectively by the *JOIDES Resolution* Facility Board (JRFB) and the National Science Foundation (NSF) to meet the IODP Science Plan."

This primary finding- that the facility is being well run with "exemplary fiscal management" - reflects the dedication, hard work, and competence of the *JOIDES Resolution* Science Operator (JRSO). The Panel also noted that "the JR is the most versatile, most used, and arguably the most important of the IODP drilling platforms in terms of addressing multiple themes and challenges in the IODP Science Plan." NSF is grateful to both the JRSO and to the Panel for their hard work on behalf of the ocean drilling science community.

The Panel's recommendations fall into two main areas- those concerning the *JOIDES Resolution* facility and the JRSO, and those concerning the enveloping structure of the International Ocean Discovery Program and how it interacts with the facility.

#### Facility and JRSO recommendations:

 The panel recommends that NSF task JRSO to investigate the need for additional resources to manage the MSR clearance process for future operations.
 The Panel strongly encourages JRSO management to develop emergency plans and strategies to minimize the impact of key personnel losses.
 The Panel recommends that the JRSO evaluate potential additional staffing needs to support increased demands on technical, curatorial, and publication services.

These recommendations are all inter-related and reflect concern that in response to budget challenges, the JRSO has reduced its staffing to a point where it is vulnerable to single-point failures in areas of critical management or technical support. Panel had a high regard for facility management and technical support quality, but noted that personnel may be stretched too thin in their responsibilities. The JRSO has been active in promoting cross-training to provide critical back-up, but NSF agrees that the JRSO should be encouraged to add sufficient personnel so as to 1) ensure the ability to quickly address unexpected complications in obtaining clearance; 2) ensure that backup is in place for the loss of a JRSO employee without compromise of facility operations; and 3) add staff sufficient to meet the needs of 10 months of facility operation per year. NSF understands that increased staffing at the JRSO carries budget consequences, and will request that the JRSO propose this additional staffing in either a FY2016 Annual Program Plan Addendum or in the FY2017Annual Program Plan.

# 4) The Panel supports efforts to increase satellite bandwidth, and considers that improving Internet speed should be a high-priority budget item. 5) We recommend that JRSO continue to evaluate non-destructive elemental scanning of individual core samples by both portable XRF and new laser methods.

NSF supports these recommendations and will encourage the JRSO to propose adoption of increased satellite communication bandwidth aboard the *JOIDES Resolution* in either a FY2016 Annual Program Plan Addendum or in the FY2017 or 2018 Annual Program Plans.

### 6) The Panel recommends that innovations made during JR expeditions by shipboard party members be effectively evaluated with community input, adequately implemented into analytical protocols of shipboard laboratories, and properly recorded in easily accessible documentation.

NSF supports this recommendation and will request that the JRSO increase community participation in the Lab Working Groups and the visibility of Lab Working Group activities to the broader science community. NSF will direct that these tasks be implemented in FY2016.

## 7) The Panel endorses JRSO efforts to seek pathways for archiving scientific ocean drilling data that facilitate machine discoverable access.

NSF supports these efforts, noting that the JRSO is working with the science community to explore creation of new opportunities to serve IODP and legacy DSDP, ODP, and IODP data.

# 8) The Panel recommends that the JRSO CA (and JRSO budget) be modified to recognize and support efforts by JRSO personnel to organize, coordinate, and conduct ship tours by appropriate local/regional/national groups during port calls and tie-up periods.

NSF receives this recommendation and notes that to implement it will require a change in tasks within the Cooperative Agreement with the JRSO. NSF will discuss this recommendation with the JRSO, with possible budgetary consideration of these outreach tasks in a future Annual Program Plan.

### International Ocean Discovery Program Recommendations:

9) The Panel recommends that the JRFB and JRSO organize a PMO meeting to review and discuss and develop common practices of user support, and the process of staffing JR expeditions and ensuring diversity. NSF receives this recommendation and will propose an agenda item at the upcoming May, 2016 *JOIDES Resolution* Facility Board meeting to discuss organizing annual Program Member Office meetings that will address these topics.