

JOIDES Resolution Facility Board Special Meeting November 23, 2020 – Virtual Meeting

Roster

Members

James Allan	National Science Foundation, USA
Leanne Armand	The Australian National University, Australia
Brijesh Bansal	Ministry of Earth Science, India
Steve Bohaty	University of Southampton, UK
Gilbert Camoin	ECORD Managing Agency, CEREGE, France
Brad Clement	JOIDES Resolution Science Operator (JRSO), Texas A&M University, USA
Zena Da Silva Martens	CAPES, Brazil
Marguerite Godard	University of Montpellier, France
Gil Young Kim	Korea Inst. of Geoscience and Mineral Res. (KIGAM), Republic of Korea
Larry Krissek	Ohio State University, USA
Ken Miller	Rutgers University, USA
Clive Neal, Chair	University of Notre Dame, USA
Yan Sun	Ministry of Science and Technology (MOST), China
Ryuji Tada	Chiba Institute of Technology, Japan

Liaisons

Gail Christeson	SEP Co-Chair, University of Texas at Austin, USA
Dick Kroon	IODP Forum Chair, University of Edinburgh, UK
Lisa McNeill	SEP Co-Chair, University of Southampton, UK
Charna Meth	IODP Science Support Office, Scripps Institution of Oceanography, USA

Observers

Carl Brenner	USSSP, Lamont-Doherty Earth Observatory, Columbia University, USA
Helen Evans	IODP Science Support Office, Scripps Institution of Oceanography, USA
Bob Houtman	National Science Foundation, USA
Kevin Johnson	National Science Foundation, USA
Candace Major	National Science Foundation, USA
Mitch Malone	JRSO, Texas A&M University, USA
Antony Morris	ESSAC Chair, UK
Terry Quinn	National Science Foundation, USA
Angela Slagle	USSSP, Lamont-Doherty Earth Observatory, Columbia University, USA
Karen Stocks	IODP Science Support Office, Scripps Institution of Oceanography, USA
Michiko Yamamoto	IODP Science Support Office, Scripps Institution of Oceanography, USA

*Not in attendance

Consensus Statements

Consensus 1: Expedition 395E. The JRFB supports the proposal from the JRSO regarding the hybrid nature of Expedition 395E that will include the remediation of hole U1309D, testing of a 3rd party water sampler, testing of the Probe Delivery Tool, and testing of hard rock drilling bits. The JRFB approves the formation of a Sample Allocation Committee (SAC - comprised of two P937 proponents, the Expedition Project Manager, and the Curator) and an Expedition Review Board (ERB - comprised of the same two P937 proponents, and the Expedition Project Manager).

Background: The fact that samples will be taken from U1309D requires the formation of a SAC. The association of this site with Proposal 937 requires the involvement of the P937 Proponents on the SAC/ERB and who will also provide operational guidance, remotely, as needed.

Consensus 2: JRFB Working Group focused on future Science Framework proposal requirements and assessments. The JRFB approves the formation of a Working Group to consider requirements and review processes for proposals that would use a proposed U.S. global ranging non-riser drilling platform to address the 2050 Science Framework. This Working Group will follow a Statement of Task.

Background: See attached Statement of Task

Consensus 3: Call for Drilling Proposals 1 April 2021. The number of proposals with the JRFB and at the SEP that would use the *JOIDES Resolution* are more than sufficient to schedule through the end of 2024. Therefore, the JRFB will no longer request any new proposals/pre-proposals* that would address the current Science Plan. The JRFB will request revisions to proposals already in the system and Ancillary Project Letters (APLs).

* **EXCEPTIONS** are Land-2-Sea proposals, as well as those proposals reviewed by the SEP in 2020 that were deactivated but encouraged to re-apply.

Consensus 4: Community Request for Information. In preparation for the transition to the 2050 Science Framework, the Board endorses the distribution of a request for information (RFI) to the international scientific community for input towards planning the next phase of scientific ocean drilling. These RFIs will be considered by the JRFB in consultation with the other Facility Boards, funding agencies, and the Forum.

Background: The RFI will request information regarding types of proposals to be submitted to the 2050 Science Framework, expedition length, brief scope of work, platform type, location/region, involvement of unique partnerships, and societal relevance.

The reasons for the RFI are to inform:

- the JRFB Working Group on Science Framework proposals (Consensus #2),
- NSF in terms of a new U.S. drilling platform,
- the JRFB and other Facility Boards and platform providers to aid in their implementation of Science Framework proposals,
- the Forum as it focuses on the overall implementation of the Science Framework.

Statement of Task (Draft): JRFB Working Group on Science Framework Proposal Requirements and Assessments

The 2050 Science Framework (SF) for scientific ocean drilling represents a new and innovative approach for conducting science using offshore drilling platforms. The JRFB has requested a Working Group (WG) be established to consider requirements and review processes for proposals that would use a proposed U.S. global ranging, non-riser drilling platform to address the SF. The WG shall not consider the requirements and review processes for proposals for other platforms. The WG should build on the firm foundation that proposals are PI-led and community-driven, and should look at ways to broaden our community, with the expectation that the regional focus of the facility will continue. Specifically, the WG should focus on innovative ways for requesting, formulating, and reviewing proposals to address the 2050 Science Framework that include, but are not limited to:

- Different proposal categories/criteria (Strategic Objectives, Flagship Initiatives, Enabling Elements).
- Proposals involving other agencies and industry, including partnerships.
- Inclusion of success definition criteria (maximum and minimum with a gradational descope in between, if possible). [Important for implementation.]
- Risk analysis criteria for estimating the likelihood of success of achieving the minimum and maximum science goals.
- Site planning in terms of re-entry, monitoring, casing, site survey data, etc.
- Formal inclusion of JRFSO cost categories as part of the proposal.
- Promotion of the science (education and outreach).
- Criteria for proposal assessment.
- Integrate the data from the RFI.

The WG will comprise of approximately eight members and have a Chair who will coordinate meetings and the meeting agenda. The composition of the WG will include the SEP Co-Chairs and U.S. community members that represent the diversity of the community and who will bring a variety of perspectives to developing the new proposal process. Ex-officio members are to provide context details about expedition implementation as the new guidelines are developed and will include the Forum and JRFB Chairs, representatives from the CIB, EFB, NSF, the SSO, and the JRFSO.

Timeline: The Chair of the WG will deliver a report at the 2021 JRFB meeting that will highlight recommendations for requesting proposals to address the 2050 Science Framework.

Meeting Notes

1. Welcome and Logistics

JRFB Chair Clive Neal opened the meeting at 16:03 EST with a discussion of logistics, including that a video recording of the meeting would be provided to allow those who could not attend an opportunity to provide feedback. Clive reviewed the meeting agenda.

2. JRSO Update and Implementation of Expedition 395E to Site U1309

Clive reminded the JRFB of Consensus Statement 2a from the August 2020 meeting as context for the discussion:

Consensus 2a: Scheduling of the JR. The challenges of implementing IODP expeditions on the JOIDES Resolution during the current pandemic are immense. Paramount in all decisions is the safety of all concerned. Given the current situation in the port call locations for Expeditions 392 and 393, and the probability that such circumstances will not change before expedition implementation, these have been postponed (but not cancelled). The JRFB has provided guidance to the JRSO for future scheduling that allows flexibility in their approach to implementing drilling expeditions while attempting to schedule at least some of the postponed expeditions.

Mitch Malone provided an update on the current schedule for the JR and Expedition 390C (South Atlantic Transect Re-entry Installations). The expedition started in Norway with a three-week transit to the sites. The expedition initially planned to install five of six re-entry systems, ending in Las Palmas. Due to changes in the COVID-19 situation in Spain and South Africa, the end port was moved to Cape Town. This adjustment provided an extra week of operating time, allowing the sixth re-entry installation to be added to the schedule. During the expedition, sediment penetration rates were slower than expected and the subsea camera connector failed, resulting not completing casing at three full sites and one partial. The work will be finished either in the February-April window or when Expeditions 390 and 393 sail.

Mitch then discussed possible implementation of Expedition 395E, the re-mediation of Hole U1309D. The work will include removing a caliper arm from a logging tool that was lost in the hole and taking temperature measurements and water samples. A couple of short cores will then be drilled to make sure the hole is clean. A second new site will also be drilled and a re-entry system installed. The site will be cored to a depth of 40-50 meters and several prototype coring bits will be tested.

Expedition 395E will only sail scientists needed to support the downhole water sampling tool and handle ephemeral samples. Mitch presented the JRSO's plan for how to handle samples and core, which includes creating a Sample Allocation Committee (SAC) with an EPM, a curator, and two proponents from proposal 937. The JRFB members

discussed the plan and agreed it was appropriate. See **Consensus 1**, which was drafted and approved by email following the meeting.

3. Science Framework Proposal Requirements

The JRFB began considering proposal requirements and processes for a post-IODP program. Clive commented that the community should not simply adapt the current proposal guidelines to the 2050 Science Framework; the innovative approach presented in the 2050 Science Framework should be reflected in implementation of a future scientific ocean drilling program.

As the JRFB only has purview over the U.S. platform, the scope of discussions about future proposal requirements did not extend to other platforms. Multiple JRFB members expressed support for an internationally coordinated proposal approach. It was recognized that some aspects of coordination should be considered by the IODP Forum, while other aspects would be decided by funding agencies.

Clive proposed that the JRFB formulate a working group to consider requirements and review processes for proposals that will address the 2050 Science Framework using a proposed U.S. global ranging non-riser drilling platform. He suggested eight members for the working group, with Ken Miller as the chair due to his extensive experience with IODP and SEP, in particular. Members should also have close knowledge of the 2050 Science Framework.

The JRFB agreed to develop such a working group and discussed points to include in the statement of task. Ex-officio members of the working group should include the JRFB Chair (Clive Neal), the IODP Forum Chair (Dick Kroon), and a representative each from the SSO, NSF, and the JRFSO. The working group will report at the 2021 JRFB meeting. See **Consensus 2** and the **Statement of Task**, which were drafted and approved by email following the meeting.

[As the exact wording of consensus statements was considered post-meeting, representatives from the CIB and EFB were also added as ex-officio members.]

4. Next Call for JR Drilling Proposals

Clive opened the discussion about how IODP should move forward with future proposal submissions. The number of proposals – at all stages of development – currently in the system for the JR provide many high-quality options for scheduling the ship through the end of 2024. The JRFB, therefore, agreed it would do the community a disservice to continue to call for new proposals to address the Science Plan when there is little chance the proposals would be drilled in the current program. The JRFB decided that the next call for proposals (April 1, 2021 deadline) will only be for revisions to existing proposals and pre-proposals, new APLs, and new Land-2-Sea proposals. Proposals that were deactivated in the past year with encouragement to resubmit would also be accepted. See **Consensus 3**, which was drafted and approved by email following the

meeting. The JRFB members will be evaluating at their next meeting what will be done with proposals submitted to address the Science Plan that do not get drilled in the current program.

The JRFB would like to assess interest from the community in writing proposals that would address the 2050 Science Framework. The Board recognizes that there is currently little information on the structure of or funding for a future program, or what platforms would be available. Understanding community interest, however, could be extremely important in informing future planning and decision-making on these topics.

The JRFB agreed to issue a Request for Information (RFI) asking the community to discuss their interest in proposing to the 2050 Science Framework. The RFIs would include the science goals that would be addressed by a future proposal and the region that would be studied. Clive will work with the SSO on the RFI and will draft a letter to the community. See **Consensus 4**, which was drafted and approved by email following the meeting.

Clive thanked the JRFB members and closed the meeting at 18:30 EST.