JOIDES Resolution Facility Board Meeting
May 8-9, 2024 – Honolulu, HI, and Zoom

Roster

Members

Gilbert Camoin (Remote), ECORD Managing Agency
Ron Hackney (In Person), Australian National University
Kevin Johnson (In Person), U.S. National Science Foundation
Larry Krissek, Chair (In Person), Ohio State University
Steffen Kutterolf (In Person), GEOMAR
Huayu Lu (In Person), Nanjing University
Mitch Malone (In Person), *JOIDES Resolution* Science Operator
Robert McKay (In Person), Victoria University of Wellington
Amelia Shevenell (In Person), University of South Florida
Wentao Wang (In Person), Ministry of Science and Technology
Not Represented, Ministry of Earth Science, India

Liaisons

Henk Brinkhuis (Not Attending), IODP Forum Chair
Sarah Davies (Not Attending), ECORD Science Operator
Nobu Eguchi (In Person), *Chikyu* Science Operator, MarE3
Barry Katz (Remote), EPSP Chair
Kathie Marsaglia (In Person), SEP Co-Chair
Charna Meth (In Person), IODP Science Support Office
Tim Reston (Remote), SEP Co-Chair
Nobukazu Seama (In Person), *Chikyu* IODP Board
Sasha Turchyn (Remote), ECORD Facility Board

Observers

Gary Acton (In Person), *JOIDES Resolution* Science Operator
Carl Brenner (In Person), U.S. Science Support Program
Angelo Camerlenghi (Remote), ECORD Science Support & Advisor Committee
Gail Christeson (Remote), U.S. National Science Foundation
Justin Dodd (In Person), U.S. Advisory Committee for Scientific Ocean Drilling
Junichiro Ishibashi (In Person), Japan Drilling Earth Science Consortium
Sarah Kachovich (Remote), ANZIC PMO
Shin'ichi Kuramoto (Remote), JAMSTEC
Leah Levay (In Person), *JOIDES Resolution* Science Operator
Harue Masuda (In Person), Japan Drilling Earth Science Consortium
Nisha Nair (Remote), IODP-India PMO
Michelle Penkrot (Remote), *JOIDES Resolution* Science Operator

Katerina Petronotis (In Person), *JOIDES Resolution* Science Operator
Sanny Saito (Remote), J-DESC Support Office
Angela Slagle (Remote), U.S. Science Support Program
Karen Stocks (Remote), IODP Science Support Office
Thena Thulasi (Remote), IODP-India PMO
Gen Totani (In Person), MEXT
Shouting Tuo (In Person), IODP-China PMO
Gabriele Uenzelmann-Neben (In Person), IODP^3 Planning Committee
Michiko Yamamoto (In Person), IODP Science Support Office

Consensus Statements

Consensus 1: The NASEM Decadal Survey of Ocean Sciences interim report identified vital and urgent U.S. ocean drilling science goals, and the FOCUS workshop will identify U.S. science priorities. These independent evaluations are taking different approaches while both adding to the continuing body of assessments that identify scientific ocean drilling as an essential tool for addressing U.S. science priorities. The JRFB is pleased that the community continues to contribute to and participate in these processes.

Consensus 2: The JRFB was pleased to hear about the positive steps forward for the future U.S. scientific ocean drilling program, as well as future plans for international partners. It was encouraging to hear that all future programs are open to and supportive of international collaborations, including the generous offer by China to provide U.S. scientists free berth space.

Consensus 3: The current JRFB will conclude with the end of IODP, yet the JRSO and SSO will have wind down activities that extend beyond that date. The JRFB recommends that an international body of scientists and recent *JOIDES Resolution* funders, similar in composition to the current JRFB, be formed to advise and provide oversight during this wind down period.

Consensus 4: The JRFB recognizes that international coordination and collaboration have been a hallmark of scientific ocean drilling and should be maintained in the future. An inclusive Forum for scientific ocean drilling could serve as an entity for determining overlapping interest of different programs and for considering partnerships on expeditions, communications, or other activities. Such a Forum should be independent of a particular program to assure fair representation. Participation could include representatives of continental scientific drilling and other programs with similar scientific objectives.

Consensus 5: The JRFB recognizes that legacy assets programs could be an important mechanism that links the post-IODP programs, bringing greater visibility and return on investments of collected cores, data, and other scientific ocean drilling assets. The JRFB encourages additional discussions on how these legacy asset programs can operate in a collaborative way post-IODP.

Consensus 6: The JRFB supports storing cores from IODP[3] and the future U.S. scientific ocean drilling program in the Gulf Coast Repository, Kochi Core Center, and Bremen Core Repository using the same geographic distribution as the current program.

Consensus 7: The JRFB supports the SSO continuing post-IODP to maintain records of and manage the selection process for the Curatorial Advisory Board until a new entity is identified to maintain these records and manage this selection process.

Consensus 8: The JRFB endorses the SSO's pilot program to implement the SSDB advisory committee's recommendations, beginning with datasets linked to completed drilling expeditions. The JRFB acknowledges that the current SSO funding may not be sufficient to cover all data archiving, in which case data will be disposed. The lead proponents should be contacted before any data is disposed to ask if proponents would like a copy of the data.

Consensus 9: The JRFB identifies proposals 851, 864, 874, 910, 941, 962, and 973 as potentially having high impact and low operational risk. Drilling capabilities similar to the *JOIDES Resolution* would enable full and rapid implementation of these proposals, while different platforms could make other proposals more viable. All proponents with proposals recently at the JRFB should be encouraged to submit proposals to the future U.S. program.

Consensus 10: The JRFB is supportive of coordinating expedition numbers between all post-IODP programs. Expedition numbers can be assigned in a similar manner to the current process, with the operators communicating on which numbers to assign to which expeditions.

Consensus 11: Although words are inadequate, the JRFB expresses its deepest gratitude to all members of the JRSO for enabling the successes of the *JOIDES Resolution* during the International Ocean Discovery Program. In particular, the JRFB recognizes Mitch Malone's steady guidance of the JRSO for the last three years, including transitioning the *JOIDES Resolution* smoothly back to full operation as the COVID pandemic waned and dealing with a variety of technical, logistical, and core-processing challenges. The entire staff of JRSO's seagoing and shorebased personnel have been essential contributors to an outstanding international scientific and technical legacy.

Consensus 12: As the end of the International Ocean Discovery Program approaches, the JRFB celebrates the program's successes overall and extends its deepest appreciation to all who have contributed to the JRFB's activities during this time. In a clear demonstration of community service and international cooperation, these contributors include all who have served on and supported the JRFB, JRFB working groups, SEP, EPSP, and CAB, as well as the IODP curators and the staff of the IODP Science Support Office.

Consensus 13: The JRFB and the scientific ocean drilling community are indebted to Larry Krissek for his outstanding service to the JRFB and the International Ocean Discovery Program, first as a member of the board, and then as JRFB Chair since 2021. Larry's insightful and thoughtful leadership has provided stability during a time of transition and uncertainty. Larry skillfully led the JRFB through the challenges of selecting and implementing the last *JOIDES Resolution* IODP expeditions, including deliberation on necessary contingency options. In addition, he effectively oversaw various JRFB working groups that developed transition recommendations to post-IODP scientific ocean drilling. In particular, Larry chaired a working group that pulled together

representatives from all parts of the international program to discuss and define Ocean Drilling Legacy Assets Projects (LEAPs), which led to the first solicitation and review of LEAP proposals. The JRFB and international Earth science community greatly appreciate Larry's service and dedication to scientific ocean drilling during this critical period.

Consensus 14: The JRFB would like to thank Kevin Johnson for leading a wonderful field trip on the day before the JRFB meeting. O'ahu Island is breathtakingly beautiful, and its geological history is fascinating. Kevin did an excellent job of sharing both the beauty and the geology with the field trip participants, and we appreciate him taking the time to organize the field trip.

Consensus 15: The JRFB is very grateful to Charna Meth and the IODP Science Support Office for organizing and supporting the very successful May 2024 hybrid meeting. The JRFB appreciates the extra logistical arrangements that allowed for in-person and virtual participation, which were essential for the meeting's success.

Action Items

Action Item 1: The IODP Curators, with support from the SSO, will create a Scientific Ocean Drilling Sample, Data, and Obligations Policy and Implementation document to take effect October 1, 2024. This document will be based on the current policy, with the addition of a Legacy Sample Allocation Committee, as well as an added policy related to Land-2-Sea Expeditions. The policy should be submitted for approval to the JRFB, CIB, and EFB by June 15, 2024.

Action Item 2: The SSO will discuss with the JRSO the possibility of archiving documents from iodp.org into MerlinOne.

Meeting Notes

1. Welcome and Logistics

The *JOIDES Resolution* Facility Board (JRFB) chair, Larry Krissek, called the meeting to order with a welcome and asked attendees to give self-introductions. Larry reviewed the meeting goals, the consensus statements and action items from the 2023 JRFB meeting, and the current agenda. Charna Meth reviewed the meeting logistics.

2. *JOIDES Resolution* Science Operator Report

Mitch Malone updated the JRFB on expeditions implemented by the *JOIDES Resolution* Science Operator (JRSO) since the last JRFB meeting, including Expedition 399 (Building Blocks of Life, Atlantis Massif), Expedition 395 (Reykjanes Mantle Convection and Climate), Expedition 400 (Northwest Greenland Glaciated Margin), Expedition 401 (Mediterranean-Atlantic Gateway Exchange), and Expedition 402 (Tyrrhenian Continental-Ocean Transition), as well as the maintenance completed during dry dock. The *JOIDES Resolution* is currently in Amsterdam. The ship will next implement a School of Rock and Expedition 403 (Eastern Fram Strait Paleo-archive), which will be its last expedition for IODP.

Demobilization of the *JOIDES Resolution* will begin in August. The contract between Texas A&M University (TAMU) and the ship owner ends on September 30. To date the ship owner currently has not found alternative work for the *JOIDES Resolution*, and currently plans are to scrap the ship. But, the ship owner could holdoff on beginning that process if it seems likely that alternative work will materialize.

TAMU submitted a five-year closeout proposal to U.S. National Science Foundation (NSF) to complete post-expedition activities, migrate data, dispose of property, produce legacy documentation, and complete remaining publications. The proposal will also allow TAMU to provide an instrumented Gulf Coast Repository by Spring 2025. Instrument access would be available via a usage fee model, and a small team will provide scientific, technical, and outreach support.

The JRFB asked about the long-term plans for the cores that contain asbestos minerals. Mitch replied that the cores will be stored in the Bremen Core Repository (BCR) because they were collected in the Atlantic Ocean. He is not familiar with the safety procedures at the BCR, but core handling should not be problematic based on TAMU's experience. The JRFB asked about the status of TAMU's closeout proposals. Kevin Johnson replied that NSF's intention is to fund the proposal. Larry asked if TAMU has enough technical staff to implement Expedition 403. Mitch replied that staff retention is going better than previously expected because TAMU created financial incentives to encourage technical staff to remain.

3. National Science Foundation Report

Kevin Johnson reviewed the current funding model for the *JOIDES Resolution*. He discussed that NSF is the majority funder of the *JOIDES Resolution*, providing $48 million per year through a cooperative agreement to TAMU. Non-binding international partner contributions provide the remainder of the operating costs, but the contributions have decreased from $16.5 million in FY2015 to a tentative commitment of $5 million for FY2024. Three complimentary project proposals (CPPs) that occurred early in IODP added an additional $18 million and were essential for keeping the *JOIDES Resolution* operational throughout the program. Without additional CPPs and with waning international contributions, the current funding model has proved unsustainable, leading NSF to decide not to extend the cooperative agreement for the *JOIDES Resolution* beyond FY2024.

NSF remains committed to maintaining access to cores and related data for the U.S. and international science communities. U.S.-owned cores will be kept at current locations under the same governance arrangements for the next five years; longer-term storage will be discussed later. NSF also issued a Dear Colleague Letter to encourage the community to continue to use legacy core material.

Looking toward the next program, NSF recently issued a solicitation for proposals to operate the Scientific Ocean Drilling Coordination Office (SODCO). SODCO will plan, manage, and execute drilling activities, encourage technology innovations, and assist with meeting curatorial responsibilities. Proposals for expeditions will be submitted directly to NSF.

NSF has also initiated a number of planning activities. NSF solicited a new decadal survey from the National Academy of Sciences, Engineering, and Medicine (NASEM), who recently issued an interim report encouraging the continuation of scientific ocean drilling and emphasizing the program's importance to societally important questions. The FOCUS Workshops are ongoing and will identify priorities with the highest level of scientific urgency, and the FUTURE Workshop will identify technologies that will enable a diverse portfolio of subseafloor sampling approaches.

NSF continues to value international partnerships to conduct scientific ocean drilling expeditions and will continue to cooperate internationally when realistic in terms of scope and budgetary constraints. NSF also recognizes the value of having a dedicated drilling vessel and is now engaged in steps toward new platform development, taking into consideration the community produced science-mission requirements (SMRs). NSF has formed a subcommittee of ocean drilling scientists who will facilitate an assessment of the SMRs and work with a contractor to determine construction and operations cost estimates of a new drilling platform. The subcommittee will engage with the government, industry, academia, and other stakeholders in completing their work.

The JRFB asked when the first expedition based on an NSF proposal could happen. Kevin replied that that depends on a number of factors, but that he could see a proposal that has already been to the JRFB moving quickly through the NSF process. Gabi Uenzelmann-Neben asked if NSF has a panel system to review the science, data package, and safety. Kevin replied that the proposals will be reviewed by the NSF system and the system includes those components. The JRFB asked who is on the subcommittee, who is the subcontractor, and what is the timeline. Kevin and Gail Christeson replied that the committee consists of Masako Tominaga, Becky Robinson, Brandon Dugan, Emily Cooperdock, Sam Bova, and Kusali Gamage, and the contractor is the Science and Technology Policy Institute (STPI). The report should be given to NSF by the end of the year, and then the next steps of evaluation and consideration begin. Nobu Eguchi asked if international scientists can be part of an NSF proposal. Kevin replied that there are ways for non-U.S. scientists to collaborate on NSF proposals, but NSF cannot provide financial support to non-U.S. scientists. Shin'ichi Kuramoto asked about the coordination between SODCO and NSF. Kevin explained that there will be discussion and coordination between the SODCO, NSF, and the PIs in the new system, and that SODCO will contract with the platform provider, which can be internationally owned.

4. Science Evaluation Panel

Kathie Marsaglia provided the Science Evaluation Panel (SEP) report, noting that SEP is responsible for the selection of the best and most relevant proposals for forwarding to the JRFB, CIB, and EFB. SEP has two regular meetings each year and has great communications and relationships with the IODP Science Support Office, the JRFB, and the IODP Forum. SEP began reviewing Ocean Drilling Legacy Asset Proposals (LEAPs) in January 2024, as well as proposals transferring from the JRFB to the EFB. Kathie then reviewed the meeting outcomes from the past year, and showed the geographic distribution of proposals at SEP and the JRFB. At the next SEP meeting, which will be the last, the panel will consider seventeen proposals.

5. ECORD Facility Board Report

Sasha Turchyn reviewed the ECORD Facility Board (EFB) membership, implementation of Expedition 389 (Hawaiian Drowned Reefs), activities to prepare for the International Ocean Drilling Programme (IODP^3), results of the last EFB meeting, and results from the post-cruise review of Expedition 386 (Japan Trench Paleoseismology). The next EFB meeting will be held jointly with the CIB in Cambridge on September 25-26, 2024.

Sasha discussed the new procedure for transferring proposals between IODP facility boards, which includes a requirement for proponents moving to the EFB to first discuss operational plans with the ECORD Science Operator. This transfer process will help proponents prepare for potential submissions to IODP^3. She also discussed the outcomes of a working group looking at proposal guidelines for IODP^3. The report from the JRFB Working Group on Science Framework Proposal Requirements and

Assessments was useful in those discussions, and she shared the EFB's gratitude to the JRFB for the development of the LEAPs concept.

Barry Katz added that IODP does begin reviewing drilling risks early in the proposal process; only the detailed site-by-site review comes after SEP.

6. *Chikyu* IODP Board Report

Nobi Seama reviewed the *Chikyu* IODP Board (CIB) membership, outcomes from the June 2023 CIB meeting (which included a joint CIB-EFB session), and the virtual CIB (eCIB) meeting in March 2024. Nobi also reviewed the new process for transferring proposals between IODP facility boards and the discussions of the proposal submission guidelines working group for IODP^3.

Expedition 405 (Japan Trench Tsunamigenesis; JTRACK) will begin in September 2024 with Shuichi Kodaira, Kohtaro Ujiie, Jamie Kirkpatrick, Patrick Fulton, Marianne Conin, and Christine Regalla serving as co-chief scientists. Nobi reviewed the objectives, the project coordination team, and the operational planning, and he shared that the CIB recommended APL-1013 be implemented as part of Expedition 405.

Nobi showed the *Chikyu* operations schedule for JFY 2022-2025, which includes IODP work, national projects, commercial operations, and maintenance periods. The schedule also includes IODP^3 work tentatively for November 2025.

7. Post-2024 Program Update: IODP^3

Nobu Eguchi provided an overview of the International Ocean Drilling Programme (IODP^3), which will begin in January 2025. This new program will be based on the MSP concept, will include a similar proposal structure to IODP, and will have vision and communication task forces. IODP^3 plans to implement two to three drilling expeditions per year, with co-chief scientists able to join from any country. IODP^3 will also support three to five proposals each year for Scientific Projects Using Ocean Drilling Archives (SPARCs), which have similar objectives to LEAPs. Each SPARC will receive 300,000 euros. IODP^3 will convene a scientific ocean drilling forum with ICDP; other scientific ocean drilling programs would also be welcome.

Nobu then reviewed the outcomes of the Interim Mission Specific Platform Facility Board (iMSP-FB) meeting in March. The iMSP-FB recommended that Sasha and Nobi be the first co-chairs of IODP^3's Mission Specific Platform Facility Board (MSP-FB), and that current IODP SEP members from ECORD, Japan, and associate members be asked to serve on the IODP^3 SEP. The first drilling expedition of IODP^3 will be called Expedition 501, and SPARCs will also receive expedition numbers.

iMSP-FB supported a plan to implement Proposal 637 (New England Hydrogeology) as the first expedition of IODP^3, and it recommended Proposal 939 (Tohoku Petit-Spot Magmatism) and Proposal 1010 (JTRACK Deep-Time Paleoseismology) as the first

expeditions for *Chikyu* in IODP^3. The iMSP also recommended maintaining the current geographic assignment of cores to core repositories for IODP^3 and hopes that there will be reciprocity from NSF's post-IODP scientific ocean drilling program.

Gilbert Camion explained that Proposal 637 (New England Hydrogeology) was to be implemented by ECORD as Expedition 406, but ECORD had to cancel implementation of the expedition within IODP due lack of bids on the tender for a platform. However, IODP^3 would like to jointly implement this proposal with NSF because the proposal is U.S.-led with a large U.S. proponent list. The scope of the expedition would also be expanded with joint funding. ESO will issue a tender call soon, with a bid evaluation in August. The hope is to implement the expedition in May 2025 with the same science party. Gilbert thanked Kevin, Gail, and Jim McManus for the discussions on this issue.

Larry asked if SPARC science parties are restricted to IODP^3 members. Nobu confirmed that they are.

8. Post-2024 Program Update: China

China is establishing the China Multifunction Platform (CMP) as its post-IODP scientific ocean drilling program. CMP will be jointly operated by Tongji University and the Guangzhou Marine Geological Survey (GMGS).

Shouting Tuo introduced the new drilling vessel *Meng Xiang*. *Meng Xiang* is 180 m long, has 3,142 m^2 of lab space, has a maximum drilling depth of 11,000 m, and is equipped for both riser and riserless drilling. *Meng Xiang* has completed sea trials. It is expected to be delivered to GMGS in October 2024 and would then be ready to implement international scientific ocean drilling expeditions in 2026. Shouting is hopeful that they will receive funding for at least two expeditions per year for the first five years.

The CMP Core Repository and Research Center will be built at Tongji University in Shanghai. It will have the capacity to store 150 km of core. IODP-China is also developing a 10-year science plan with three science priority themes focused on low-latitude forcing of climate change, plate tectonics in the oceanic subduction zone, and deep life and deep carbon cycle under the seafloor.

Shouting discussed that CMP will include open access to samples and data, bottom-up proposal submissions and peer review, and transparent regional planning. They look forward to working with IODP^3 to jointly review proposals, jointly implement expeditions and exchange berths. Shouting stated that they are discussing internally if they can invite U.S. scientists to participate in China's expeditions free of charge, given the special contribution of the United States to international ocean drilling over the past 56 years. China welcomes other partners to join CMP; full membership would cost one million USD and would buy berths for four scientists, as well as seats in the scientific advisory structure.

9. Post-2024 Program Update: India

Thena Thulasi presented the post-2024 update on behalf of IODP-India and Nisha Nair. Thena reviewed that the National Centre for Polar and Ocean Research acts as the nodal agency for IODP-India, and she gave an overview of IODP-India's highlights, ongoing activities, support and workshops for developing drilling proposals, and its vision for the future.

IODP-India is hosting an international workshop on Andaman drilling proposals, collecting site survey data to support development of drilling proposals, encouraging Indian scientists to submit LEAP proposals, and proposing a joint session at the upcoming AOGS 2024 conference.

India's ongoing commitment is to remain a dedicated member of IODP and to be part of the next phase of scientific ocean drilling. India plans to continue engaging in discussions with IODP^3 and NSF regarding future collaborations, and then submit a proposal to India's Ministry of Earth Science for continuation of funding.

10. Post-2024 Program Update: ANZIC

Ron Hackney discussed the status of ANZIC funding and an update on ANZIC's view of post-2024 opportunities, challenges, and risks. Australia's funding for IODP is under the National Collaborative Research Infrastructure Strategy (NCRIS) through June 2027. New Zealand is funded through June 2026, and then will use NCRIS to explore additional options. ANZIC funding includes membership in international scientific ocean drilling programs and ICDP, support for LEAPs, and training opportunities.

Ron presented the science priorities that came from the Future DEEP workshop, and the important priority of engagement with First Nations Peoples to promote cross-cultural thinking. ANZIC developed new proposal ideas in the lead up to the IODP^3 proposal workshop in March. ANZIC does have funding to support ANZIC scientists participating in SPARCs and LEAPs.

Post-2024, ANZIC ultimately needs clarity on membership models, program plans, and opportunities to engage internationally to guide their investment in scientific drilling and associated research. ANZIC is awaiting clarity on opportunities with NSF's program. ANZIC provided a letter of intent to join IODP^3 as an Associate Member, with some caveats; discussion are going well. ANZIC also sees opportunities with CMP and is awaiting clarity on membership models. Joining every program could be financially difficult for ANZIC and could make it more difficult for ANZIC to demonstrate outcomes and impacts to funders. ANZIC is, therefore, also considering other models that might be more relevant to ANZIC scientists.

11. USAC Report

Justin Dodd summarized recent U.S. planning activities for post-IODP. These activities include support from the U.S. Science Support Program (USSSP) for workshops looking at interstitial water research opportunities and priorities, planktonic foraminiferal biostratigraphy and taxonomy, and integrating scientific ocean drilling with NASA priorities. The U.S. has also engaged the community in the previously mentioned FUTURE and FOCUS workshops.

The FOCUS workshop series is particularly important as it aims to identify the most compelling science priorities that can be addressed by existing subseafloor sampling platforms and tools, as well as those that require deep drilling. The FOCUS process began with a series of virtual workshops in December 2023, culminating in an in-person workshop to be held later this month. FOCUS builds on previous planning efforts, as well as international connections and partnerships.

The FOCUS workshops coincide with the NASEM Decadal Survey process and their interim report on scientific ocean drilling. That interim report independently assessed scientific ocean drilling, concluding that IODP and its predecessor programs have fundamentally transformed our understanding of the planet. The report further identifies research questions that can only be advanced with scientific ocean drilling.

Justin also reported that USSSP/USAC do not have specific plans for a *JOIDES Resolution* celebration in Amsterdam due to funding limitations and logistical challenges. Instead, a Union session on the legacy of the *JOIDES Resolution* has been proposed for the 2024 AGU Annual Meeting, and additional celebratory events are being planned for that meeting as well.

Larry added that Henk Brinkhuis, who was unable to join the JRFB meeting, is looking into celebratory activities for the final port call of the *JOIDES Resolution*, but timing and logistics might also hamper those efforts.

12. Potential Post-2024 JOIDES Resolution Funding

Carl Brenner discussed efforts to find funding to possibly extend the *JOIDES Resolution* beyond 2024. He explained that after NSF decided not to extend the cooperative agreement with TAMU, the ship owner began trying to market the vessel to industry, without success. The ship owner then began discussing ways to keep the *JOIDES Resolution* available for science, with a few U.S. community leaders helping to make connections to possibly interested parties. The group began speaking with current and past IODP funding partners, other U.S. government agencies, and private sources (e.g., donors, philanthropies). Brazil is possibly interested in a partnership, but it is not yet clear if that partnership, or others, will materialize. The chances are slim, but more should be known in six to eight weeks.

13. Post-IODP Coordination: Transition of JRFB

The JRFB had a series of discussions about coordination, collaborations, and potential co-sponsorship on topics of broader interest. The discussions were intended both to provide advice to a future U.S. scientific ocean drilling program and to initiate or continue conversations about future partnerships or other opportunities for cooperation.

The first of these discussions focused on the JRFB itself, which will end with IODP on September 30, 2024. However, the JRFB provides oversight to the JRSO and SSO, and both of those entities will have closeout activities, tasks, and obligations beyond the IODP end date. For example, the JRSO could have questions related to sample parties, XRF scanning, and publications, particularly in the first year post-IODP. The JRFB also discussed that the JRFB chair position receives logistical support from the SSO and salary support from USSSP; if an entity is created to advise the JRSO and SSO closeout activities, both of these types of support might still be needed for the chair.

The JRFB concluded that an entity like the JRFB would be needed post-IODP. The JRFB sees value in the entity continuing to have international representation, similar to its current membership, as the JRSO and SSO will be winding down activities from IODP. Terms of reference would need to be written. This body would only provide advice on issues related to IODP and not issues related to the new U.S. scientific ocean drilling program, as that would be handled by NSF's new program.

14. Post-IODP Coordination: Communication Between Programs

The JRFB values the international collaboration that occurred during IODP and predecessor programs, and they would like to see avenues for collaboration continue post-IODP. The IODP Forum is currently a place where all partners come together. IODP^3 has plans to create a Forum in its structure, but Gilbert added that a future Forum does not have to be part of the IODP^3 structure. The JRFB discussed that an important aspect of a future Forum is for it to be an open venue for communications and coordination between all post-IODP programs. In addition, many at the JRFB expressed support for including other programs with similar scientific objectives to assure interaction on broader goals.

The JRFB discussed that a Forum-like entity that is independent of any future program's structure would be important for international collaboration. The goal should be to create an entity that is inclusive and equitable to all programs that are participating. It could be a venue for each participating program to discuss their priorities and determine mechanisms for cooperation, and it could be used to consider potential areas for consistency between programs, particularly in areas such as how data is collected and stored. GEOTRACES and SCAR are potential models for similar international dialogues. Conversations about a future scientific drilling Forum could continue at the IODP Forum in September.

In addition to interacting at a future Forum, different post-IODP programs could also invite observers from other post-IODP programs to attend their meetings, which would also increase communications between the programs.

15. Post-IODP Coordination: Expedition Numbering

Nobu shared that the first expedition of IODP^3 will be numbered Expedition 501. SPARCs will also receive expedition numbers but will end with an "S". IODP^3 will begin numbering proposals with 1100, but will use IODP proposal numbers for those that were in the IODP system. Nobu asked if expedition and proposal numbers should be coordinated across the post-IODP programs.

The JRFB discussed if separate programs need coordinated numbering systems for proposals. Proposals that are submitted to NSF will receive NSF proposal numbers per NSF procedures, and China has yet to discuss their expedition and proposal number system. It was agreed that it would be confusing if the same expedition numbers were used by different programs. It is currently simple to coordinate expedition numbers through email, and it should be equally as simple to do that between future programs.

16. Post-IODP Coordination: Legacy Asset Programs

The JRFB discussed the different legacy asset programs. Larry reminded the JRFB that LEAPs were developed in partnership with the current IODP community, and that LEAPs are intended to include scientists from all countries. SPARCs will be part of IODP^3, and Harue Masada reviewed Japan's ReCORD program. Shouting shared that China expects to have funding to support Chinese participation in LEAPs in the future. USSSP has a Novel Projects program and ANZIC offers Legacy Analytical Funding, which overlap with legacy asset programs.

The JRFB considered the details associated with each of these programs and their plans moving forward. While there are multiple programs focusing on legacy assets, a strong conclusion was not reached on ways these programs could coordinate in terms of science, participation, and funding. LEAPs were designed to be independent of any future program to encourage global collaboration on research; separate legacy asset programs could erode that integrated goal. Another view is that different legacy asset proposals could be submitted in parallel to different funding sources, and then the projects could be discussed at a future Forum for coordination. The JRFB sees value in international collaboration on legacy asset programs, and this conversation could continue at the next IODP Forum meeting.

17. Post-IODP Coordination: Cores and Sampling

Michelle Penkrot presented the results of discussions between herself and the other two IODP core curators, Ulla Roehl and Yusuke Kubo. The curators have been considering what sampling will look like after IODP ends, and have concluded that the IODP Sample, Data, and Obligations Policy and Implementation document should be revised

to simplify the policy text, to include broader language to apply to cores collected from past and future scientific ocean drilling programs, to address increased demand on cores from legacy asset projects, and to address Land-2-Sea expeditions.

In specifically thinking about legacy asset projects, the curators would like to add "legacy project researchers" as a new type of sample requester. They proposed creating a Legacy Sample Allocation Committee (LSAC) for each legacy asset project. The LSAC would review and approve all sample and data requests associated with that legacy asset project, and it would consist of two project co-chief scientists or PIs from that legacy asset project, one curator from the respective core repository, and one member from an associated core repository or operator.

The JRFB discussed the LSAC proposal and considered how previous sample requests for those cores would be taken into consideration. Michelle shared that repositories rarely receive requests that overlap with each other. If this does occur, the curators put the researchers in touch with each other, and then they usually decide to either collaborate or pivot. This approach has worked well. Curators also monitor for requestors that don't publish on requested samples, and they have the option of contacting the expedition co-chief scientists for additional information, should that be needed. Michelle stated that curators should also be involved in the review of legacy asset projects to further flag these and other issues. The JRFB agreed that the sample allocation committee model has worked well for drilling expeditions, and modifying the approach to a LSAC for legacy asset projects is a practical way forward.

The JRFB discussed Land-2-Sea expeditions, which present a potential sampling complication since the ocean and continental drilling aspects could be significantly separated in time. The curators proposed that they ask the co-chief scientists for input on how a request fits within a project's goals for up to three years post-moratorium. This will help the curators consider future drilling when making sampling decisions. The JRFB agreed that this is a sensible approach. The curators will also compare the proposed scientific ocean drilling sample policy to ICDP's sample policy to make sure they are not conflicted.

The United States, ECORD, and Japan have agreed to keep cores from IODP and the previous drilling programs in their current repositories for the next five years. The recent iMSP-FB meeting recommended using the same geographic distribution for cores collected from IODP^3 and the future U.S. scientific ocean drilling program. The JRFB agrees with this approach.

The Curatorial Advisory Board (CAB) is an important part of the curators' process for resolving request issues. The JRFB supports the continuation of a CAB post-IODP and this should be reflected in the updated Sample, Data, and Obligations Policy and Implementation document. Currently, new CAB members are nominated by the IODP core curators, and then the IODP Science Support Office assists in obtaining approval for the nominations from all three IODP facility boards. The IODP Science Support

Office can continue to manage this process until a new, single entity is identified to manage future staffing of the CAB.

18. IODP Science Support Office Report

Charna outlined the major tasks of the IODP Science Support Office (SSO). The SSO's major accomplishment from the past year was support of LEAPs, which included supporting concept development with all IODP stakeholders, implementing the pilot program, and creating the IT infrastructure to collect and review the proposals. LEAPs represent the first new approach to proposals since Land-2-Sea and the first globally coordinated program focused on legacy assets. The SSO received seven submissions to LEAPs over the two deadlines. These submissions represent a wide range of legacy data assets, countries, and 2050 Science Framework strategic objectives and flagship initiatives. The final LEAP submissions, along with fifteen drilling proposals, will be reviewed at the upcoming SEP meeting in June.

Looking forward, the SSO has received a one-year no-cost-extension from NSF. This extension moves the end of the SSO's period of performance to September 30, 2025, allowing for work on issues related to data, websites, and proposals to continue. As the SSO plans its final work, it will need to know how long to maintain iodp.org and its subdomains (e.g., publications.iodp.org, sedis.iodp.org, proposals.iodp.org, ssdb.iodp.org), and if and where documents (e.g., terms of reference, policies, minutes, and Integrated Ocean Drilling Program material) stored on iodp.org should be archived.

Karen Stocks then presented information about the site characterization data currently held by the SSO. Karen reviewed the three main components of the SSDB data: (1) Modern-era Digital Data (SSDB digital data ~26,000 files from 2005 to present), (2) Legacy Digital Data (pre-SSDB digital data, ~10,000 files back to Proposal 334 and Leg 101), and (3) Legacy Analog Data (physical data, ~33,000 items from 1969-2005). These data were all submitted to support proposal review. SSDB was not intended to be a permanent archive.

The SSO convened an SSDB Advisory Committee to provide recommendations for action on the fate of site characterization data. Their report was approved by the JRFB in December, and it concluded that while all data have value, priority should be placed on preserving digital site characterization data that supported drilled proposals.

Based on these recommendations, the SSO proposes a pilot project for the modern digital data associated with implemented expeditions that includes contacting proponents, compiling metadata, submitting to an archive (if needed), and providing data links to JRSO publications. Once the pilot program is complete, the SSO can determine if the work that can be accomplished with the funding available. For the modern digital data that is not associated with an implemented expedition the SSO will contact the lead proponents to alert them about the timeline for deletion, giving them the opportunity to download if desired.

Legacy digital data associated with implemented expeditions can be archived in the same manner as the modern digital data, if the time and funding allow for that action. The SSO proposes to permanently dispose of analog data once IODP ends due to the lack of resources available to digitize the data and the lower priority given to this data by the SSDB Advisory Committee. Funding issues, a lack of metadata, and confidentiality issues make other potential paths for this data unrealistic.

The JRFB asked if archived files will receive a DOI and if all data files will be archived for each proposal. Karen replied that the files will receive a DOI and that the plan is to archive original data but not derivatives or interpretations of that data. For example, SEGY files will be archived, but not site maps. The SSO will reach out to the SSDB Advisory Committee if questions arise during this process. The JRFB asked if SSDB is frequently accessed. Karen explained that the data is mostly used by proposal reviewers. The JRFB supported the SSO's plans to move forward with SSDB data.

19. Review of Proposals at the JRFB

The JRFB discussed providing advice to the next U.S. scientific ocean drilling program on high-impact proposals that are "ready to drill". The discussion included full proposals that are currently at the JRFB and full proposals that have recently transferred to the EFB. Nationality of the proponents was not considered.

The JRFB discussed criteria for identifying these proposals, including if proposals are of reasonable cost, have low operational risk, have low risk for obtaining clearance, and have a strong potential for high scientific reward. The JRFB also discussed considering potential linkages to the 2050 Science Framework and other programs (e.g., ICDP, IODP^3, ice shelf drilling). They also recognized that proposals would probably need some rescoping if implemented on an MSP instead of the *JOIDES Resolution*, and that high reward often comes with risk.

Each JRFB member considered their own views on the relative importance of the criteria in identifying their individual top proposals. Consensus was then reached around the following proposals: 851 (Cenozoic Northwest Atlantic Transect), 864 (Equatorial Atlantic Gateway), 874 (Neogene Newfoundland Sediment Drifts), 910 (Continental Margin Methane Cycling: Rio Grande), 941 (Godzilla Megamullion Lithosphere Architecture), 962 (Greenland Ice Sheet), and 973 (NW Africa Neogene Climate). These proposals were not ranked relative to each other, and lead proponents of all proposals at or recently at the JRFB will be encouraged to submit to a future U.S. program.

20. Meeting Close

The JRFB reviewed the draft consensus statements and action items. Larry closed the meeting by thanking everyone for participating.