JR Facility Science Evaluation Panel (SEP) Meeting 10-12 January 2017 Scripps Institution of Oceanography, UCSD, La Jolla, CA

Meeting Roster

Science Subgroup

Natsue Abe Japan Agency for Marine-Earth Science and Technology (JAMSTEC)

Gary Acton Sam Houston State University
Steven Bohaty University of Southampton
Anders Carlson Oregon State University

Christopher Charles Scripps Institution of Oceanography, UCSD

Li-Hui Chen Nanjing University
Cristiano Chiessi University of Sao Paolo

Cornelia Class Lamont-Doherty Earth Observatory – Columbia University

Bernard Coakley University of Alaska

Deniz Cukur Korea Institute of Geoscience & Mineral Resources (KIGAM)

Matthew Fantle Pennsylvania State University
Sarah Feakins University of Southern California

Marguerite Godard Université Montpellier

Michael Gurnis California Institute of Technology (Caltech)

Marc-André Gutscher University of Brest – Institut Universitaire Europeen de la Mer

Ryota Hino Tohoku University Samuel Jaccard University of Bern

Jens Kallmeyer GFZ German Research Centre for Geosciences

Zhifei Liu Tongji University
Andrew McCaig University of Leeds

Cecilia McHugh City University of New York – Queens College

Robert McKay¹ Victoria University of Wellington

Ken Miller Rutgers The State University of New Jersey

Yuki Morono JAMSTEC
Hajime Naruse Kyoto University
Yusuke Okazaki Kyushi University
Werner Piller University of Graz
Julia Reece Texas A&M University

Brandi Reese Texas A&M University – Corpus Christi

Marci Robinson United States Geological Survey
Ashok Singhvi Physical Research Laboratory
Andreas Teske University of North Carolina

Heiner Villinger University of Bremen Masanobu Yamamoto Hokkaido University

Unable to attend

¹ Alternate for Tim Naish

Site Subgroup

Rebecca Bell Imperial College London

Calvin Campbell Geological Survey of Canada - Atlantic

Gail Christeson University of Texas at Austin

Weiwei Ding Second Institute of Oceanography, State Oceanic Administration

Chris Elders Curtin University

Louis Géli IFREMER

Gilles Guerin Lamont-Doherty Earth Observatory of Columbia University

Sean Gulick University of Texas at Austin (Co-Chair)

Matthew Hornbach² Southern Methodist University

Ken Ikehara³ National Institute of Advanced Industrial Science and Technology (AIST)

Priyank Jaiswal Oklahoma State University

Gwang-Soo Lee⁴ KIGAM

Dhananjai Pandey National Center for Antarctic and Ocean Research
Michael Riedel GEOMAR – Helmholtz Centre for Ocean Research Kiel

Will Sager⁵ University of Houston

Helenice Vital Universidade Federal do Rio Grande do Norte

Peter Vrolijk Retired/New Mexico Tech - Adjunct

Guangfa Zhong Tongji University

Liaisons and Observers

Jamie Allan National Science Foundation (NSF)
Carlos Alvarez-Zarikian JRSO - Texas A&M University (TAMU)

Jamie Austin
Rita Bauer
IODP Science Support Office (SSO) - UCSD/SIO
Carl Brenner
IODP US Science Support Program (USSSP) - LDEO
Dru Clark
IODP Science Support Office (SSO) - UCSD/SIO
Nobu Eguchi
JAMSTEC Center for Deep Earth Exploration (CDEX)

Helen Feng Independent Consultant to the SSO

Holly Given IODP Science Support Office (SSO) - UCSD/SIO

Barry Katz Chevron Corporation - EPSP (Chair)

Yoshi Kawamura JAMSTEC Gil Young Kim KIGAM

Adam Klaus JRSO –TAMU

Anthony Koppers JOIDES Resolution Facility Board Chair – Oregon State University

Gilles Lericolais European Consort. for Ocean Res. Drilling (ECORD) Facility Board (Chair)

Mitch Malone JRSO –TAMU

Brian Manning IODP Science Support Office (SSO) - UCSD/SIO
Sally Morgan ECORD Science Office (ESO) – University of Leicester

Chris Olson IODP Science Support Office (SSO) - UCSD/SIO

Katerina Petronotis JRSO –TAMU Angela Slagle USSSP - LDEO

Karen Stocks IODP Science Support Office (SSO) - UCSD/SIO

Shouting Tuo IODP China – Tongji University

Michiko Yamamoto IODP Science Support Office (SSO) - UCSD/SIO

Unable to attend

² Alternate for Lindsay Worthington

³ Alternate for Juichiro Ashi

⁴ Alternate for Seung-Sep Kim

⁵ Alternate for Cara Burberry

Science Evaluation Panel (SEP) Meeting 10-12 January 2017 Scripps Institution of Oceanography, UCSD, La Jolla, CA

Tuesday January 10, 2017 09:00-17:00

1. Welcome and Introductions

Science Evaluation Panel (SEP) Co-Chair, Dr. Ken Miller, welcomed the SEP to Scripps Institution of Oceanography in La Jolla, CA.

1.1 Call to order, panel charge, thanks to past members, and self-introductions

Dr. Miller called the meeting to order with a welcome and provided a brief description of the panel's charge, a thanks to past members, and he asked attendees to perform self-introductions.

1.2 Logistical Announcements

Meeting host, Science Support Office Executive Director, Dr. Holly Given, reviewed the basic logistics for the meeting, including safety and Internet access.

1.3 Approval of Meeting Agenda

Dr. Miller asked the SEP members to review the agenda and provide changes or additions. No members presented additions or changes, and they approved the agenda.

2. Reports from IODP Entities

2.1 Perspectives from the JRFB Chair

JOIDES Resolution Facility Board (JRFB) Chair, Dr. Anthony Koppers, presented updates from the JRFB meeting in May 2016, including:

- JOIDES Resolution Schedule for Fiscal Year 17-19
- Long-term JR Cruise Track and Update on Proposal Pressure in the Atlantic Region
- Dealing with Site Survey Data Requiring Non-Disclosure Agreements
- Looking Ahead to FY 22-23
- JRSO Mid-Term Reviews
- Miscellaneous JRFB Updates

For more detailed information regarding this report, please see Dr. Koppers' presentation, which is posted at https://iodp.org/sep-presentations/sep-2017-january-presentations.

2.2 NSF Report

NSF Program Manager, Dr. Jamie Allan, reviewed the key points of progress and/or change within the IODP. These included:

- FY2017 Budget: Overall Positive Financial Situation
- JR100 Program (NSF's JOIDES Resolution non-IODP Coring Program)
- Definition of "Expedition Data"
- Next Phase of IODP 2019-2023
- JR Staffing Through the current phase and Post 2019
- Schedule for the Next Phase of IODP 2019-2023
- Summary of the First JR Facility Review Activities
- NSF Response to First Facility Review
- Second JR Facility Review March 2017

Other IODP News

Dr. Allan stated that the next JR 100 window would likely occur during the JR's Pacific Transit in 2019.

Dr. Allan and Dr. Gilles Lericolais, ECORD Facility Board Chair agreed that pre-cruise and post-cruise data are necessary and frequently funded outside the IODP, e.g. An example given that Allan lauded was ECORD's support of the computerized tomography (CT) scanning of Chicxulub cores at Weatherford Labs, with software and labor donated by a third party (Enthought of Austin, TX).

Dr. Allan also shared his enthusiasm for the success and innovation of Expedition 370 (Temperature Limit of the Deep Biosphere) where samples were helicoptered from the *Chikyu* to a shore-based science party at the Kochi Core Center for state-of-the-art analysis, cell counting and experiments of cell growth at in-situ pressure and temperatures in ultra-clean labs.

Finally, in response to a question about a need to increase participation funding rates in the next round of NSF IODP Memoranda, Dr. Allan stated that partner nation contribution rates have dropped from 50% in the initial days of ODP to 22-24% today, with U.S. shipboard science party members representing less than a third of the JOIDES Resolution science parties.

For more detailed information regarding this report, please see Dr. Allan's presentation, which is posted at https://iodp.org/sep-presentations/sep-2017-january-presentations.

2.3 JR / IO Report

Dr. Mitch Malone, JRSO Liaison, presented highlights of the JR's recent expeditions (362T, 362, 363, and 366), including details of the aft drawworks brake failure during Expedition 362. He also updated the attendees regarding:

- JOIDES Resolution Upcoming Expeditions
- JRSO Updates Staff changes and Expedition Staffing

Dr. Jamie Austin, IODP Forum Chair, asked if the JRSO had updated their ship maintenance review procedures, because the aft drawworks brake failure, which caused Expedition 362 11-days of operations. Dr. Malone stated that the drawworks could not be repaired at sea, and Dr. Allan reminded the group that this issue will be considered in the upcoming review.

For more detailed information regarding this report, please see Dr. Malone's presentation, which is posted at https://iodp.org/sep-presentations/sep-2017-january-presentations.

2.4 MSP / EFB, IO Report

Dr. Gilles Lericolais, ECORD Facility Board (EFB) Chair, presented a report of progress for the EFB from their March 2016 meeting, which included:

- ECORD Facility Board Members (Science Board, Executive Board, and Funding Agencies)
- Mission Specific Platform (MSP) Proposals at EFB
- Completed Expeditions: 2015-2016 (357 and 364)
- 2016 update on Expedition 357 and Expedition 364
- Scheduled Expeditions: Proposal 708 and 879 (Expedition 373 was postponed)
- Proposals in the EFB Waiting Room 581 (Deactivated in June 2016), 637, and 716
- Proposals Forwarded from SEP 730 and 879
- EFB 2016 Proposal Evaluation Results

- Summary of MSP Proposals at EFB and SEP
- Schedule of MSP Expeditions through 2023
- ECORD FB Science Board Member Rotations and Replacements

Dr. Sally Morgan, ECORD Science Operator (ESO) Liaison, presented a summary of ESO operations and activities completed in 2015 and 2016, as well as those scheduled for 2017 and 2018:

- Expedition 346: Chicxulub Impact Crater
- Expedition 373: Antarctic Cenozoic Paleoclimate (postponed to 19/20?)
- Expedition 381: Corinth Active Rift Development (2017?)
- Expedition 377: Arctic Ocean Paleoceanography (2018)
- ESO-Hosted Summer Schools
- ESO Review to happen in 2017

Regarding the status of Canada's participation in ECORD; Dr. Morgan stated that ECORD approached Canada with a request that they provide icebreaker support for Expedition 377, and Canada declined. Dr. Lericolais clarified that while Canada left ECORD in 2016, ECORD is hopeful that the Trudeau government will reunite Canada with ECORD in 2017.

For more detailed information, please see Dr. Lericolais' and Dr. Morgan's presentations, which are posted at https://iodp.org/sep-presentations/sep-2017-january-presentations.

2.5 Chikyu / CIB, IO Report

Center for Deep Earth Exploration (CDEX) liaison, Dr. Nobu Eguchi provided the CDEX/CIB (*Chikyu* IODP Board) Report, which included summaries of:

- Chikyu IODP Long-term Planning
 - ICDP Oman Drilling Project core analysis July to September 2017
 - Expedition 380 November-December 2017
 - NanTroSEIZE C2 in 2018
- IODP Expedition 365 NanTroSEIZE Stage 3: Shallow Megasplay Long-Term Borehole Monitoring System (LTBMS)
 - LTBMS connected to DONET
 - GeniusPlug and Core
- IODP Expedition 370: T-Limit of the Deep Biosphere off Muroto Key Achievements
- Outreach Activities
 - Expedition Videography
 - International Chikyu Onboard School (J-DESC and JAMSTEC)
 - Open Ship Event
- Next CIB Meeting March 15-16, 2017 in Kobe
- Next Technical Advisory Team (TAT) Meeting February 20-21, 2017 at JAMSTEC

For more detailed information, please see Dr. Eguchi's presentation, which is posted at https://iodp.org/sep-presentations/sep-2017-january-presentations.

3. Science Support Office Report

To bring new attendees up to date, Dr. Holly Given, IODP Science Support Office (SSO) Executive Director introduced the staff and summarized the:

- Science Support Office Services
- Background (documents) for Proposal Review

- Confidentiality Policy and Panel Member Sign-in Requirement
- Prohibition of cell phone use to transmit images or messages regarding SEP discussions or results

Dr. Given also updated the group on the recent developments at the SSO, including:

- New Non-Disclosure Agreements (P875 and P882)
- The Small Group Meeting following SEP
- The JR Community Survey

Dr. Given concluded her report with a review of proposal submission rates, data file statistics, and proposal distribution.

Dr. Karen Stocks, Co-PI for the Science Support Office, then provided the SEP Members with a summary of proposed changes to the Site Survey Databank (SSDB) file upload workflow to create "review packages", and the rationale for and functionality of these changes. Dr. Stocks described the current workflow and the problems observed with this workflow, both for the SSDB and the reviewers. She detailed the revisions envisioned by the development team using mock ups of the SSDB data submittal and review process pages.

Based on Dr. Stocks' summary, the SEP members request that

- The proponent have the ability to transfer data to a new site by accessing and updating metadata
- Reviewers be able to perform queries on (filter and/or sort) the files presented in the data package

Dr. Stocks assured the SEP Members that she understands their requests and the SSO Team will consider them as they move forward.

For more detailed information, please see Dr. Given and Dr. Stocks' presentations, which are posted at https://iodp.org/sep-presentations/sep-2017-january-presentations.

4. Proposal Review and Advisory Process

Drs. Miller and Gulick (SEP Co-Chairs) provided a detailed review of panel procedures.

4.1 Review Procedures

Dr. Miller reminded those in attendance of their requirement to keep proposal content and discussion of all proposals confidential. He provided a brief summary regarding the SEP status and function, and he reviewed the results for the previous two SEP meetings.

Dr. Miller then summarized proposal review procedures through:

- Highlights from the SEP Terms of Reference
- General evaluation criteria for IODP proposals and response letters
- Rating of the proposal (after external review)
- Critical drilling plan review including a sufficient number of alternate sites

Dr. Sean Gulick continued the overview by providing details of Site Survey Data review procedures, including:

- Characterizing Site Survey Data
- General data requirements and accepted formats (from the Guidelines)
- Classification System
- Watchdog (WD) responsibilities in preparing proposal reviews
- The Proposal Evaluation Form
- Actions for panelists with Conflicts of Interest

Dr. Miller then presented a summary of the proposals submitted for the October 1 deadline, the Watchdogs responsible for each proposal, the possible destination for each proposal, and he reminded the panelists to submit their written reports to Dr. Michiko Yamamoto, SSO Proposal Manager.

Panelist, Dr. Andrew McCaig requested that the SSO provide a summary of the results of the past few meetings with the review materials to make it easier for the reviewers to understand the proposal's progress within the system. Dr. Michiko Yamamoto explained that this information is already available to the reviewers because the proposal package includes the documents generated by each step in the process.

For more detailed information, please see Dr. Miller and Dr. Gulick's Review Procedure presentation, which is posted at https://iodp.org/sep-presentations/sep-2017-january-presentations.

5. Review of Proposals

5.1 Revised Full Proposals

The SEP began their reviews of revised proposals.

16:50 Meeting Adjourned for the Day

Wednesday January 11, 2017 09:00-17:00

5.1 Revised Full Proposals (continued)

The SEP completed their reviews of revised proposals.

Following the review of revised proposals, Dr. Sean Gulick gave a short science talk, in which he presented the results of Expedition 364: Chicxulub K-T Impact Crater.

5.2 Externally Reviewed Proposals

The SEP reviewed externally reviewed proposals.

17:50 Meeting Adjourned for the Day

5.3 New Proposals

The SEP completed their reviews of new Full proposals and began their reviews of new Preproposals.

Following the lunch break, Dr. Yuki Morono gave a short science talk, in which he presented the results of Expedition 370: Temperature Limit of the Deep Biosphere.

5.3 New Proposals (continued)

The SEP completed their reviews of new Pre- and APL proposals.

6. Summary of SEP reviews

As summarized below, Dr. Miller and Dr. Gulick reviewed the results and ratings (as necessary) for each of the proposals discussed at this meeting.

Proposal#	Туре	Title	PI	Platform	Result
833	Full2	Guaymas Basin Activity	Andreas Teske	JR	External Review
853	Full2	South Atlantic Transect	Rosalind Coggon	JR	External Review
864	Full	Equatorial Atlantic Gateway	Tom Dunkley Jones	JR	Reivse
871	CPP2	Lord Howe Rise Continental Ribbon	Ron Hackney	Chikyu	Forward to CIB
874	Full	Newfoundland Neogene Sediment Drifts	Oliver Friedrich	JR	Revise
875	Full	Brazilian Equatorial Margin Paleoceanography	Luigi Jovane	JR	Deactivate
882	Full	Brazilian Equatorial Margin Tectonics	Paola Vannucchi	JR	Revise
890	Full	Walvis Ridge Hotspot	Will Sager	JR	Revise
902	Full	Iceberg Alley Paleoceanography	Michael Weber	JR	Holding Bin
906	Pre	Rio Grande Rise Formation	Christian Lacasse	JR	Deactivate
907	Pre	Sunda Shelf Sea Level	Karl Stattegger	MSP	Deactivate
908	APL	Costa Rica Megathrust Fluid-Pressure	Nathan Bangs	JR	Addendum
909	Pre	NW Greenland Glaciated Margin	Paul Knutz	JR	Develop Full
910	Pre	Continental Margin Methane Cycling: Rio Grande	Alberto Malinverno	JR	Develop Full
911	Pre	Argentine Margin Paleoceanographic Transects	James Wright	JR	Develop Full
912	Full	Drake Passage Paleoceanography	Frank Lamy	JR	External Review

Came back from External Review	
Revised	
New	

Dr. Miller also reminded SEP members that their review reports were due to Dr. Yamamoto no later than Monday 16 January 2017.

7. Schedule of next SEP meeting

Dr. Miller announced that the next SEP Meeting is scheduled for 21-23 June 2017 in Lisbon, Portugal, and the group determined that the January 2018 meeting will be held 9 - 11 January 2018 in La Jolla, CA.

Dr. Miller asked for input from the attendees regarding venues for the June 2018 meeting. SEP Members suggested Potsdam and Edinburgh for ECORD's consideration. Dr. Austin volunteered Austin, TX as a possible U.S. venue for the June 2018 SEP Meeting, and Dr. Marci Robinson offered Reston, VA (USGS) as a second U.S. option.

Dr. Allan reiterated that Australia and New Zealand are cost prohibitive with such a large group, but that NSF can approve of smaller meetings (such as the Forum) at Australasian and similar venues.

8. Thanks to members rotating off

Dr. Miller noted that no members are rotating off the SEP after this meeting, but, as a heads-up for those affected, he displayed a list of the SEP to the members rotating off the SEP following the June meeting.

9. AOB

Dr. Miller confirmed with Dr. Malone that no co-chief nominations were needed following this meeting, and he asked meeting attendees if they had announcements to share with the group. These announcements included:

- Dr. Angela Slagle of the U.S. Science Support Program (USSSP) announced the following workshops:
 - Demystifying the IODP Proposal Process for Early Career Scientists: Northern Atlantic and Gulf of Mexico. 23-25 January 2017 in Austin Texas. Dr. Slagle noted that early career scientists (who wanted to know how to prepare their own IODP proposals) organized this workshop.
 - Drilling strategies for assessing Links between Quaternary Gulf Stream dynamics, pore pressure evolution, and slope stability on the Western North Atlantic margin: An IODP proposal development workshop. 11-13 April 2017 in Dallas Texas.
 - Onshore-Offshore Drilling and Sampling to Understand Freshwater Resources along the New England Continental Shelf: An IODP-ICDP Workshop. 22-23 May 2017 in Woods Hole, Massachusetts.

And Dr. Carl Brenner, Director of the USSSP asked all SEP attendees to take the JR Community Survey, noting that the USSSP had received 18 new entries since the beginning of the SEP Meeting.

 Dr. Mike Riedel announced the Australia-New Zealand IODP Consortium (ANZIC) Australasian Workshop 12-16 June 2017 in Sydney Australia. The workshop will develop new ideas and generate proposals for drilling in the Australasian region.

Following these announcements, Dr. Miller requested and received consensus support for the following letter of thanks to Dr. Margaret Leinen (with special thanks to Dr. Holly Given) and Scripps Institution of Oceanography for hosting this meeting.

Dr. Margaret Leinen Director, Scripps Institution of Oceanography, UCSD 12 January 2017

Dear Margaret,

The IODP Science Evaluation Panel has enjoyed another very successful meeting at Scripps Institution of Oceanography, in large part due to the hospitality and thoughtfulness of our gracious

host, Dr. Holly Given, and her Science Support Office Team. We would like to express our gratitude to Holly and her staff for coordinating this meeting with great care and consideration of our needs. We offer you our sincere thanks for allowing us to once again conduct our meeting at Scripps Institution of Oceanography in this beautiful and befitting location.

Sincerely,

The IODP Science Evaluation Panel

Finally, Dr. Miller reminded the group that an email would arrive in the next few days with the Meeting Satisfaction Survey and asked all attendees to take a few minutes to respond. He reiterated that the SEP Membership is a wonderful group and thanked everyone in attendance for participating with such enthusiasm.

16:05 Meeting Adjourned