JR Facility Science Evaluation Panel (SEP) Meeting 12-14 January 2016 Scripps Institution of Oceanography, UCSD, La Jolla, CA

Meeting Roster

Science Subgroup

Jang-Jun Bahk Korea Institute of Geoscience & Mineral Resources (KIGAM)

Steven Bohaty University of Southampton
Anders Carlson Oregon State University
Cristiano Chiessi University of Sao Paolo

Cornelia Class Lamont-Doherty Earth Observatory – Columbia University

Bernard Coakley University of Alaska

Sarah Feakins University of Southern California
Eric Ferre Southern Illinois University
Marquerite Godard Université Montpellier

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

Ryota Hino Tohoku University

Steve Hovan Indiana University of Pennsylvania

Minoru Ikehara Kochi University
Samuel Jaccard University of Bern

Jens Kallmeyer GFZ German Research Centre for Geosciences

Kathie Marsaglia California State University, Northridge

Andrew McCaig University of Leeds

Cecilia McHugh City University of New York – Queens College

Robert McKay¹ Victoria University of Wellington

Katsuyoshi Michibayashi² Shizuoka University

Ken Miller Rutgers The State University of New Jersey

Yuki Morono JAMSTEC

Matt O'ReganStockholm UniversityWerner PillerUniversity of GrazJulia ReeceTexas A&M University

Brandi Reese³ Texas A&M University – Corpus Christi

Marci Robinson United States Geological Survey

Brian Romans Virginia Polytechnic Institute and State University (Virginia Tech)

Ashok Singhvi Physical Research Laboratory

Weidong Sun Guangzhou Institute of Geochemistry
Kenichiro Tani⁴ National Museum of Nature and Science

Andreas Teske University of North Carolina

Jun Tian Tongji University
Heiner Villinger University of Bremen
Masanobu Yamamoto Hokkaido University

Unable to attend

¹ Alternate for Tim Naish

² Alternate for Satoko Ishimaru

³ Alternate for Jason Sylvan

⁴ Alternate for Natsue Abe

Site Subgroup

Juichiro Ashi University of Tokyo

Cara Burberry University of Nebraska - Lincoln
Calvin Campbell Geological Survey of Canada - Atlantic

Ben Clennell Commonwealth Scientific and Industrial Research Org. (CSIRO) Weiwei Ding⁵ Second Institute of Oceanography, State Oceanic Administration

Gilles Guerin Lamont-Doherty Earth Observatory of Columbia University

Sean Gulick

Mads Huuse

Seung-Sep Kim

Sebastian Krastel

University of Texas at Austin
University of Manchester
Chungnam National University
Christian-Albrechts University at Kiel

Johanna Lofi⁶ Université de Montpellier – Géosciences Montpellier

David Mallinson East Carolina University (SEP Co-Chair)

Dhananjai Pandey National Center for Antarctic and Ocean Research

Robert Pockalny University of Rhode Island

Michael Riedel GEOMAR – Helmholtz Centre for Ocean Research Kiel

Zhen Sun South China Sea Institute of Oceanology

Gabriele Uenzelmann-Neben Alfred Wegner Institute

Helenice Vital Universidade Federal do Rio Grande do Norte

Peter Vrolijk ExxonMobil Upstream Research Co.

Lindsay Worthington University of New Mexico

Liaisons and Observers

Jamie Allan National Science Foundation (NSF)

Jamie Austin
Rita Bauer
Carl Brenner
Dru Clark
Nobu Eguchi
Holly Given
IODP Forum Chair – University of Texas at Austin
IODP Science Support Office (SSO) - UCSD/SIO
IODP US Science Support Program (USSSP) - LDEO
IODP Science Support Office (SSO) - UCSD/SIO
JAMSTEC Center for Deep Earth Exploration (CDEX)
IODP Science Support Office (SSO) - UCSD/SIO

Barry Katz Chevron Corporation - EPSP (Chair)

Yoshi Kawamura JAMSTEC/CDEX Adam Klaus JRSO –TAMU

Anthony Koppers JOIDES Resolution Facility Board Chair – Oregon State University

Denise Kulhanek JRSO -TAMU

Gilles Lericolais European Consortium 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 IODP Science Support Office (SSO) - UCSD/SIO

Eisho Sato Ministry of Education, Culture, Sports, Science and Technology (MEXT)

Angela Slagle USSSP - LDEO

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

Shouting Tuo IODP China – Tongji University

Trevor Williams JRSO -TAMU

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

Unable to attend

⁶ Alternate for Serge Berné (ECORD)

⁵ Alternate for Jaibaio Li

JR Facility Science Evaluation Panel (SEP) Meeting 12-14 January 2016 Scripps Institution of Oceanography, UCSD, La Jolla, CA

Meeting Minutes

Tuesday 11 of January 2016 09:00-17:00

1. Welcome and Introductions

Science Evaluation Panel (SEP) Chair, Dr. Ken Miller, welcomed the SEP to La Jolla.

1.1 Call to order, panel charge, thanks to past members, and self-introductions
Dr. Miller called the meeting to order with a welcome, a brief description of the panel's charge, a thanks to past members (specifically former SEP Chair, Dr. Dick Kroon) 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 he briefly discussed his plans for implementation over the 3-day meeting. No members presented additions or changes, and the agenda was approved.

2. Reports from IODP Entities

2.1 Perspectives from the JRFB Chair

JRFB Chair, Dr. Anthony Koppers, presented a summary of the recent International Ocean Discovery Program (IODP) article in EOS (https://eos.org/project-updates/scientific-ocean-drilling-charts-new-course/) which highlighted the IODP's new Science Plan, the new Business Plan with streamlined program structure, improved proposal throughput, and the new long-term *JOIDES Resolution* ship track for 2017-2020. Dr. Koppers reviewed the latest collaboration with the International Continental Drilling Program (ICDP), the most recently updated IODP guideline documents, and he announced the new JR Facility Board Members (Dr. Clive Neal and Dr. Paul Wilson).

Dr. Koppers illustrated the distribution of expeditions recommended for scheduling by the JRFB (through FY'17-'18) on a ship track map. He stressed that the minimum timeframe for taking a proposal through to scheduling is 3 to 3.5 years, which requires that IODP receive South and Equatorial Atlantic proposals now to have them ready for drilling in 2019-2020. Dr. Koppers asked the SEP to fulfill one of their roles as defined in the SEP's Terms of Reference by providing the JRFB with advice regarding shortcomings in the proposal pool and to make suggestions for stimulating proposal pressure. Dr. Koppers closed his presentation by showing the SEP the most recent effort at stimulating proposal pressure: a new half-page, full-color Call for Proposals ad for publication in EOS.

For more detailed information regarding this report, please see Dr. Koppers' presentation, which is posted at http://www.iodp.org/meeting-presentations.

2.2 Report from NSF and Status of the JR Facility

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

- JOIDES Resolution Staffing Changes in Response to Sea Change Recommendations:
 - o Increase U.S. Science Party members from 8 to 10 for upcoming JR expeditions
 - Onboard Outreach Program staff members will be counted as Science Party members and have publishing responsibilities
- The NSF JR Facility Review Panel will meet at the JRSO from February 24-26, 2016
 - Annual and mid-award reviews are required
 - Review results will determine renewal or re-competition of Cooperative Agreement and permit "mid-course" corrections if necessary
 - The NSF had invited as panel members European, Japanese, Australian, and Canadian scientists
 - Co-chiefs will meet February 22-23, 2016 and report their findings to the NSF review panel

Dr. Allan reviewed the Cooperative Agreement language regarding the JR Facility Review, the selection and makeup of the review panel, the scope and use of the panel's report, and the review schedule through 2019. He stated that the report will be shared with NSF financial partners, but it will not be a publicly shared document.

Finally, Dr. Allan stated that NSF will split CPP revenue enhancements 50/50 between cost reduction for the JR Facility and supplementing NSF's core science programs. As an example of how this core science supplement can benefit the IODP, Dr. Allan highlighted five proposals that were recommended for funding by the NSF Marine Geology and Geophysics (MGG) program that directly support future IODP expeditions.

For more detailed information, please see Dr. Allan's presentation, which is posted at https://www.iodp.org/meeting-presentations.

2.3 JR Science Operator (JRSO) Report

Dr. Mitch Malone, JR Science Operator Liaison, presented highlights of the last two expeditions (356, and 359), the current expedition (360), upcoming expeditions, and he updated the attendees regarding:

- Scientific staffing for Expeditions 362 (Sumatra), 363 (Western Pacific Warm Pool), 366 (Mariana Convergent Margin), 367/368 (South China Sea Rifted Margin) and 369 (Australia Cretaceous Climate)
- The new Expedition Project Manager/Staff Scientist (EPM/SS), Trevor Williams, who started 1
 August 2015

Finally Dr. Malone stressed the increasing importance of placing drill sites outside of any nation's exclusive economic zone (EEZ), as negotiations to drill within these zones continue to be more difficult. He sited a recent failure to reach an agreement on a drill site within Indonesia's EEZ.

For more detailed information, please see Dr. Malone's presentation, which is posted at https://www.iodp.org/meeting-presentations.

2.4 MSP / EFB, IO Report

Dr. Gilles Lericolais, ECORD Facility Board Chair, presented a report of progress for the ECORD-FB from their March 2015 meeting. The information included:

- A current list of ECORD Facility Board members
- Membership and meeting issues
- A summary of Mission-Specific Platform proposals at the EFB (and their status)
- A schedule of proposed MSP expeditions through 2023 (see presentation via link below)
- A summary of MSP proposals at SEP

Dr. Sally Morgan, ECORD Science Operator (ESO) Liaison, presented a summary of ESO operations recently completed and pending for 2016:

- 2015 Expedition 357, P758, Atlantis Massif: Serpentinization and Life
- 2016 Expedition 364, P548, Chicxulub Impact Crater

And she summarized progress on upcoming/potential expeditions:

- 2018 Proposal 813-Full: Antarctic Cenozoic Paleoclimate
- 2018 Proposal 708-Full: ACEX-2 (with in-kind contributions of one or more ships)
- Not yet scheduled Proposal 637-Full2: New England Hydrogeology
- Not yet scheduled Proposal 879-Full: Gulf of Corinth

She noted that the Second ECORD Training Course was scheduled in Bremen in March, the First ECORD Petrophysics Summer School was scheduled in Leicester in June-July, and the 10th ECORD Summer School (Submarine Geohazards) was scheduled in Bremen in September.

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

2.5 Chikyu / CIB, IO Report

Center for Deep Earth Exploration (CDEX) Liaison Dr. Nobu Eguchi provided the CDEX/CIB Report, which included summaries of:

- Chikyu IODP Long-term Planning
- Chikyu IODP Expedition 365
- CIB Activities since the June 2015 SEP
 - CIB invited a Full Proposal Development Workshop proposal from 876-Pre (Bend Fault Serpentinization) proponents with a deadline of January 31, 2016
 - CIB Meeting #4 scheduled for March 23-24, 2016
- CIB Membership starting 1 April 2015

Dr. Eguchi noted that the *Chikyu* is currently docked for 10-year laboratory refit and renovation, ship repair and maintenance, and a 5-year inspection (Sept through January). He highlighted some of the more significant laboratory improvements.

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

3. Science Support Office Report

Dr. Holly Given reminded the panelists of the four tasks for which the Science Support Office is charged:

- Support the JRFB and its advisory panels
- Manage IODP proposal submission / review process
- Manage the Site Survey Data Bank
- Maintain www.iodp.org as a coordination site

And she summarized recent leadership changes in the SEP, Forum, and JRFB.

She emphasized to the meeting participants their need to be familiar with IODP proposal guidelines and policies, in particular the two IODP Confidentiality Policies, which were recently updated because of an uptick in confidentiality inquiries regarding industry data. She informed the meeting participants that their compliance with these updated policies would be gathered through the circulation of a sign in/acceptance sheet and reminded all attendees that electronic devices were not to be used to transmit or communicate SEP presentations, discussions, or results to outside parties.

Dr. Given highlighted the SSO's work on:

- Deactivating dormant (>5 years) proposals
- Revisions to the Proposal Data Base prior to the April deadline
- Request to Watchdogs for input regarding usefulness of SSDB files they are asked to review
- Coordinating with SEP, EPSP, FB chairs, Science Operators, and the SSO through an annual small group meeting associated with this January SEP

She reviewed proposal submission rates vs. Site Survey Data Bank (SSDB) file submission rates, and asked for SEP input as to how to be clearer to proponents as to what they should submit. Dr. Given wrapped up her presentation with a review of the active proposal statistics and a request for continued input from the community regarding iodp.org, PDB and SSDB, as well as their input regarding ways to increase the number of proposals submitted (using the new half-page, full-color EOS Call for Proposals ad as an example).

Dr. Marc-André Gutscher, Dr. Allan, Dr. Miller, and Dr. Koppers had a brief discussion regarding the need for more proposals and they concluded that scientists are not motivated to submit a proposal when there is a very low chance of it being awarded due to the *JR* ship track, so we may not need to keep a large number of proposals in the queue. However, it is critical that the proposals we receive are of top quality and reflect the ship track. Our current gap is in the South Atlantic, so proposals for that region are needed in the next year or two.

For more detailed information please see Dr. Given's presentation, which is posted at https://www.iodp.org/meeting-presentations.

4. The Proposal Review and Advisory Process

4.1 Review Procedures

Dr. Miller (SEP Chair) summarized the review process as follows:

- Review procedures:
 - Highlights from the SEP Terms of Reference
 - General evaluation criteria for IODP proposals and response letters

- Rating of the proposal (after external review)
- Notes regarding drilling plan review

Dr. Dave Mallinson continued the overview by providing details of Site Survey Data characterization, and Dr. Miller resumed with:

- Watch Dog (WD) preparation of proposal reviews
- Proposal Evaluation Form
- Actions for panelists with Conflicts of Interest

Dr. Miller then presented a summary of the proposals submitted for the April 1 deadline and their possible destinations, and he reminded the panelists to submit their written reports to Dr. Michiko Yamamoto.

For more detailed information, please see Dr. Miller and Dr. Mallinson's Review Procedure presentation, which is posted at https://www.iodp.org/meeting-presentations.

5. Review of Proposals

5.1 Revised proposals

The SEP began their reviews of revised Full proposals.

17:00 Meeting Adjourned for the Day

Wednesday 13 January 2015 09:00-17:00

5.1 Revised Full proposals (continued)

The SEP completed their reviews of revised proposals.

5.2 Revised APL Proposals

The SEP reviewed APL proposals.

Following the lunch break, Dr. Sean Gulick gave a short science talk, in which he presented the results of Expedition 341: Southern Alaska Margin.

5.3 Externally Reviewed Proposals

The SEP reviewed externally reviewed proposals.

5.4 Proposals with New Data

The SEP reviewed a single proposal with new data.

16:55 Meeting Adjourned for the Day

Thursday 14 January 2015 09:00-16:00

The day began with a short science talk from Dr. Richard Norris, in which he presented the results of Expedition 342: Paleogene Newfoundland Sediment Drifts.

5.5 New Pre-Proposals

The SEP completed their reviews of new Pre-proposals.

5.6 New Full Proposals

The SEP completed their reviews of new Full proposals.

5.7 New APL Proposals

The SEP completed their reviews of new APL proposals.

6. Summary of SEP reviews

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

Proposal#	Туре	Title	PI	Stage	Platform	Theme	Results
730	Full2	Sabine Bank Sea Level	Frederick Taylor	SEP	MSP	СО	EFB (excellent)
732	Full2	Antarctic Peninsula Sediment Drifts	James Channell	JRFB	JR	СО	Stay in JRFB
832	Full2	Tasman Frontier subduction	Sutherland	SEP	JR	СО	НВ
834	Add (Full2)	Agulhas Transkei Transect	Gabriele Uenzelmann-Neben	SEP	JR	EC	JRFB (good to excellent)
835	Full2	Japan Trench Tsunamigenesis	Shuichi Kodaira	SEP	NR-Chikyu	EM	External Review
846	APL2	Falkland water depth record	Victoria Peck	SEP	JR	СО	НВ
848	Full	Weddell Sea History	Michael Weber	SEP	JR	СО	Revise
871	СРР	Lord Howe Rise continental ribbon	Ron Hackney	SEP	Chikyu	EC (AII)	Revise
880	APL2	Drilling parameters for Lithology	Kyaw Moe	SEP	NR-Chikyu	n/a	Deactivate
884	CPP2	Southern Australia Cretaceous Anoxia	Simon Holford	SEP	JR	EC (CO)	Deactivate
887	CPP2	Gulf of Mexico Methane Hydrate	Peter Flemings	SEP	JR	EM	External Review
890	Pre	Walvis Ridge Hotspot	William Sager	SEP	JR	EC	Full
891	APL	Indonesian Throughflow Makassar Strait	Kyung Eun Lee	SEP	JR	СО	Deactivate
892	Full	Reykjanes Mantle Convection	Ross Parnell-Turner	SEP	JR	EC	Revise
893	APL	Taiwan arc-continent collision	Tim Byrne	SEP	JR	EC	Deactivate
894	APL	S.Pacific Quaternary paleoproductivity	Gavin Dunbar	SEP	JR	СО	Deactivate
857B	Pre	DREAM: Balearic Promontory	Johanna LOFI	SEP	JR	BF (EC)	Full

: Came back from external review : Revised

: New

: Only data

7. Schedule of Next SEP Meeting

Dr. Miller announced that the next SEP Meeting is scheduled for June 21-23, 2016 in Bremen, Germany.

8. Thanks to Members Rotating Off

Dr. Miller extended thanks on behalf of the SEP to Dr. Gabriele Uenzelmann-Neben and Dr. Ben Clennell, who are rotating off the SEP following this meeting.

Drs. Miller and Mallinson also led the meeting attendees in gaining consensus in support of the following statement:

The SEP would like to thank Dick Kroon for is service and commitment to the IODP, the PEP, and the SEP. Dick's enthusiasm for the science, and his great optimism, were infectious, and they provided a much needed stimulus to panelists during long meetings. His communication and organizational skills were a tremendous factor in the successful navigation of the muddy waters involved in the transition from PEP/SCP to the SEP, and the advancement of numerous proposals to the expedition phase. His term as chair represents a major contribution to the Earth Sciences.

11. All Other Business

Drs. Miller and Mallinson led the meeting attendees in thanking the alternates who participated in the meeting, and Dr. Mallinson led the meeting attendees in thanking Dr. Miller, the new SEP Chair, for coordinating his first, and very successful, meeting.

In addition, the SEP Co-Chairs worked with the meeting attendees to approve the following letter to Dr. Margaret Leinin in thanks of the contributions of Scripps Institution of Oceanography (SIO) and the IODP SSO to the success of this meeting:

Margaret Leinen
Director, Scripps Institution of Oceanography

January 14, 2016

Dear Margaret,

The IODP Science Evaluation Panel has enjoyed another very successful meeting in the Scripps Seaside Forum, in large part due to the hospitality and thoughtfulness of our gracious hosts, Richard Norris and Holly Given. We would like to express our gratitude to them as well as to the IODP Science Support Office Staff for coordinating this meeting with great care and consideration of our needs. In addition to conducting our panel discussions in relative luxury, we were able to take advantage of this lovely venue for a sunset tribute to Ted "Gus" Gustafson as we recognized his many years with NSF's scientific ocean drilling programs to include sailing on at least 113 drilling expeditions, one of which was DSDP Leg 1! We offer you our sincere thanks for allowing us to once again conduct our meeting at SIO in this beautiful and befitting location.

Sincerely, The IODP Science Evaluation Panel

Dr. Given reminded the group that an email would arrive shortly with the Meeting Satisfaction Survey and asked all attendees to take a few minutes to respond.

15:17 Meeting Adjourned