

SUMMARY
North Pacific Research Board – Spring Science Panel Meeting
March 28 – March 31, 2017

The Science Panel met March 28-31, 2017 at the Inn at the Market in downtown Seattle, Washington.

The meeting was attended by panel members Milo Adkison, Carin Ashjian, Colleen Duncan, Stew Grant, Melissa Haltuch, Tuula Hollmen, Patricia Livingston, Lloyd Lowry, Phil Mundy, Tom Royer, Suzann Speckman, Diana Stram, and Pat Tester. Chris Siddon joined the meeting on Wednesday for the remainder of the week. Polly Wheeler joined for part of the Wednesday discussion. Courtney Carothers and David Hill were absent. The meeting was staffed by Betsy Baker, Matt Baker, Susan Dixon, Jo-Ann Mellish, and Brendan Smith.

1. Call to Order/Approve Agenda

Science Panel Vice-Chair Tuula Hollmen opened the meeting with a round of introductions for all members of the Panel and staff present. Betsy Baker introduced two specific tasks recently added to the Science Panel agenda, both of which would be discussed later in the meeting: the Nominating Committee's request for input on this year's slate of nominees, and the Strategic Planning Working Group's request for input on panel expertise needs and size. The panel agreed to have Board Member Jan Jacobs, who chairs the working group, attend Thursday's discussion of that tasking.

The agenda for the current meeting and the fall meeting minutes were presented and approved, with the amendment to add discussion and allow for Jan Jacobs to attend the strategic planning.

MOTION: Approve current agenda with minor amendments.

MOTION: Approve minutes from fall 2016 Science Panel meeting.

MOTION: Reappoint Chris Siddon and Tuula Hollmen as Science Panel Chair and Vice-Chair, respectively.

Susan Dixon provided information on travel claim submissions.

All Science Panel members present signed a conflict of interest declaration.

2. Gulf of Alaska Integrated Ecosystem Research Program

Matt Baker provided a summary of the final stages of this program. All awards were closed in fall 2016. The final reports and the first special issue of *Deep-Sea Research II* are available on the NPRB website. A second special issue is in progress.

The Gulf of Alaska IERP synthesis group continues to have monthly calls and is currently schedule to run through early 2018. A workshop to share information on findings and facilitate synthesis was held in February 2017. The agenda and report on the workshop are provided in memo materials.

3. Arctic Program

Matt Baker presented the current activities of the Arctic Integrated Ecosystem Research Program (IERP), including a description of the funding of gap projects, communications with stakeholders, work plans, and upcoming meetings.

The Science Panel had recommended several projects to the Board in the fall of 2016 to fill observed gaps in the program. These included five additional studies covering aspects of phytoplankton, microzooplankton and fish. The new PIs have been integrated into the larger study and were included in the November 2016 planning meeting.

To date, NPRB has hosted five presentations by Arctic IERP PIs to various stakeholder groups, as well as two hub meetings (Kotzebue, Nome) and a community meeting in lieu of a hub meeting in Utqiagvik/Barrow. Hub and community meeting reports are included in the memo materials. The goal of the hub meetings is to develop a framework for communicating research throughout the process and to improve engagement.

An integrated work plan was prepared by the Arctic IERP Steering Committee that describes the scope and sampling design of the project. This document is available on the NPRB website.

Two additional meetings are currently scheduled for fall 2016 (logistics planning) and spring 2017 (annual PI meeting).

4. Internal Systems Update

Matt Baker provided an overview of the recent system updates and future planned upgrades. Over the past two years, Resource Data Inc. (RDI), Axiom Data Science and Arctic IT have been contracted. RDI has developed an updated proposal submission, peer and panel review systems. Aspects of these have been presented to the Panels as they have been developed. Overall, there has been positive feedback from both internal and external users on the efficiency of these additions. Axiom Data Science has created an online Research Workspace tool, initiated a project catalogue and have assumed data storage and review responsibilities. Arctic IT has been contracted to manage all internal hardware and computer services. Additional details on each of these services are provided in memo documents.

Due to significant personnel turnover at RDI, there were several delays and setbacks with the 2017 proposal and review cycle, however, we have engaged a senior RDI staff member to provide stability and reliability moving forward. The development of a centralized user portal has been discussed as a future addition to our online tools.

8. Other Matters

On behalf of the Board's Nominating Committee, Betsy Baker asked the panel to identify expertise gaps and consider whether to expand the panel by one or two members. The sense of the Science Panel was as follows.

- Expertise Gap: The Panel noted interest in replacing the expertise of those panelists with concluding terms but that the changing makeup of the panel necessarily means that at any given time some disciplines will not be represented. It is more important to have SP members who can think broadly and system-wide, bridging disciplines from their respective areas of expertise, than it is to fill a particular subject matter gap. The panel did not identify any such gaps.
- Panel Size: Increasing the Science Panel by no more than two members was generally seen as beneficial, both to reduce the chance of conflicts and assist in reviewing the increasing number of proposals, which is expected to grow.

On both points, the panel noted that the potential for conflicts (e.g., due to institutional affiliation) should be considered when making appointments. Regarding panel size, another possible approach would be to reduce the number of areas covered by the RFP rather than expanding Science Panel expertise or size. The current broad scope sometimes makes it difficult for the Panel to ensure available expertise within a reasonable workload.

Discussion of the separate Nominations Committee tasking regarding this year's slate of nominees was scheduled to take place on Thursday.

5. Graduate Student Research Awards (GSRA)

Jo-Ann Mellish provided a summary of the applications received in response to the 2017 GSRA solicitation. A total of 48 applications were received for consideration (20 MS, 28 PhD) by the closing date of February 10, 2017. Each application was assigned to two Science Panel members to evaluate the student's abilities and the merit of the research proposed. The Panel agreed to only discuss applicants with overall minimum rankings of two very goods, one excellent, or higher for the Master's projects, and a ranking of at least one excellent or higher for the PhD programs.

Ten Master's applications and ten Doctoral applications met these minimum criteria and were discussed. After discussion, the Science Panel recommended ten Master's and nine Doctoral applications to the Board for funding consideration. The Science Panel noted that completing the GSRA reviews prior to the Core Program proposals was a welcome change in the standard order of the agenda.

6. 2017 Core Program

Jo-Ann Mellish presented an overview of the proposals received in response to the 2017 RFP with an advertised target funding level of \$4.55 million. One hundred and forty proposals were submitted by the deadline of December 16, 2016. One proposal was disqualified due to subject matter and one proposal was withdrawn by the applicant. A total of \$32 million was requested by the one hundred and thirty-eight proposals that moved forward to peer review. A funding agreement plan is under development for potential funding partners for the 2018 cycle. The existing agreement with the Oil Spill Recovery Institute (OSRI) will remain in place for the 2017 funding cycle. OSRI met on March 24th, and reviewed eight proposals of interest. Three proposals were selected as candidates for co-funding (19, 28, 132) up to a total of \$100,000.

The full listing of proposals, conflicts of interest and review assignments were provided in the memo and supplementary materials. The discussion period was focused on the Panel presentations and summary decisions. Each proposal was given a consensus ranking of Tier 1 (excellent/very good), Tier 2 (very good/good) or Tier 3 (fair/poor/do not fund). Five of the fifteen proposals considered for Tier E were ultimately given this highest recommendation (16, 53, 121, 135, 137). The high number of exceptional proposals in the data rescue category was noted and the Panel encouraged the Board to consider extending the funding target for this category. There were also recommendations to the staff to consider minor streamlining and revisions to the Science Panel review pages and process for discussion at the fall meeting.

Table 1. Summary of 2017 Core proposal submissions.

Tier	Number of Proposals	Total Funds Requested
Tier E	5	\$1,025,536
Tier 1	40	\$8,302,644
Tier 2	58	\$13,801,328
Tier 3	35	\$8,594,836
TOTAL	138	\$31,724,345

The increasing number of proposals, reviews, and reviewer burden was discussed. Metrics presented noted that the average number of invitations required to obtain 2-3 external peer reviews for a funding cycle has increased from four to nine over the last ten years. This has been compounded by the increased number of proposals and no corresponding increase in the amount of time in the review

period. The Science Panel noted that more time will be needed in future if a similar workload is expected of both peer and panel reviewers. There is significant reviewer fatigue. Current recognition of reviewers is limited to a calendar; however, it was suggested that an option could be added to AMSS registration to allow individuals to self-identify as reviewers. This option could also be used to identify Board, Panel, Student presenters and staff as a mechanism for increasing visibility and communications at the symposium. A potential for allowing reviewers to opt in to a webpage for recognition of their effort was raised for consideration.

7. Budget Overview & Strategic Planning

Betsy Baker presented the background for the continued strategic planning exercise. Board Member Jan Jacobs joined the meeting as chair of the Strategic Planning Working Group. Matt Baker provided a summary of the prior IERPs and the history of their development. The Science Panel were asked for their input on what form and (if) future IERPs should take. If they do move forward, what types of questions should be pursued? It was noted that either a geographic or process-driven approach could be taken.

It was pointed out that IERPs have been part of the NPRB Science Plan from the very start. Various panel members commented on the value of the three IERPs undertaken to date. Possible topics proposed for a new IERP, should the Board agree to fund one, included the concept of a smaller-scale geographic focus (e.g., Cook Inlet) and a process focus such as climate change and multidisciplinary research. There was concern that the prior large-scale approach to IERPs may not always be available in the future, and that overall, the funding amount might not be appropriate at that scale. The cost of vessel time in particular was seen as a limiting factor, not only for the research, but the participating researchers. Some panel members commented that, given the anticipated decline in NPRB grant funding, the IERPs may commit too many resources (financial and people) for too long of a time and that more flexible approaches to integrated studies might be appropriate. Several members stressed the importance of integrated research to IERPs and Core research, and encouraged exploring ways to include integration in funded Core research where appropriate.

The general premise of an alternating cycle for the Core Program was endorsed, as long as the cycle did not drop to less than every other year. There was support for higher total target amounts per RFP, an extended proposal review, and RFP development period that would be facilitated by an alternating cycle.

8. Other Matters

Betsy Baker presented the status of Science panel seats to be filled due to upcoming vacancies. Three members are completing their terms in June 2017 without an option to renew (Pat Livingston, Pat Tester, Tom Royer) and one member is eligible for one year due to an incomplete first term (Stew Grant). The Nominations Committee met on March 8, 2017, and specifically tasked the Science Panel with providing feedback on: gaps in expertise, recommendations on current nominees, definition of stock assessment expertise requirements, and potential for expansion of the size of the Panel. These more general issues were discussed earlier in the meeting.

The full application packages for each of the fifteen nominees to the 2017 request were provided in the memo documents. Each nominee was discussed briefly and put into context of the overall needs of the upcoming panel vacancies.

9. Communications & Outreach

Brendan Smith provided an update on Communications and Outreach activities. Researchers submitting proposals for the Core Program had the option to submit a companion Outreach proposal that could be

funded for up to \$15,000, or to include a standard outreach approach without separate funding. Outreach proposals were mandatory for research proposals dealing with coastal communities. There was some discussion about the boundary and application of this requirement for the 2018 funding cycle.

A total of forty-four Outreach proposals were submitted. The proposals were presented to the Science Panel as a compiled pdf on their individual review pages and online agenda. At the completion of the Core Program Tier ranking discussion, panelists were requested to read the companion proposals for all Tier 2 and higher ranked proposals. Assignments were to mirror those of the Core Program. Each Primary and Secondary panel reviewer were then asked to prepare for the following day to provide a summary of the proposal, and nomination for a flag (positive) or no flag (neutral) status. They were asked to consider if the proposal presented merely adequate or standard approaches, or if the outreach was innovative or particularly relevant. The Panel were reminded that all research proposals incorporated a standard outreach option that would serve as a fallback for any outreach proposal that was not chosen for funding. Eighteen companion outreach proposals were flagged by the Panel for further consideration. The Science Panel noted that they appreciated the changes to the program and found the separation of research and outreach review to be beneficial. A total of \$80,000 is targeted for this program.

Additional updates on the website redesign, spotlight program, 2017 calendar, Arctic communications, Alaska Marine Science Symposium, and customer relationship management were provided. The streamlined version of the biennial report was well received and the Panel appreciated the new layout. Panelists were given the opportunity to vote on Photo Contest submissions. The highest ranked photos were, in order of first to third: #16 sea lions, #6 astrophotography, #11 kelp forest. Project press highlights can be referenced in the memo.

10. Science Plan Update

Matt Baker presented the history and justification for the ongoing Science Plan update. Recent efforts were summarized, including the fall panel and Board decisions, along with a report of the external review committee meeting in January. There was some concern that there were still several larger outstanding issues (e.g., research categories, IERP vs. no IERP) that had yet to be resolved such that significant effort at this meeting might not be warranted. There was general comment that fewer, broader topics for RFPs could allow more flexibility, although there was not a full consensus on what those categories should look like. The Panel pointed to NPRB's legislative mandate "to provide grants to ... conduct research activities on or relating to the fisheries **or** marine ecosystems", and emphasized the importance of the second "or" (in bold above). The Panel expressed strong concern that the mission component of basic science should not be masked by the fisheries management component. It was noted that the recommendations of the ERC tended to heavily favor management based issues, which may be a consequence of the makeup of the committee.

A new timeline for the update was proposed, including review of some plan sections by the Panel prior to the fall meeting.

11. Partnerships in the Core Program

Matt Baker provided an update on the progress of establishing new partnerships for funding within the Core Program (e.g., separate from the development of IERP partners). Three entities in addition to OSRI have approached NPRB, and therefore we are developing a standard protocol to ensure consistency. The Panel was asked for their recommendations on how to move forward in general with pursuing funding partners. It was noted that a minimum funding level and time commitment should be established. There was concern that the addition of partners could influence the direction of the

research. Overall, there were several concerns with the concept but they were willing to move forward with caution.

Betsy Baker thanked the Panel and staff for their efforts. A plaque was presented to each of the outgoing members (Pat Livingston, Tom Royer and Pat Tester) as a token of appreciation.