

National Science Foundation
Directorate for Biological Sciences

Advisory Committee Meeting
April 2-3, 2018
Room 2030

Summary Minutes

BIO Advisory Committee Members in Attendance:

Dr. Stephanie Hampton (Chair)	Dr. Carla Caceres	Dr. Susan Gregurick
Dr. Richard Kuhn	Dr. Richard McCombie	Dr. Lucinda McDade
Dr. Gretchen North	Dr. Diane Pataki	Dr. Dominic Poccia

BIO Advisory Committee Members Attending via Teleconference:

Dr. Suzanne Barbour
Dr. Benjamin A. Garcia

Monday, April 2, 2018

Dr. Stephanie Hampton, Advisory Committee Chair, convened the meeting at 9:00 AM by welcoming the Advisory Committee (AC) members, National Science Foundation (NSF) staff and guests, and requesting introductions.

Dr. Brent Miller, BIO Science Advisor, reviewed the Advisory Committee Charter and the Federal Advisory Committee Act. Dr. Hampton provided an overview of AC meeting objectives and scope, and reviewed the meeting agenda.

BIO Directorate Overview – *Dr. Joanne Tornow, Acting Assistant Director for Biological Sciences*

Dr. Joanne Tornow, Acting Assistant Director for Biological Sciences, provided an overview of the BIO Directorate. Topics covered included the BIO budget, the division structure, NSF's position on sexual harassment, and four key areas of investment: the Rules of Life Big Idea, the National Ecological Observatory Network (NEON), Understanding the Brain, and Fundamental Research and Workforce Development.

Division Science Overview – *Dr. Alan Tessier, Acting Division Director, Division of Environmental Biology; Dr. Michelle Elekonich, Acting Division Director, Division of Integrative Organismal Systems; Dr. Theresa Good, Acting Division Director, Division of Molecular and Cellular Biosciences; Dr. Muriel Poston, Division Director, Division of Biological Infrastructure*

BIO Directorate Division Directors provided overviews of the scope of the research their divisions support and key scientific questions their programs seek to address.

Big Ideas and Rules of Life Panel – Dr. Joanne Tornow

Dr. Tornow introduced representatives from the six research directorates participating in the Rules of Life Big Idea:

- Dr. Jim Kurose, Assistant Director, Computer and Information Science and Engineering;
- Dr. William (Jim) Lewis, Acting Assistant Director, Education and Human Resources;
- Dr. Dawn Tilbury, Assistant Director, Engineering;
- Dr. Anne Kinney, Assistant Director, Mathematical and Physical Sciences;
- Dr. Fay Cook, Assistant Director, Social, Behavioral and Economic Sciences; and
- Dr. Richard Murray, Division Director, Division of Ocean Sciences, Geosciences.

The representatives described their Directorates' involvement in the Rules of Life Big Idea and discussed research questions of common interest to BIO and other Directorates that could serve as opportunities for present or future collaboration. The representatives and the AC also discussed challenges shared by all fields represented by the Directorates present, including workforce development and how best to leverage commonalities in shared infrastructure.

Dr. Kurose, Dr. Lewis, Dr. Tilbury, Dr. Kinney, Dr. Cook and Dr. Murray left the meeting at 2:30 PM.

Renewing NSF: Partnerships in BIO – Dr. Jim Deshler, Deputy Assistant Director, Division of Biological Infrastructure

Dr. Jim Deshler, Deputy Division Director for the Division of Biological Infrastructure, introduced the Agency Priority Goal (APG) to expand public and private partnerships as outlined in the NSF Strategic Plan, including the APG's goal statement, structure and strategies. Dr. Deshler highlighted key challenges and opportunities identified by the APG, including opportunities to expand and enhance investments in research and innovation, infrastructure and workforce development. He provided a summary of FY18 progress towards the APG goal, including an ongoing inventory of NSF partnerships.

Renewing NSF – Dr. Erwin Gianchandani, Deputy Assistant Director, Directorate for Computer and Information Science and Engineering

Dr. Erwin Gianchandani, Deputy Assistant Director for Computer and Information Science and Engineering, provided an overview of the Renewing NSF Big Idea, including its origin, goals, implementation strategy, and primary challenges and opportunities these activities may face. The AC provided suggestions for the Renewing NSF steering committee to consider, including use of metrics to show and measure impact, and ways to streamline merit review and partnership formation.

Dr. Hampton adjourned the meeting at 4:50 PM.

Tuesday, April 3, 2018

Dr. Hampton reconvened the meeting at 8:30 AM.

Approval of BIO AC meeting minutes – *Dr. Stephanie Hampton, AC Chair*

The summary minutes from the December 2018 BIO AC meeting were approved without corrections or comment.

BIO's Move to No Deadline – *Dr. Michelle Elekonich, Acting Division Director, Integrative Organismal Systems*

Dr. Michelle Elekonich, Acting Division Director for Integrative Organismal Systems, explained the shift to a no deadline proposal submission process that is in the process of being implemented across BIO. Dr. Elekonich outlined reasons for the change, how the new process will affect proposal preparation and submission, and the outcomes of successful pilots in the Directorate for Geosciences and BIO's Plant Genome Research Program. Core programs in IOS, Molecular and Cellular Biology (MCB) and the Division of Environmental Biology (DEB) will be affected by the shift, as well as the Research Resources cluster in the Division of Biological Infrastructure (DBI).

Future Planning: Subcommittees – *Dr. Joanne Tornow, Acting Assistant Director for Biological Sciences*

Dr. Tornow explained the roles, responsibilities and operations of subcommittees in the context of the BIO AC. She noted that while BIO may have specific asks of the AC that will require a subcommittee, she encourages the AC to consider and suggest future topics of interest or concern to the AC.

Dr. Diane Pataki left the meeting at 9:33 AM.

Subcommittees: NEON – *Dr. Roland Roberts, Program Director, Division of Biological Infrastructure*

Dr. Roland Roberts, Program Director in DBI, updated the AC on the National Ecological Observatory Network (NEON), which has nearly completed its transition to operations. Dr. Roberts requested the AC form a subcommittee to facilitate the formation of a NEON user group that would catalyze engagement with the scientific community and would advise on effective methods to evaluate community engagement and to assess whether NEON is serving the community as intended. He proposed the NEON user group meet quarterly with an interagency working group and work with the BIO AC to encourage wider engagement of ecological community through a grassroots network of users.

Dr. North moved that the AC form a NEON subcommittee as described by Dr. Roberts. Dr. McDade seconded the motion, which passed unanimously. Dr. Hampton informed the committee that a charge for the NEON subcommittee would be drafted and presented to the AC for approval later.

Dr. Diane Pataki re-entered the meeting at 10:05 AM.

Preparation for Director's Visit

The BIO AC identified priority topics for discussion for the Director's visit. Dr. Hampton assigned AC members to lead discussions on specific topics of interest.

Director's Visit – *Dr. France Córdoba, Director, NSF; Dr. Joan Ferrini-Mundy, Chief Operating Officer, NSF; and Brian Stone, Chief of Staff, NSF*

Dr. Tornow introduced NSF Director, Dr. France Córdoba; NSF Chief Operating Officer, Dr. Joan Ferrini-Mundy; and NSF Chief of Staff, Dr. Brian Stone. Dr. Córdoba thanked the AC for their service and acknowledged Dr. Tornow's first AC as Acting Assistant Director for BIO.

Dr. Córdoba provided an overview of the NSF budget and the Ten Big Ideas, including their goals and contributions to NSF's mission. Dr. Córdoba, Dr. Ferrini-Mundy and Dr. Stone addressed questions raised by the AC on topics of interest, including NSF support of graduate education, broadening participation, communicating science within the community and with the public, and partnerships.

Dr. Córdoba, Dr. Ferrini-Mundy and Dr. Stone left the meeting at 12:02 PM.

Wrap-up and Action Items – *Dr. Stephanie Hampton*

Dr. Hampton proposed the AC consider organizing an interest group on graduate education. Dr. Tornow indicated that Dr. Miller would reach out to AC members at a later date to gauge interest on topics for interest groups. Dr. Hampton reminded the AC that a charge for the NEON subcommittee would be drafted and sent to the AC for approval.

Dr. Hampton adjourned the meeting at 12:13 PM.