

National Science Foundation
Directorate for Biological Sciences

**Advisory Committee Meeting
May 24, 2019
Room 3410**

Summary Minutes

BIO Advisory Committee Members Attending via Teleconference:

Dr. Carla Cáceres (Chair)	Dr. Barbara Beltz	Dr. Thomas Daniel
Dr. Benjamin Garcia	Dr. Susan Gregurick	Dr. Paul Turner
Dr. Lucinda McDade	Dr. Gretchen North	Dr. Diane Pataki
Dr. Richard Kuhn	Dr. Maria Pelligrini	Dr. Jeannine Cavender-Bares
Dr. Suzanne E. Barbour		

BIO Advisory Committee Members Not in Attendance:

Dr. Michael Ibba

Friday, May 24, 2019

Dr. Carla Cáceres, Advisory Committee Chair, convened the meeting at 10:02 AM by welcoming the Advisory Committee (AC) members, National Science Foundation (NSF) staff and guests. She led the introduction of the AC members, including the four new members. Dr. Joanne Tornow, Assistant Director for the Biological Sciences, led introductions of the BIO senior leadership present at the meeting.

The AC unanimously approved the September 2018 and November 2018 AC meeting minutes without changes.

Dr. Cáceres provided an overview of AC meeting objectives and scope, and reviewed the meeting agenda.

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

Dr. Joanne Tornow, Assistant Director for Biological Sciences, provided an update on the state of the BIO Directorate. Topics covered included BIO senior leadership changes; updates on the budget, proposal submissions, and new solicitations and DCLs; and impacts of the government shutdown. Dr. Tornow discussed the BIO vision and new opportunities within BIO for integrative and convergence research.

Proposal Submission Update and Discussion – *Dr. Barbara Beltz, AC Liaison to Subcommittee on Proposal Submission*

Dr. Barbara Beltz, AC Liaison to the Subcommittee on Proposal Submission (SPS), briefed the BIO AC on the status of proposal submission policy and on the work of the SPS. She informed the AC that the SPS held its first meeting at NSF headquarters, provided the AC with the SPS charge and list of members, and discussed meeting outcomes. Following Dr. Beltz's update, AC members asked questions on diversity of the SPS members, how BIO compares on proposal submissions to other NSF research directorates, and the research community response to the formation of the SPS and proposal submission policies.

NEON update – Dr. Roland Roberts, Science Advisor/BIO Centers, Division of Biological Infrastructure

Dr. Roland Roberts, Science Advisor/BIO Centers in the Division of Biological Infrastructure, provided an update on the status of the National Ecological Observatory Network (NEON). Topics included an overview of NEON for new members, the observatory's completed transition to full operations, and NEON's recent and upcoming community engagement activities.

Subcommittee on NEON User Engagement Update – Dr. Jeannine Cavender-Bares, AC Liaison to Subcommittee on NEON User Engagement

Dr. Jeannine Cavender-Bares, BIO AC Liaison to the Subcommittee on NEON User Engagement, provided an update on the subcommittee. Dr. Cavender-Bares provided the AC with the subcommittee charge and roster, and a draft report on NEON User Engagement prepared by the subcommittee. Dr. Cavender-Bares read emails received from the community about NEON to the meeting attendees. She also provided an overview of the specific recommendations made in the report. The AC unanimously approved the report without changes.

Integration in Biology Discussion – Dr. Carla Cáceres, BIO AC Chair and discussion moderator

Dr. Carla Cáceres introduced a discussion on integration in biology, prompting AC members to consider topics such as potential opportunities and pitfalls, reasons for integrating, methods for integrating, and potential ways in which the integration of the biological subdisciplines could play out differently at different institutions. AC member Dr. Thomas Daniel and Dr. Benjamin Garcia each provided their thoughts on integration, including the administrative challenges institutions will face, the long-term scientific and training benefits of integration, the importance of considering the different subcultures of the scientific community, and the computational challenges that will be associated with integration of different biological subdisciplines. The discussion was opened to the rest of the AC. Topics highlighted include possible mechanisms by which BIO can support integration, the importance of interagency cooperation and barriers to successful collaboration, and training opportunities.

Preparation for Director's Visit

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

Director's Visit – Dr. France Córdoba, Director, NSF; Brian Stone, Chief of Staff, NSF; Dr. Fleming Crim, Chief Operating Officer, NSF

Dr. Tornow introduced NSF Director, Dr. France Córdova, NSF Chief of Staff, Brian Stone, and NSF Chief Operating Officer Dr. Fleming Crim. Dr. Córdova thanked the AC for their service and updated the AC on the state of the agency. The AC updated the Director on their conversations at this meeting, including updates from the BIO subcommittees and their discussion on how BIO could stimulate the re-integration of biology. Dr. Córdova emphasized the importance of the subcommittees' work to engage with the research community, as well as that of partnerships, and that diversity and inclusion permeate conversations in all programs and processes at NSF.

Committee on Equal Opportunities in Science and Engineering Update – Dr. Suzanne Barbour, AC Liaison to NSF CEOSE

Dr. Suzanne Barbour, BIO AC liaison to the NSF Committee on Equal Opportunities in Science and Engineering, reminded the AC of the Committee on Equal Opportunities in Science and Engineering (CEOSE) charge, and provided an update on recent CEOSE activities, including an upcoming report on broadening participation in place-based research. She reviewed the topics of previous year's reports and outlined the major recommendations of the upcoming report. Dr. Barbour and Dr. Cavender-Bares emphasized the opportunities for NEON involvement in these activities.

Advisory Committee for Environmental Research and Education Update – Dr. Diane Pataki, AC Liaison to AC-ERE

Dr. Diane Pataki, BIO AC liaison to the Advisory Committee for Environmental Research and Education (AC-ERE), provided an update on the AC-ERE. She indicated that the AC-ERE had a short meeting in the spring with no updates to report and is preparing a report on environmental security.

BIO Responses to COV Reports – Dr. Alan Tessier, Deputy Assistant Director for Biological Sciences

Dr. Alan Tessier provided the AC with the BIO responses to the Division of Molecular and Cellular Biology and Division of Integrative Organismal Systems Committee of Visitor (COV) reports presented to the AC at its September 2018 meeting. He indicated that both reports were positive, and that the NSF Office of the Director would be made aware of any suggestions that BIO could not act on directly.

Wrap-up and Action Items – Dr. Alan Tessier, Deputy Assistant Director for Biological Sciences

Dr. Tornow requested the AC consider topics of interest for the next AC, including any other directorates or offices at NSF that they would like to present at the next meeting. The AC indicated they would be interested in a briefing of recent Understanding the Rules of Life activities, a follow-up conversation on Integration Institutes, a discussion of the National Academy of Science Report on Reproducibility and Replicability in Science, and a joint meeting with the AC for the NSF Office of Advanced Cyberinfrastructure.

Dr. Cáceres adjourned the meeting at 3:37 PM.