

Terms of Reference
Science Advisory Board of the Ice Drilling Program

Purpose:

The Science Advisory Board (SAB) of the Ice Drilling Program (IDP) provides guidance to the IDP to ensure that science goals of the U.S. science community are reflected in IDP plans for drilling in support of NSF-funded science. Specifically, the SAB will:

- Lead the working groups to communicate with the U.S. science community and identify current and new areas of research that require the use of existing drilling equipment and/or the development of new drilling technologies.
- Synthesize and articulate the visions and requirements of the community to the IDP and to NSF through SAB and community input to the IDP Long Range Science Plan. This publicly available document, which includes a prioritized 10-year planning matrix, will be updated annually. Updates and news will be communicated to the community through this document, the IDP Icedrill.news listserve, and the IDP website (<http://icedrill.org>).
- Provide comments and guidance to the IDP on meeting U.S. community goals for drilling in support of NSF-funded science, and when needed, provide feedback concerning the IDP activities and responses to community goals.

Membership and Responsibilities:

The SAB consists of seven active U.S. scientists and engineers with expertise covering the range of U.S. scientific activities that require scientific ice drilling. SAB members will typically serve one term of four years, although occasionally durations may vary by a year or two. No more than three members shall rotate off the board in a given year.

New SAB members:

New members shall be U.S. scientists who need samples from within or beneath glaciers and ice sheets for their science. Preference for new SAB members will be given considering balance across IDP Working Group disciplines, and include active members of IDP Working Groups who have not served on the SAB as possible and necessary to maintain balance. The SAB will not have members who have been employed by IDP in the past 10 years. The SAB will advertise for new members from the U.S. community. The SAB will discuss the slate of nominees and will come to consensus on new SAB members with consideration of nominee commitment, experience and expertise. SAB membership rotations occur each year in the early fall, or at another time if a member becomes unable to serve.

SAB Chair:

The SAB will elect a Chairperson from the Science Advisory Board, who will serve for two years. For election of a new Chair, the current SAB Chair will solicit nominees from current SAB members and will discuss the possibility with identified nominees, in order to determine that at least one nominee would be willing to serve as Chair. Nominated candidates for Chair must have served as a member of the SAB for at least one year, either currently or previously. The Chair will give the slate of willing nominees to the IDP Executive Director, who will send the list of willing nominees to current SAB members and ask them to vote. The nominee with the most votes will be the new SAB Chair. Election of the new Chair should occur in the winter.

Meetings:

The SAB will hold a minimum of two meetings per year. The meetings will primarily be virtual. One meeting will be held in the spring and typically last one day. A second short 1-2 hour virtual meeting will be held in the fall. The purpose of the meetings is to ensure that science goals of the U.S. science community are reflected in IDP plans for drilling in support of NSF-funded science, that the annual actions of IDP are in accordance with NSF and community priorities subject to availability of funding, and that the IDP Working Groups are effectively representing the U.S. science community to identify current and new areas of research that require the use of existing drilling equipment and/or the development of new drilling technologies. If a SAB member cannot attend, a U.S. scientist who is a member of an IDP Working Group and who is approved by the SAB may attend. The Chairperson, in consultation with Board members and the IDP Executive Director, will determine the meeting agenda. The Chair will communicate with the IDP throughout the year, and convene additional SAB virtual meetings as needed.

Working Groups:

The IDP-SAB will establish working groups as needed to provide scientific coordination among various scientific communities whose science depends on ice drilling. These may be standing groups or task forces intended to work on a specific issue for a limited period of time. Currently the IDP supports two working groups: the Ice Core Working Group (IDP-ICWG), and the Englacial and Subglacial Access Working Group (IDP-ESAWG). Each working group will have at least one active member who is on the SAB to facilitate liaison between the Working Group and the SAB. The working groups provide for the engagement of specialists and community members from outside the Board to provide input to the SAB and IDP, and to provide information exchange and discussion of future scientific endeavors within membership of the working group. Each working group will help cultivate new community leadership for future positions on the SAB. At annual SAB meetings, the SAB will review and identify evolving working group structure and activities.