

Bioconductor Mission and Technical Advisory Board Purpose

The *Bioconductor* mission is to promote the statistical analysis and comprehension of current and emerging high-throughput biological assays. *Bioconductor* is based on packages written primarily in the *R* programming language. *Bioconductor* is committed to open source, collaborative, distributed software development and literate, reproducible research. Enabling user and developer communities is an essential part of our mission.

The Technical Advisory Board's purpose is to support the *Bioconductor* mission by

- Developing strategies to ensure long-term technical suitability of core infrastructure for the *Bioconductor* mission. Core infrastructure includes: all aspects of package addition, management, and distribution; end-user engagement (e.g., web, support site, and slack); developer support; and development of packages for use by the broader developer community.
- Identifying and pursuing technical and scientific aspects of funding strategies for long-term viability of *Bioconductor*.

Membership

Nominations for regular members are evaluated with the following guidelines:

- From 8 to 15 members, nominated by the current Technical Advisory Board.
- Provide a broad representation of the *Bioconductor* scientific community: emerging and established researchers; biological, statistical, and computational emphases; and areas of scientific research.
- Strive for diverse representation of gender, ethnicity, geography, and other aspects of the *Bioconductor* community.
- Include PI / MPI on grants or funding sources that support *Bioconductor* infrastructure development, as well as individuals with extended contribution to the project.

Executive officers include the following positions:

- Chair. Responsible for overall board leadership, establishing meeting agendas and managing meetings, committee oversight, board conduct, board learning & development (e.g., new member recruitment; succession planning).
- Vice-chair. Provide short-term leadership in support of chair.
- Secretary. Responsible for communication of board activities, scheduling and dissemination of meeting material, collation of meeting minutes.

Procedures

Selection and terms of membership

- Members and executive officers are elected to available positions over a three-month

process, conducted annually.

- Members and executive officers are elected to a three-year renewable term.
- Members
 - Members, including renewing members, are nominated through a process that includes public solicitation of nominees (Month 1); nomination by current board members (Month 2) and supermajority approval by current board members (Month 3). The solicitation and outcome of the nomination process are intended to be transparent. Discussion is conducted private to the Technical Advisory Board. Voting is private and coordinated by the Secretary.
If the number of nominees achieving a supermajority approval exceeds the number of available positions in the Board (N), nominees will be ranked by the fraction of approval votes and the top N nominees will be elected. Ties that would lead to the number of elected nominees exceeding N will be resolved by a voting round in which each TAB member casts a vote for exactly one of these nominees, and the nominees are ranked by the number of supporting votes.
 - Initial term of current regular members is two years from establishment of this document, to facilitate rotation with incoming members.
- Executive officers
 - Executive officers are current board members nominated (Month 2) and elected by supermajority vote of board members (Month 3). Discussion and voting procedures are similar to standard membership.
 - Executive officers serve terms that provide continuity, e.g., one office filled each year.

Early termination

- Early termination is ideally obtained through mutual agreement of member and chair, e.g., due to competing obligations.
- A supermajority of board members may, in exceptional circumstances, vote to terminate board membership or executive officer position.

Board meetings

- Board meetings are scheduled for the first Thursday of each month, 12pm Eastern time or as convenient.
- The Agenda is established by the Chair in open consultation with the board. The agenda is communicated by the Secretary to Board members.
- Action items are identified during the meeting, to be executed by Board members or delegated to committees overseen by the Chair. Action items are usually identified through consensus, but may be subject to supermajority vote if consensus cannot be reached.
- Outcomes of the Board are summarized in an Annual report, prepared by Chair and approved by Board by a simple majority vote.
- Meeting summaries are communicated to board members and *Bioconductor* community in a timely fashion by the Secretary.

Quorum and voting

- Quorum is defined as one-third of current board membership
- Formal votes will be conducted by electronic means requiring a majority or two-thirds supermajority of votes cast.
- Abstentions, explicitly or because no vote is cast, are not included in vote tallies.

Executive ability

- The Technical Advisory Board recognizes that it lacks the ability to require execution of action items, and relies on the good-faith efforts of Board members for accomplishing the *Bioconductor* mission.

Changes to this document

- This document can be amended by supermajority vote of the Technical Advisory Board.

Committees and Working Groups of the Board

Committee and Working Group procedures

- Committees provide strategic guidance to the board on overarching areas of concern. Committees are defined with structured interactions (e.g., regularly scheduled meetings) and ongoing responsibility to report to the Board.
- Working groups focus on implementing specific short-term goals. Working groups exist for several months, adopting diverse approaches to accomplishing goals. Working groups typically produce a specific outcome, summarized to the Board.
- Committee and Working Group creation and leadership are determined by the chair on recommendation of the board.
- Appointment to committees and working groups is at the discretion of the Committee Chair.
- Members of committees and working groups are not required to be members of the board.
- The Chair, Committee, or Working Group members report to the Board on terms established at the time of formation, e.g., monthly progress (Committees), milestones (Committees or Working Groups), significant public actions. Communication is facilitated by the Secretary.

Existing committees

- Annual Conference (Levi Waldron, chair). Organize the *Bioconductor* 2019 annual conference.
- Emerging topics (Vincent Carey, chair). Identify and enable development of *Bioconductor* resources to facilitate exploration of emerging topics in a manner consistent with the *Bioconductor* mission.

Existing working groups

- Code of conduct (Martin Morgan, chair). Establish a code-of-conduct for the public-facing aspects of the project, e.g., support site, email listservs, slack channel, conferences.