International Brain Laboratory

Charter Governance and Policies

v0.5 (Pending approval)
2019-01-11

1. Principles

The IBL aims to develop a new model for large-scale scientific collaboration. The vision of the IBL is a collective working democratically toward a common scientific goal. It aims to operate as a much as possible as a peer-to-peer collaboration, with minimal top-down control and bureaucracy. Mechanisms for bottom-up, collective decision-making are favored whenever possible. Just-in-time decisions are preferred over pre-planning. 'Good enough for now' decisions with frequent evaluation and revision are preferred over attempted optimality that slow decision-making. Governance structures should be minimal and should be designed to avoid conflicts of interest between those administering resources and those using them. Governance structures and decision processes that follow from these principles are considered provisional and will always be periodically reviewed and evolved in order to better serve the needs and goals of the collaboration. Technological innovation is seen as a strong ingredient to enable these aims to be achieved.

2. Decision-making

The decision-making body for setting shared scientific goals and shared policies within the IBL is the GA, consisting of all IBL PIs, as specified in 7. Individual PIs remain responsible for day-to-day decisions within their laboratories and the EB and specific Working Groups are responsible for day-to-day decision-making regarding to coordinated processes. Both PIs and EB work in accordance with goals and policies set by the GA.

Decision-making within the GA is based on the principle of consent. Consent decision-making adheres to the principle of reasoned argument and equality amongst members. A proposal or other recommendation to be decided can be drafted by the GA itself, by a subsidiary body (EB or Working Group) or a specifically delegated subgroup. That proposal is presented and explained to the GA. All members of the GA have an opportunity to provide comments in the form of concerns or objections. An objection is a well-reasoned argument why the proposal would impede progress toward the goals of the collaboration. A proposal is modified using this input and is accepted once objections are resolved. Stalemates may be resolved by majority vote. The aim of this process is not optimization, but "good enough for now" solutions. An accepted proposal has a review date at which time it is evaluated and amended or revoked if

necessary. The decision-making process is structured and is led by a moderator (the Facilitator), whose role is to facilitate the process rather than to advocate their own views. The consent decision-making process is used for all policy and governance decision-making, but not necessarily for day-to-day decisions by EB and Working Groups.

The IBL aims to develop and/or test software solutions that facilitate the consent decision-making process.

3. Internal data sharing

All IBL PIs agree to make all data collected within the collaboration immediately and unconditionally available by all collaboration members. Data must not be censored or otherwise withheld by individual PIs, and consequences for withholding data, including removal from the collaboration, must be implemented. Data sharing should occur by default as a standard action of the common data pipeline. Exceptions to this rule may be made for sound scientific reasons. For example, independent replication of a particular experiment may be desired and require that one or more groups not have access to data collected by another group until their own experiment is concluded.

4. Experimental registration

In order to maximize transparency and thereby minimize unnecessary duplication of work and undesirable competition, in addition to sharing data, all IBL PIs agree to share experimental plans by registering experiments being performed. This policy is intended to help facilitate communication within the collaboration and to thereby maximize the possibility for mutual cooperation. This policy does *not* entail that choice of experiments is centrally coordinated or that PIs must avoid duplication of effort. It only entails that the information on who is doing what is available within the collaboration. Unless otherwise decided, it would remain the decision of each investigator whether to pursue any particular experiment, regardless of whether it was already registered. The only thing prevented by the policy is pursuing non-registered experiments. Also note that registration does not imply anti-competition. Duplication of experiments may in fact be very useful. For example, members may organize deliberate contests in order to provide motivation and optimize crucial parts. It is likely that arranged independent experiments by different labs will also be important for addressing issues of replicability. Repurposing experiments or data for use outside the collaboration would be a violation of spirit and principle of the collaboration.

5. Methods and reagent sharing

IBL PIs agree to share all methods and reagents used in IBL experiments to all other PIs within the collaboration. The IBL will implement methods to facilitate the transmission not only of data but of process knowledge across labs. This is essential not only to allow for experimental replication across the collaboration but to maximize efficiency. By ensuring that the best

possible methods for data collection, data analysis and the production of tools and other reagents are available to be used throughout the collaboration the effectiveness of the entire team is maximized. The IBL aims to provide databases, tools for tracking development and tools for benchmarking of methods.

6. Management structures & positions

6.1. General Assembly (GA)

6.1.1. *Membership:* The General Assembly consists of all the Principal Investigators participating in the collaboration. The GA selects its own members. A selection process is to be specified. Term and process for revoking membership to be reviewed.

6.1.2. *Meetings:* The GA agrees to meet physically at least 1 time per year and to attend online meetings and participate in online forums (e.g. Slack).

6.1.3. *Responsibilities:* Members are expected to devote a substantial portion of their time (~25%) to the collaboration.

6.1.4. *Functions:* All decisions about scientific goals and policies are made by the GA.

6.1.4.1. The GA elects the members of the Executive Board.

6.1.4.2. GA proposes members of the Advisory Board.

6.2. Executive Board (EB)

The Executive Board is the management team elected by the GA to facilitate the execution of scientific goals according to principles decided by the GA. The EB has the responsibility to globally overview all aspects of the IBL and to react appropriately. The EB will initially consist of a Facilitator, a Spokesperson, a Resource Coordinator and additional members who coordinate different Working Groups. EB members are elected by the GA to a fixed renewable term and report to the GA.

6.2.1. *Facilitator:* The Facilitator's role is to forge consensus, acting as moderator of online and physical EB and GA meetings. The Facilitator has the responsibility to ensure that meetings are carried out effectively, that decision-making processes are respected and decisions reviewed, that communication processes and other software tools are working as well as possible. The Facilitator also liaises with the SAB.

6.2.2. *Spokesperson:* The role of the Spokesperson is to represent the IBL with respect to funding agencies and other outside bodies.

6.2.3. *Resource Coordinator:* The Resource Coordinator is responsible for overall resource planning and manages the IBL common budget (funds allocated to general programs rather than to specific labs).

6.2.4. Additional EB members are the Heads of other Working Groups to be established and evolved. Example Working Groups:

6.2.4.1. Behavioural Task Design

6.2.4.2. Data Sharing

6.2.4.3. Publication Policy

6.3. Scientific Advisory Board (SAB)

The SAB is an independent body responsible for the reviewing the overall progress of the IBL toward its objectives. Thus, the SAB assesses progress toward the goals of the collaboration set by the GA. It is also responsible for the regular evaluation of contribution of individual members and other programs to the collaboration goals.

6.3.1. *Membership*:

6.3.1.1. SAB members are proposed by the GA and approved by the RC.

6.3.1.2. SAB members serve a fixed renewal term of N years.

6.3.1.3. To minimize potential conflict of interest, members of the SAB cannot be working members of the collaboration and do not receive funds from the IBL.

6.3.2. *Responsibilities*: The SAB meets physically at least 1/year and is responsible for preparing an annual written report.

6.3.3. *Functions*: The SAB reviews progress of the IBL towards its common scientific goals and assesses the contributions of individual PIs, the effectiveness of the EB, and the value of other IBL Working Groups to those goals. It reports to the GA.

6.4. Resource Council (RC)

6.4.1. *Membership*: The RC consists of members of the EB and Funding Bodies.

6.4.2. *Responsibilities*: The RC meets X/yr, oversees the distributions of resources.

6.4.3. *Functions*: The RC decides the distribution of resources according to recommendations by the SAB as approved by the GA.

Approved policies

1. Authorship and Credit Assignment Policy

IBL Authorship and Credit Assignment Policy v0.4
https://drive.google.com/open?id=12aO6iFHtRsw7WzYhudQZ5VD52ZjQgfHe

2. Decision Process

Decision process v0.1
https://drive.google.com/open?id=1HU1Ov9U207i5KIfdBu3eurATMP3jAA2o