NSF ENGINEERING RESEARCH CENTER FOR ADVANCED TECHNOLOGY FOR THE PRESERVATION OF BIOLOGICAL SYSTEMS (NSF ATP-Bio)

CENTER BYLAWS

The NSF Engineering Research Center for Advanced Technology for the Preservation of Biological Systems (referred to hereinafter as "NSF ATP-Bio " or "Center") has been established to overcome the core obstacles to biopreservation and accelerate the development and translation of biopreservation technologies. This project enables biopreservation, i.e. "stopped biological time," to preserve biological systems across the entire spectrum of complexity– cells, tissues, organs, and even some whole organisms. It involves banking of life-saving organs and tissues for transplantation, shipping therapeutic cells around the world, expansion of human cells and tissues available for drug research, and storing germplasm and whole organisms to preserve biodiversity and support aquaculture, among other applications. NSF ATP-Bio is responsible for crucial scientific contributions to cryobiology of biological systems, nanoscience/nanotechnology, thermodynamics of water in heterogeneous biological systems, computational chemistry, and many other fields. NSF ATP-Bio aims to develop the diverse workforce needed for rapidly growing biopreservation industries and to integrate the technologies into society through robust ethical and regulatory engagement, outreach, internships, sponsored research, and training opportunities. NSF ATP-Bio is supported in part by the National Science Foundation (NSF) through award number: EEC-1941543 (the "NSF Contract").

1. Center Constituency

1.1. Academic Members

1.1.1. Core Academic Members. The Core Academic Members are the University of Minnesota as the lead institution and core partner institutions: Massachusetts General Hospital (MGH), the University of California-Riverside (UCR), and Texas A&M University (TAMU). Each of the Core Academic Members provide key research resources, a significant level of cost share, and educational and outreach resources. The Dean of each College of Engineering at the Core Academic Members (or equivalent) will have a seat on the Council of Deans and have a key role in setting the vision and strategy for the Center.

1.1.1.1. Additional institutions may be added to the Core Academic Members as nominated by Center Leadership in consultation with the Executive Committee with ultimate approval as needed by the Council of Deans.

1.1.1.1.1 Center Leadership is composed of the Director, Deputy Director and Administrative Director who are in charge of the overall direction of the center. While decision making is participatory, the final decisions are the responsibility of the Director who is ultimately accountable to the NSF. In the event the Director is temporarily unable to discharge this responsibility in a timely way, the Deputy Director will act on behalf of the Director, with prompt notification to both the Director and Administrative Director

1.1.1.2 Core Academic Members may be removed from NSF ATP-Bio upon recommendation of the Center Leadership and approval by the Council of Deans. 1.1.2. Non-Core Academic Members. Carnegie Mellon University and the University of California-Berkeley (UCB). Non-Core Academic Members provide crucial technical expertise that complements the Core Academic Members and may offer educational programs, industrial networks, and other resources that would strengthen the Center's mission.

1.1.2.1. Non-Core Academic Members may be added by invitation and nomination from the Center Leadership and approval from the Executive Committee.

1.1.2.2. Non-Core Academic Members may be removed from NSF ATP-Bio upon recommendation of the Center Leadership and approval by the Council of Deans.

1.2. Industry Members. NSF ATP-Bio industry membership is open to all for-profit or non-profit corporations, foundations, government agencies, federally funded research and development

corporations (FFRDCs), and government-owned contractor-operated laboratories (all herein referred to as NSF ATP-Bio Member Partners). NSF ATP-Bio Member Partner membership is also open to international for-profit and non-profit corporations, including those without a US affiliate, subject to applicable U.S. laws and approval by University of Minnesota's Export Control office. NSF ATP-Bio Member Partner Industry membership entitles NSF ATP-Bio Member Partners to a seat and/or participation in the Industry Advisory Board (IAB) as described below. The IAB advises the Center leadership on strategy, research road-mapping, intellectual property management, education/training, and other topics. Notwithstanding anything to the contrary contained herein, all membership benefits are explicitly conditioned on full and timely compliance with all applicable U.S. laws and regulations.

1.2.1. There are three classes of NSF ATP-Bio Member Partner Industry membership: Sustaining, Full, and Associate. Sustaining is the top-tier of membership; Full the mid-tier, and Associate the lowest tier. Rights and responsibilities of each membership tier are outlined in 1.2.1.1 through section 1.2.1.3 below.

1.2.1.1. Sustaining NSF ATP-Bio Member Partner. The annual membership fee for a Sustaining member is $50,000. Membership entitles an NSF ATP-Bio Member Partners to one seat on the IAB. An NSF ATP-Bio Member Partners may elect to have more than one Sustaining membership, but no company may hold more than three seats on the IAB. Each Sustaining member seat on the IAB is assigned four full votes on any voting matters that come before the IAB.

1.2.1.1.1. Any Sustaining member is eligible to serve as the Chair of the IAB and can participate and serve as the Chair of any IAB sub-committee.

1.2.1.2. Full NSF ATP-Bio Member Partners. The annual membership fee for a Full member is $25,000. Membership entitles an NSF ATP-Bio Member Partners to one seat on the IAB. An NSF ATP-Bio Member Partners may elect to have more than one, but voting memberships are capped at three Full memberships, and each additional Full membership would entitle the company to have an additional seat on the IAB. Each Full member seat on the IAB is assigned two full votes on any voting matters that come before the IAB.

1.2.1.2.1. Any Full member can participate and serve as the Chair of any IAB sub-committee.

1.2.1.3. Associate NSF ATP-Bio Member Partners. The annual membership fee for a Full member is $1,000. Membership entitles an NSF ATP-Bio Member Partners to have one representative participate in IAB discussions. An Associate member has no voting rights on the IAB, nor can the member chair any IAB committee or sub-committee.

1.2.1.3.1. An Associate member can participate on any IAB sub-committee.

1.2.2. Benefits of Industry membership in NSF ATP-Bio are outlined in ATTACHMENT A.

1.2.3. The Center operates on a September 1 to August 31st fiscal year. Initial NSF ATP-Bio Partner membership will be prorated for the balance of the existing fiscal year, with membership continuing thereafter on an annual basis corresponding with the Center's fiscal year. NSF ATP-Bio Member Partners membership fees for subsequent years are due on the first day of the new fiscal year. The membership continues by default in subsequent years unless a Company decides to terminate membership by giving the Center 90-day written notice prior to the termination date.

1.2.4. All or part of the annual industry membership fee may be paid in-kind on a case-by-case basis subject to the approval of the NSF ATP-Bio Director, Deputy Director, and SPI Director.

1.3. Non-Profit/Government Members. NSF ATP-Bio Non-Profit/Government membership is open to all non-profit corporations, foundations, government agencies, federally funded research and development corporations (FFRDCs), and government-owned contractor-operated laboratories (all herein referred to as NSF ATP-Bio Member Partners). NSF ATP-Bio Member Partners Non-Profit/Government membership is also open to international non-profit corporations,

including those without a US affiliate, subject to applicable U.S. laws. NSF ATP-Bio Member Partners Non-Profit/Government membership entitle NSF ATP-Bio Member Partners to participation in the Industry Advisory Board (IAB) as described below. The IAB will advise the Center leadership on strategy, research road-mapping, intellectual property management, education/training, and other topics. Notwithstanding anything to the contrary contained herein, all membership benefits are explicitly conditioned on full and timely compliance with all applicable U.S. laws and regulations.

1.3.1.1. Non-Profit/Government Membership entitles an NSF ATP-Bio Member Partners to have one representative participate in IAB discussions. A Non-Profit/Government member has no voting rights on the IAB, nor can the member chair any IAB committee or sub-committee.

1.3.1.2. There is no annual fee associated with Non-Profit/Government Membership, however, Non-Profit/Government members are encouraged to make in kind or other meaningful contributions.

1.3.1.3. Benefits of Non-Profit/Government Membership in NSF ATP-Bio are outlined in ATTACHMENT A.

1.4. Innovation Members. NSF ATP-Bio innovation membership is open to all for-profit or non-profit corporations, foundations, government agencies, federally funded research and development corporations (FFRDCs), and government-owned contractor-operated laboratories (all herein referred to as NSF ATP-Bio Member Partners). NSF ATP-Bio Member Partners Innovation membership is also open to international for-profit or non-profit corporations, including those without a US affiliate, subject to applicable U.S. laws. NSF ATP-Bio Member Partners innovation membership does not entitle NSF ATP-Bio Member Partners to participation in the Industry Advisory Board (IAB), unless invited to do so by the IAB. Notwithstanding anything to the contrary contained herein, all membership benefits are explicitly conditioned on full and timely compliance with all applicable U.S. laws and regulations.

1.4.1.1. There is no annual fee associated with Innovation Membership, however, innovation members are encouraged to make in kind or other meaningful contributions to NSF ATP-Bio.

1.4.1.2. Benefits of Innovation Membership in NSF ATP-Bio are outlined in ATTACHMENT A.

1.5. Organizations may become NSF ATP-Bio Member Partners upon approval from the Center Leadership and Strategic Partner & Innovation Director.

1.6. NSF ATP-Bio academic and NSF ATP-Bio Member Partners Members (i.e., Industry, Non-Profit/Government, and Innovation Members) shall be governed by these Bylaws. These Bylaws and the NSF ATP-Bio Membership Agreements are the full governing documents for Members.

2. Organizational Structure

2.1. The organizational structure of NSF ATP-Bio consists of Center Leadership, Pillar, Component, and Thrusts Leadership, Advisory Boards, and various committees or panels to manage the organizational infrastructure. The organizational structure of NSF ATP-Bio is shown in ATTACHMENT B.

2.1.1. Center Leadership: Center Director, Deputy Director, and Administrative Director. The Director in consultation with the Deputy Director and Administrative Director is responsible for the overall activities of NSF ATP-Bio, including financial and personnel resources, technology licensing and transfer, workshops and symposia, mentoring and education, space, and research. The Director reports to the Council of Deans. The initial Director is Prof. John Bischof of the University of Minnesota and the initial Deputy Director is Prof. Mehmet Toner of MGH, both of whom will continue to serve in that capacity at the discretion of the Council of Deans.

2.1.1.1 If the Director is temporarily unable to carry out his or her duties, the Deputy Director will become the Acting Director until the Director is able to resume his or

her duties.

2.1.1.2. The Council of Deans may select a replacement for the Director from University of Minnesota faculty within NSF guidelines and pending final approval by NSF.

2.1.1.3. The Center Leadership is assisted by support staff.

2.1.2 The Center Leadership is advised by the following Advisory Boards: an Industrial Advisory Board (IAB), a Scientific Advisory Board (SAB), an Engineering Workforce Development Advisory Board (EWD AB), an Diversity and Culture of Inclusion Advisory Board (DCI-AB), and a Student Leadership Council (SLC).

2.1.3. An Executive Committee, which represents various leadership roles and functions provides guidance to Center Leadership (see 3.2 below).

2.3. The **Scientific Research** Pillar is led by the Research Pillar Director, supported by the Research Program Manager, with oversight by Center Leadership. .

2.4. The **Innovation Ecosystem** Pillar is led by the Strategic Partner & Innovation (SPI) Director with the objective of executing effective commercialization for the output of research and a Member Partners membership program.

2.5. The **Engineering Workforce Development** (EWD) Pillar is led by the EWD Director(s) to initiate and manage programs in engineering education development and assessment at the pre-college, community college, undergraduate, graduate, postdoctoral, and practitioner levels. Efforts also include research, policies, and procedures that support a welcoming and supportive organization to all Center members and program participants.

2.6. The **Ethics and Public Policy** (EPP) component performs analyses to contribute to the conduct of NSF ATP-Bio research, technology development, and deployment in a way that is cognizant of ethical, legal, and societal implications (ELSI). EPP will pioneer ELSI analysis and offer exposure to ELSI methods and outputs for NSF ATP-Bio investigators and trainees.

2.7. **Evaluation**. The External Evaluator takes direction from Center Leadership and reports findings to the Center Leadership and the Executive Committee. The Evaluator manages all aspects of the Center's ongoing assessment, including formal reports for both internal use and to meet NSF and other external requirements.

2.8 **Integration**. The Integration Director takes direction from Center Leadership and reports findings to the Center Leadership and the Executive Committee. The Integration Director observes the Center's barriers to integration by utilizing external evaluation data and mechanisms. The Integration Director consults with the Integration Committee.

3. **NSF ATP-Bio Leadership Teams**

3.1. NSF ATP-Bio has an Administrative and Operations Team (AOT), responsible for the day-to-day operations..

3.2. NSF ATP-Bio Executive Committee (EC) consists of the following role-based voting members: all Center, Pillar, and Component Directors, TA and/or TB Leads, Site Leaders from all core institutions that are not already represented by that list, with non-voting participants as named by Center Leadership (3.2.3).

3.2.1. The EC serves as an advisory body providing strategic review and counsel to the Center Leadership. The responsibilities of the EC:

- Review the Center mission, vision, and strategy
- Advise Center Leadership on matters pertaining to the Center
- Enable communication and provide input across Center pillars, components, and programs
- Perform functions as laid out in these By-laws
- Review and amend the By-laws

3.2.2. EC members vote on matters as stated below:

3.2.2.1. Each EC member has one vote. A quorum, defined as two-thirds of EC members,

must participate in a vote. EC voting results shall follow majority rules to approve a motion.

3.2.2.2. An exception to this rule pertains to the Center By-laws as explained in Section 12.

3.2.3. Non-voting EC participants include programmatic and administrative staff, SLC representatives, the external evaluator, and other members named by Center Leadership.

3.3. NSF ATP-Bio has an Integration Committee led by the Integration Director and members as determined by the IC Chair. The Integration Committee reports to Center Leadership. The Integration Committee will provide data to NSF ATP-Bio team leads to help enable the integration of efforts related to specific goals in each pillar, and develop measurement tools and assess outcomes with the external evaluator.

3.4. The EWD Director(s) develops and manages a cross-institutional leadership team that develops and executes the NSF ATP-Bio EWD agenda..

3.5. 3.6. The EPP Director and Co-Director manage an EPP team to develop and execute the NSF ATP-Bio EPP agenda. EPP incorporates an Ethics and Public Policy Panel (EP3).

4. Conflict Resolution. Conflicts pertaining to the Center will be resolved by the Center Leadership. If the Center Leadership cannot address a conflict, disagree on how to resolve a conflict, or develop an irresolvable conflict between themselves, the matter will be referred to the Council of Deans . In the very unlikely event that the Council of Deans is unable to resolve the conflict, we will request input from NSF Program Officials to resolve the issues.

5. **Advisory Boards**

5.1. Industrial Advisory Board (IAB). The IAB acts as an advisory body providing strategic review and counsel to Center Leadership on the research activities of the Center. It meets at least semi-annually to review the NSF ATP-Bio 's research programs and mechanisms for technology transfer, as well as assignments for action, disposition, and recommendations of IAB sub-committees. Specifically, the IAB will:

- Elect an IAB Chair who will serve a two-year term and coordinate the IAB meetings. A Vice-Chair will also be elected who will fill in for the Chair in case of absence and will become the Chair at the end of his/her term. The former IAB Chair will assume a “Past Chair” position to ensure continued engagement. Elections shall occur at the Annual meeting or as required to fill vacancies.
- Create and maintain a set of operating guidelines.
- Form sub-committees as necessary to advise the Center.
- Review annual reports from the Center.
- Make recommendations based on all tiers of NSF ATP-Bio Member Partners membership.
- Review Core Research and Seed Project Research and recommend priorities and adjustments to research direction. Attend Annual Meetings and NSF Site Visits and provide feedback on progress reports.
- Prepare a Strengths-Weaknesses-Opportunities-Threats (SWOT) analysis and present it in an annual review with the NSF site visit team.
- Advise on use of funds associated with membership fees. Such use may be for seed project funding, student fellowships, creation of a patent protection fund, and other topics deemed appropriate by the IAB.

5.1.1. Voting Rights. Sustaining and Full NSF ATP-Bio Member Partners members are considered voting members with Sustaining members having 4 votes per membership and Full members having 2 votes per membership. Associate and Non-Profit/Government members can participate in IAB meetings, but will not have voting rights. Innovation members may
participate in IAB meetings only at the invitation of the IAB.

5.1.2. The IAB and all NSF ATP-Bio Member Partners are expected to conduct themselves in accordance with section 6.

5.2. Scientific Advisory Board (SAB). The SAB provides independent external peer evaluation and assessment of scientific research conducted by the Center. The SAB members consist of individuals from organizations that are not Members of NSF ATP-Bio but with knowledge of the topic and ability to devote sufficient attention to ensure a rigorous scientific research agenda. The SAB appointment is made by invitation from the Center Leadership. The SAB convenes at least once per year to evaluate the Center's research direction. The SAB is expected to conduct themselves with confidentiality in regards to the pre-published research of the Center.

5.3. Ethics and Public Policy Panel (EP3). The EP3 is made up of ethics and public policy experts chosen by the Ethics and Public Policy Leadand Co-Lead. The EP3 convenes according to EPP goals and milestones. .

5.4. Engineering Workforce Development Advisory Board. The EWDAdvisory Board includes members from K-12 partner sites, university faculty or staff members from Core Institutions, and others as chosen by the EWD leadership. The EWD Advisory Board convenes according to the AB charter.

5.5. Scholar Leadership Council (SLC). The SLC is a Center-wide body that provides review and counsel to the Director and the Administrative Team on (a) student involvement in Center programs; (b) the NSF ATP-Bio strategic plan and (c) collaboration among the Center Members. The members of the SLC are elected from among all trainees participating in Center research, including undergraduates, graduate students, postdocs, and professional students. The SLC convenes as needed to conduct business relevant to student research and educational outreach and report at the annual site visit. The chair and vice chair of the SLC serve as non-voting members of the Executive Committee.

6. Confidentiality Policy

6.1. For the purpose of Sections 4 herein, the following terms shall have the following meanings:

6.1.1. **"Disclosing Party"** means an academic Member or NSF ATP-Bio Member Partners, its employees, faculty, staff and students, furnishing Confidential Information.

6.1.2. **"Receiving Party"** means an academic Member or NSF ATP-Bio Member Partners, its employees, faculty, staff and students, receiving Confidential Information.

6.2. For the purpose of this Article, **"Confidential Information"** includes, but is not limited to, all technical, corporate, financial, economic, legal or other information or knowledge generally concerning a Member or any of its affiliates, whether disclosed orally, or in the form of written material, computer data or programs, and including information respecting models, mechanisms, processes, photographs, intellectual property, inventions, invention disclosures, know-how, or otherwise, howsoever obtained, and which is clearly and obviously identified as confidential in writing at the time of disclosure by an appropriate legend, marking, stamp or other positive written identification on the face of the document or item, or if oral, which is confirmed as confidential by a writing submitted by the Disclosing Party to the Receiving Party within thirty (30) days of the disclosure except information that:

- is non-confidential under the NSF ATP-Bio Data Management Policy and Plan;
- is disclosed lawfully to the Receiving Party by a third party who has no obligation of confidentiality to the Disclosing Party with respect to the disclosed information;
- is, or becomes, generally known to the public, other than by a breach by a Receiving Party of its obligations hereunder;
- is already known by the Receiving Party before disclosure by the Disclosing Party hereunder as can be proved by evidence of the Receiving Member, and which is not the subject of a previous confidentiality agreement between the Disclosing Party and the Receiving Party;
- is developed by the Receiving Party independently of the disclosure by the Disclosing Party; or
- is required to be disclosed by a subpoena, Court Order or other law, regulation or ordinance.

6.3. For a period of three (3) years after the disclosure of any given item of Confidential Information, the Receiving Party shall maintain each such item of Confidential Information in strict confidence and shall not disclose that information, except to the extent necessary for the performance of a Core Research Program, to any third party, except with the prior written consent of the Disclosing Party. The obligations of this Article 4 shall continue with respect to any Confidential Information for said three (3) year period, regardless of the termination or expiration of an Industrial Member's membership.

6.4. If, to benefit the Core Research program of the Center, it becomes necessary for an Industry Member to divulge proprietary information to any member of the staff of the Center (including students), such divulgence shall be made in writing, or if made orally, confirmed in written summary within thirty (30) days of disclosure. It will be the responsibility of the individual(s) involved in such transaction to keep the information confidential.

7. Publications and Presentations

7.1. Each Member recognizes that the results of research in the Center will be published and that those engaged in research shall be permitted to present at symposia and international, national, or regional professional meetings and to publish in journals, on the Internet, in theses, or in dissertations, or otherwise in a mode of their own choosing, the methods and results of research.

7.2. All publications arising from Center research shall contain an acknowledgment that "This material is based upon work supported, in part, by the National Science Foundation under EEC No. 1941543".

8. Compliance with United States Antitrust and Competition Laws

8.1. The Center may include among its NSF ATP-Bio Member Partners and academic members parties who are business competitors. It is the policy of the Center to comply with United States antitrust and competition laws that apply to each of its members.

9. Export Controls

9.1. It is understood by all members of the Center that the research conducted by the Center and the individual Core Academic Members is anticipated to be of the type which qualifies for the Fundamental Research Exclusion under applicable U.S. export laws and regulations (including the Arms Export Control Act, as amended, and companion regulations, the International Traffic in Arms Regulations, the Export Administration Act of 1979, and companion regulations, the Export Administration Regulations). Notwithstanding the foregoing, all members of the Center shall abide by all applicable laws and regulations concerning the export or re-export of technical data, computer software, laboratory prototypes, and other commodities.

10. Intellectual Property. Intellectual property developed with Center funds will be subject to the Center's Intellectual Property policy and Intellectual Property management plan.

11. **Code of Conduct**. All NSF ATP-Bio members (academic and NSF ATP-Bio Member Partners) conduct themselves in accordance with the Center's Code of Conduct and all other guiding principles and policies.

12. Communications and Information Dissemination

12.1. The Center maintains a web presence (atp-bio.org). Member Partners agree the Center will use Member Partner names on the Center website and in marketing materials. The Center publishes electronic newsletters and leverages other methods of communication (social media, YouTube) to highlight the latest accomplishments of the Center.

12.2. The Center has sought to protect the phrasing and styling of the "NSF ATP-Bio " mark by securing the mark. This will protect against unauthorized use of the mark by those unaffiliated with the Center. All Center Members, including faculty, students, and trainees, will be entitled to use the NSF ATP-Bio mark for Center work and business without charge. The Center Leadership may issue guidelines on appropriate uses of the mark as necessary.

12.3. The EPP maintains an ELSI portal on the UMN Consortium on Law and Values in Health, Environment, & the Life Sciences website.

12.4. The Center utilizes, NSF ATP-Bio HUB, https://atpbio.myhubintranet.com, a secure portal for exchanging sensitive information among Members. This portal may be accessed through the website.

12.5. The annual NSF Site Visit and Annual Meeting will be hosted by the University of Minnesota or another Core Academic Member. The Site Visit will present an executive summary of the year's accomplishments. Research and other results from the Center will be included in presentations, posters, testbeds, and lab tours. Undergraduate and graduate students, postdoctoral fellows, and research associates will be incorporated into the events as appropriate.

12.6. Annual Reports. The Center Leadership, in collaboration with Pillar and Component Leaders, shall prepare an Annual Report summarizing each project conducted by NSF ATP-Bio and include a list of all available technical publications detailing NSF ATP-Bio research, projects, and programs. This report shall be provided to all Members.

13. Amendment of Bylaws.

13.1. Any EC member may propose an amendment to the By-laws as an agenda item for an EC meeting, provided that the request for a vote on amending the By-laws is made to Center Leadership and communicated to all EC members at least 48 hours before the scheduled EC meeting.

13.2. The EC may by adopt, amend, or repeal the By-laws of NSF ATP-Bio (an "Amendment"). Each EC member will have one vote. EC voting results shall follow supermajority rules (2/3 of all EC voting members) to approve a motion.

13.3. If the Executive Committee votes to amend the By-laws or adopt new By-laws, it will send the amended or new By-laws to the Council of Deans.

14. Termination.

14.1. The Council of Deans in consultation with the Center Leadership and cognizant NSF program directors may terminate the Center upon written notice to the Core Academic Members, other Academic Members, and all NSF ATP-Bio Member Partners Members. With the exception of project completion and graduation, if the NSF award is terminated or if conditions otherwise preclude continuation of the Center, uncommitted fees shall be returned to the NSF ATP-Bio Member Partners on a pro rata basis. Termination will also be subject to the cooperative agreement.

Amendment Table

Amendment No	Significant Change	Approve Date
0	Initial document release and approved by the EC	12/10/2022
1	Amended Integration Committee procedure to report findings to the EC and added revision table	12/15/2022
2	Amended industry membership model, minimal changes to leadership teams and advisory boards	05/13/2021
3	Amended section 2.3 to add Research Pillar Director to organization	12/02/2021
4	Amended section 2.2.1 to increase membership from 12 to 13.	03/03/2022
5	Updated Attachment A and B: NSF ATP-Bio Membership Structure and NSF ATP-Bio Org Chart	9/8/2023
6	Update Code of Conduct statement	7/31/2024
7	Updated “ATP-Bio” to “NSF ATP-Bio”. Proposed modifications to content. Edited to present tense. Proposed amendments to Bylaw principles drafted 1/30/25 to represent ERC operations. In alignment with NSF’s broadening participation priorities, an EWD organizational change was implemented to reflect guiding principles of an accessible and welcoming organization for all.	4/30/25

ATTACHMENT A: ATP-BIO MEMBERSHIP STRUCTURE

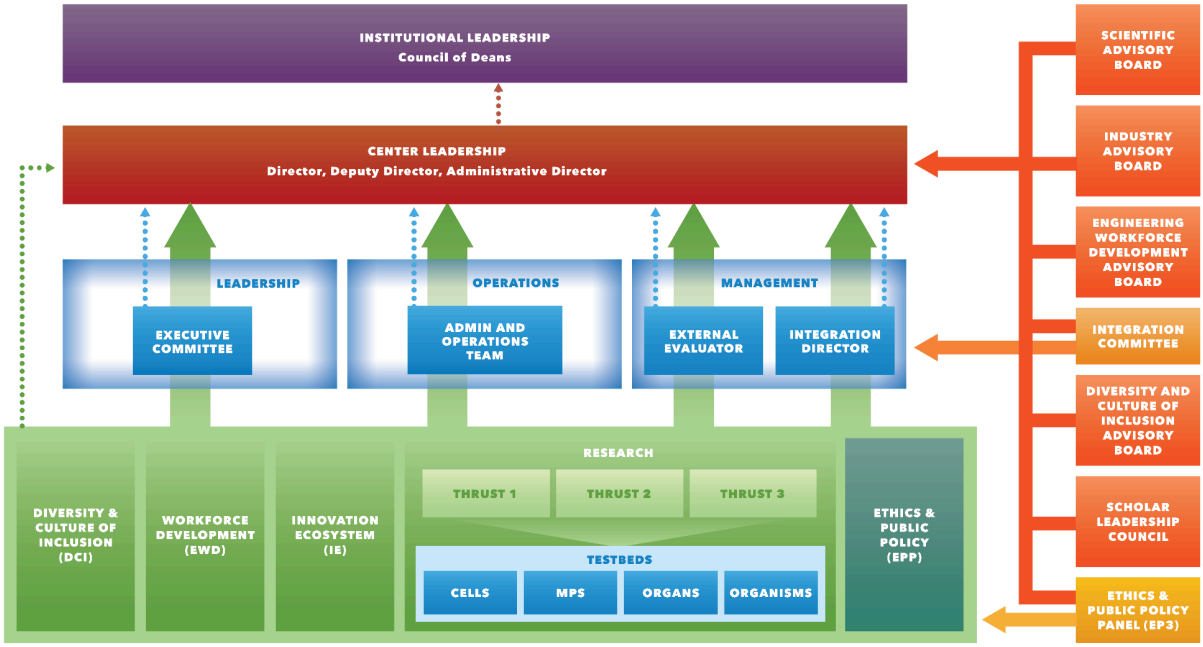
ATP-Bio Membership	Sustaining Member	Full Member	Associate Member	Non-Profit/ Government	Innovation
Membership Dues*	**$50,000**	**$25,000**	**$1,000**	**In kind**	**In kind**
Membership Benefits					
Industrial Advisory Board (IAB)					
IAB Seat, Votes	✓ 1 seat = 4 votes	✓ 1 seat = 2 votes	✓ 1 seat = 0 votes	✓ 1 seat = 0 votes	
IAB Chair	✓				
IAB committee chairs & participation	✓	✓	✓	✓ participation only	by IAB invitation only
Intellectual Property					
Royalty-bearing commercial license	1st Level Priority	2nd Level Priority	3rd Level Priority		
Non-exclusive royalty-free license rights for non-commercial internal research	✓	✓	✓	✓	
Center Strategy and Engagement					
Influence ATP-Bio research strategy & priorities	✓	✓	✓	✓	✓
Early access to pre-competitive research progress & results	✓	✓	✓	✓	✓
Opportunity for collaborative or sponsored projects	✓	✓	✓	✓	✓
Recruit trainees	✓	✓	✓	✓	✓
Facilitated access to faculty, research staff, & students	✓	✓	✓	✓	✓
Participation in ATP-Bio networking events, annual meetings, & webinars	✓	✓	✓	✓	✓
Collaborate on thought leadership	✓	✓	✓	✓	✓

*Industry members may use in-kind contributions towards member dues upon approval. Non-profit/Government & Innovation members are expected to make in-kind or other meaningful contributions in lieu of membership dues.

NSF ATP-Bio Center Bylaws May 13, 2021

ATTACHMENT B: ATP-BIO ORG CHART

NSF ATP-Bio Org Chart (as of Y4 annual report)



NSF ATP-Bio Functional Org Chart (as of Y5)