

# International Bio Funders Compact

INCORPORATING BIOSECURITY INTO THE BIOSCIENCE RESEARCH FUNDING REVIEW PROCESS

The world is in the midst of a 21<sup>st</sup> century bioscience and biotechnology revolution driven by rapid technological advances and accelerated by the application of artificial intelligence. While these advances offer significant potential benefits for human health and pandemic preparedness, the accelerating development and dissemination of novel capabilities for life science research, development, and manufacturing are also contributing to growing risks of accidents or deliberate misuse, which could derail continued progress in these areas. While any accident or misuse is cause for concern, the risk of widespread transmission or dissemination of a high-consequence pathogen are of particular concern, even though most life science research poses a small risk of such high-consequence events.

**We, as funders of life science research, acknowledge the leverage we have to incentivize safer and more secure practices. We accept our role in safeguarding the tools of modern bioscience and biotechnology against accidental and deliberate misuse, and thus commit to:**

- 1) Implement pre-funding biosecurity and biosafety reviews as part of the decision-making processes within our organization.
- 2) Conduct post-funding assessments of adherence to biosecurity and biosafety best practices among researchers that we fund.
- 3) Develop implementation plans to fulfill this pledge while focusing on the mission and needs of our respective organizations.
- 4) Designate an individual or team to oversee biosecurity and biosafety pre- and post-funding reviews as well as other activities that align with this pledge.
- 5) Share best practices for biosecurity and biosafety risk assessment and risk reduction among the bioscience and biotechnology funding communities.

The list below offers **examples of steps** that our organizations can take in fulfilling the commitments under the Bio Funders Compact, including examples of both proactive risk reduction measures and mechanisms to ensure compliance.

#### **Proactive Risk Reduction Measures:**

- **Pre-Funding Biosecurity and Biosafety Reviews:** Implement a biosecurity and biosafety review process for research proposals that involve or have the potential to generate highly transmissible and virulent biological agents. This process will assess proposals for dual-use research of concern (DURC) potential and information security (info hazard) risks, including proposals for *in silico* research with potentially harmful applications when transitioning from digital designs to physical biological systems and materials. This review will be conducted by qualified personnel and assess:
  - Potential risks associated with the research and the proposed risk reduction measures.
  - Comparative risks and benefits of proceeding with the proposed research relative to (i) alternative approaches to address the public health need or scientific question using safer methods or (ii) declining the proposal.
  - Researcher experience and training in biosecurity and biosafety protocols.
  - Adequacy of laboratory facilities and infrastructure for safe handling of biological materials.
- **Sharing Biosecurity Best Practices:** Participate in a bio funders' community forum focused on sharing best practices for emerging biological risk identification and biological risk reduction. This may include sharing risk assessment processes, effective pre- and post-funding assessment frameworks, and/or records of research that they have chosen not to fund as a part of fulfilling these commitments.
- **Consider allocating a fraction of grants funds for enacting biosafety and biosecurity best practices and innovations:** Facilitate best practice and compliance by including incentives for implementers to both assess risk and develop innovations that are safer and more secure by design.

#### **Mechanisms to Ensure Compliance:**

- **Biosecurity Clauses in Funding Agreements:** Include specific clauses in funding agreements that outline biosecurity expectations and potential consequences for non-compliance. These clauses should address:
  - Requirement to adhere to established regional, national and/or local biosafety and biosecurity protocols.
  - Expectation to report any accidents, incidents, or near misses involving biological materials consistent with other legal obligations.
  - Expectations to report changes in planned research that may incur new biosafety or biosecurity risks not contemplated in the original research plan.
  - Provisions to review publicly disclosed data and publications to mitigate biosafety, biosecurity, and information security risks.

- Provisions for suspending or terminating funding in case of major biosafety or biosecurity violations.
- **Monitoring and Compliance Checks:** Conduct periodic and ad-hoc post-funding reviews to ensure researchers are implementing, embedding, and adhering to biosafety and biosecurity best practices outlined in the funding agreement. This may include one or more of the following:
  - On-site inspections of laboratory facilities.
  - Periodic review of research plans to identify and evaluate new biosafety and biosecurity risks due to evolving scientific aims and approaches.
  - Review of biosafety and biosecurity risk assessment and training documents.
  - Audits of research standard operating procedures and protocols and associated biosafety and biosecurity provisions.

**Recognizing that risks evolve as technology and our understanding of biology improve, we seek to ensure that this compact keeps pace with advancements.**

Therefore, we may revisit the compact language to iteratively refine and improve it in consultation with signatories.

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**Name**

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**Title**

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**Affiliation**