

A world in which bioscience and biotechnology can advance and flourish, safely and responsibly.

# **MISSION**

The International Biosecurity and Biosafety Initiative for Science (IBBIS) works collaboratively with global partners to strengthen biosecurity norms and develop innovative tools to uphold them. We undertake this work to safeguard science and reduce the risk of catastrophic events that could result from deliberate abuse or accidental misuse of bioscience and biotechnology.

## **CHALLENGE**

Bioscience and biotechnology advances offer tremendous potential benefits. They are vital to fighting disease, protecting the environment, and promoting economic development, but these innovations can also increase the risks of accidents or deliberate misuse with catastrophic global consequences.

These underlying risks are not new, but they have been exacerbated by COVID-19, which has led to the proliferation of research into pathogens with pandemic potential and the establishment of new high-containment labs around the world to house this work.

As the technical barriers to manipulating biological organisms continue to fall, a broader range of entities – including states and extremist terrorist groups -- will have greater access to knowledge and tools to create deadly biological agents, potentially manufacturing the next pandemic.

While national governments play a key role in oversight, they have struggled to keep pace with rapid bioscience and biotechnology advances. Furthermore, no international entity dedicates its top priority to strengthening biosecurity and bioscience governance and to reducing emerging biological risks associated with technology advances.



## **SOLUTION**

NTI is working with global stakeholders to establish the <u>International Biosecurity and Biosafety Initiative for Science (IBBIS)</u>, an independent organization dedicated to reducing emerging biological risks associated with technology advances.

IBBIS will address risk-reduction opportunities throughout the bioscience research and development lifecycle to incorporate effective risk reduction practices at every stage – from project conceptualization and funding, through research execution, and on to publication or commercialization.

IBBIS' initial work will focus on developing biosecurity tools and best practices for DNA synthesis providers around the world to <u>prevent the misuse of DNA synthesis technology</u>, but IBBIS' activities will broaden over time. Potential activities include, but are not limited to:

- Supporting the development of biosecurity standards for use by funders, who are uniquely positioned to incentivize incorporation of biosecurity measures into grant proposals.
- Guiding universities and industry to develop effective approaches to strengthen oversight of dual-use bioscience research conducted within their laboratories.
- Partnering with industry stakeholders to develop biosecurity and biosafety requirements for customers who want access to materials and services to support bioscience research.
- Working with publishers to update their guidelines regarding publication of manuscripts containing information that might be misused.
- Developing proposals for governments to incentivize or require biosecurity practices through funding conditions, regulation, and guidance.

## **LEADERSHIP**

Piers Millett, Ph.D., is the founding executive director of IBBIS. Dr. Millett is an internationally recognized expert in global biological risk reduction with nearly 25 years of science policy experience. He recently served as vice president for responsibility at the iGEM Foundation (International Genetically Engineered Machines Competition) and as deputy head of the Implementation Support Unit for the Biological Weapons Convention.

## **LEARN MORE**

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