

Five years. Eleven priorities.

A coordinated philanthropic, private-sector, and government response to build defenses that outpace offensive biological capabilities.

\$2.6B philanthropic investment	2027–2031 five-year roadmap	11 priorities	3 pillars: Prevent, Detect, Respond
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THE FIVE-YEAR PLAN

2027 · \$380M Build the foundation	2028 · \$480M Pilots into operating systems	2029 · \$595M Scale and enforce	2030 · \$665M Achieve durable readiness	2031 · \$480M Maintain defensive advantage
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GLOBAL AMBITION, PHASED IMPLEMENTATION

A biological threat anywhere is a biological threat everywhere.

The threat is global. Any engineered pathogen released anywhere, if undetected or unanswered, becomes everyone's crisis within weeks. The plan is therefore global in ambition – including 99%+ of commercial DNA synthesis orders screened worldwide; pathogen-agnostic surveillance at major transit hubs on six continents; 24-hour international data sharing; coordination mechanisms that activate across borders in hours.

Implementation is phased because it will take time to build a foundation for a biosecure future. Early actions concentrate

on high impact interventions where regulatory leverage and research capacity make progress most tractable, starting with the U.S., EU, and UK. The design principle is to generate standards, institutions, and proof points that other geographies can adopt, adapt, and extend over time. At the same time capacity building efforts should be international from the outset when it is essential for systems to function effectively, for example with detection, travel-hub surveillance, and response coordination.

THE ARGUMENT

Offensive capabilities are proliferating faster than defensive ones.

COVID-19 killed millions of people, caused trillions in economic losses, and disrupted every aspect of global society. But COVID-19 was mild compared to the threats now becoming possible with rapidly advancing AI and biotechnology. AI tools increasingly help users interpret biological research, design biological systems, and troubleshoot laboratory work, potentially lowering the technical barriers to biological misuse. At the same time, advances in DNA synthesis, genetic engineering, and laboratory automation are making biology easier to design, build, and test. As these capabilities advance, they could enable malicious actors to cause a pandemic that results in significantly more damage to human health, economies, and political stability.

Fortunately, the world is not starting from zero. AIxBio safeguards, diagnostic technologies, medical countermeasures, personal protective equipment, pathogen surveillance systems, and built-environment protections have all improved significantly. The cost of synthesizing dangerous pathogens falls every year, while our surveillance systems, stockpiles, and safeguards remain largely where they were after COVID-19. We have created effective defensive technologies, but we aren't deploying them at scale. What we don't have is time. Every month of delay widens the gap between what adversaries can do and what our defenses can stop.

Some defenses are ready to deploy, others are early in development. We must scale what works now while developing the capabilities needed to close the remaining gaps. The window to act is closing.

Three pillars. Eleven priorities. One system.

Interlocking layers of defense: preventing misuse of powerful biological technologies upstream, detecting threats that slip through, and responding faster than any pathogen can spread.

Prevent

Stop dangerous capabilities from being acquired or misused

Prevent stops dangerous capabilities from being acquired or misused before harm occurs. It targets the points in the biological supply chain where offensive capabilities can be constrained, monitored, or blocked.

Nucleic Acid Synthesis Screening
Know Your Customer (KYC)
AIxBio Safeguards
Research Governance
Threat Disruption, Attribution & Deterrence

Detect

Identify threats that prevention misses

Detect builds a pathogen-agnostic early-warning architecture to catch novel or engineered pathogens before they spread widely. Because no preventive system will be perfect, early detection systems must be rapid, continuously operational, and global.

Global Early Warning
Diagnostics & Testing

Respond

Respond faster than the pathogen can spread

Respond ensures society contains any released pathogen faster than it can spread. It includes essential workforce protection, biohardening of the built environment, rapidly deployed medical countermeasures, and the coordination mechanisms needed to mount an effective public-private response.

Diagnostics & Testing
Essential Workforce Protection
Built Environment Biohardening
Rapid Medical Countermeasures
Global Response Coordination

THE ASK

\$2.6 billion over five years

A coordinated philanthropic investment to supplement government spending and catalyze private-sector action. Sustained capacity ultimately depends on market mechanisms that complement government action – advance market commitments, volume guarantees, and development finance – building on the G20 High Level Independent Panel on Pandemic Preparedness framework.

Per-year phasing is suggested and illustrative. The \$2.6B total is the plan's headline figure; annual splits will evolve as the plan is implemented.

The window for this investment to be maximally effective is narrow. As AI capabilities advance and access to dual-use biotechnology expands, the cost of closing gaps in our defenses will increase. **Early investment compounds.**

VISION

We envision a world in which defensive biological capabilities decisively outpace offensive ones – where any attempt to misuse biology is either prevented at the outset or detected early, attributed rapidly, and met with effective countermeasures. We plan to build this through layered defenses deployed at the speed the threat demands: safeguards for dual-use biotechnology and advanced AIxBio capabilities comparable to those in other high-risk industries; systems to detect any highly infectious, deadly pathogen before it spreads widely; platforms to develop and deploy countermeasures within weeks; and protections for essential workers and the built environment as insurance against worst-case scenarios.

SCOPE

This action plan's primary focus is on catastrophic deliberate biological threats to humanity and the means to prevent and respond to them in ways that prevent large-scale, severe civilizational disruption. At the same time, the work to advance this mission will also have great value in preventing and responding to high-consequence natural and accidental biological threats – whether to humans, animals, or the environment.