Submission # 1:

Date:	2/26/22
Name:	Joshua Monrad
Organization:	University of Oxford
Email:	*Personal Information*@gmail.com
Comment:	To the National Science Advisory Board for Biosecurity, It is undoubtedly crucial to address ongoing debates raised over the last two years, including on the need for transparency around gain-of-function research. However, biosecurity challenges posed by wider scientific developments should not be neglected. As synthetic virology methods become more powerful and accessible, we are heading towards a world where it is feasible for anyone to create a pandemic-capable virus. Is this the direction that we wish to go? We urge the NSABB to broadly consider the generation and sharing of relevant methods and information. To this end, the Board must expand its focus beyond enhanced PPPs to also consider issues such as the discovery of new pathogens in wildlife as well as viral engineering approaches developed for viral vectors and oncolytic viruses. To mitigate emerging risks, the NSABB and scientific community must proactively address the development and dissemination of the capabilities to create pandemic pathogens. *Jonas Sandbrink, Nuffield Department of Medicine, University of Oxford* *Joshua Monrad, Future of Humanity Institute, University of Oxford* *Gregory Lewis, Department of Zoology, University of Oxford*

Submission # 2:

Date:	2/23/22
Name:	Sam Weiss Evans
Organization:	Harvard University
Email:	samuel_evans@harvard.edu
Comment:	Dear Members of the National Science Advisory Board for Biosecurity (NSABB), In the years since the last convening of the NSABB, interest has grown in thinking about security governance as itself a site of experimentation. In a Policy Forum piece in *Science* (attached), we argue for the need to **Embrace experimentation in biosecurity governance**. The NSABB can play an important role in expanding this experimental mindset if it chooses. In the piece, we point to the need for **four key ways to improve how we envision and govern security concerns in biology**: 1. Be systematic and open about the assumptions we are making–most notably about the structure of science, governing authorities, and their relations to specific security conceptions–in our ways of governing biosecurity; 2. Routinize the analysis of the limitations of existing systems and promote actions that address or work around them; 3. Develop better methods to collect data to evaluate the effectiveness of governance experiments; and 4. Enhance data sharing across current and future experiments by addressing barriers to communication, such as industrial considerations of competition sensitivity, governmental controls (e.g., export restriction, classification), and differing terminology. As we note in the paper, "taking a structured approach to experimental [governance] design, periodically reassessing, and cooperating may seem like simple steps to take, but our collective experience suggests that biosecurity efforts over the past two decades—from promoting selfgovernance to requiring oversight of pathogen research—have largely not taken these steps. They require thinking beyond the current crisis, testing design choices (e.g., the use of lists), and being willing and able to rethink basic assumptions, such as the idea that both science and security are things that can be governed in isolation from other aspects of society."

	At present, no capability for systematic learning about the effectiveness and limitations of current biosecurity governance exists. This is problematic, since we do not have perfect knowledge of the ways that biology might be used by malicious actors, or of the best ways to prevent such uses. No a priori reason exists to believe that our original assumptions and hypotheses are optimal. The consequences of getting assumptions wrong, such as a pandemic caused by a laboratory-derived pathogen, are among the strongest arguments for testing a wide range of assumptions in ways that can provide signals of effectiveness prior to catastrophic events. We encourage the NSABB to view biosecurity and dual-use governance as an experimental space that requires regular testing and revisiting of assumptions undergirding policy design choices. Doing so will enable the life science community to make more than sporadic movement past reactive approaches, which in turn will help protect our economic vitality, academic freedom, and the health and security of our nation, people, and environment. It would also provide a signal to the world that biosecurity is not a one-size-fits-all system, but it is one that can be adaptable, reflective of local needs, and accountable across jurisdictions. We would be happy to discuss these points in more detail with the NSABB if desired. Kind Regards, Sam Weiss Evans, Senior Research Fellow, Program on Science, Technology & Society, Harvard University Jacob Beal, Raytheon BBN Technologies David Gillum, Assistant Vice President, Environmental Health and Safety, ASU Rik Bleijs, Head Biosecurity Office, The Netherlands Megan J. Palmer, Executive Director of Bio Policy & Leadership Initiatives, Adjunct Professor of Bioengineering, Stanford University Graeme Harkess, Head of Biorisk and Biological Safety Officer, The Pirbright Institute, UK Francesca Ceroni, Lecturer, Imperial College London Sean O hEigeartaigh, Executive Director, Centre for the Study of Existential Risk, Cambridge, UK Alessia Cagnetti, Biosafety manager Polo d'Innovazione Genomica Genetica e Biologia (PoloGGB), Italy (on behalf of all authors)
Attachment:	Evans et al 2020 - Embrace experimentation in biosecurity governance.pdf

Submission # 3:

Date:	2/23/22
Names:	Sam Weiss Evans
Organization:	Harvard University
Email:	samuel_evans@harvard.edu
Comment:	Dear Members of the National Science Advisory Board for Biosecurity (NSABB), There is little analysis of the experiences of people who implement DURC policy. As the Board reconvenes to consider revisions to the USG policies on dual use research of concern (DURC), we would like to submit the attached report, which provides a detailed account of the 2017 Stakeholder Engagement Workshop on the Implementation of the United States Government Policy for Institutional Oversight of Life Sciences Dual Use Research of Concern. No official report of the workshop was produced, and we hope that this document will be useful as you assess the DURC policies. In our Forward to the report, Daniel Greene and I note four themes that were expressed at the workshop, which the Board may want to consider: 1. There are **many different ways that institutions have composed their Institutional Review Entities** (IREs), which are responsible for assessing the DURC potential of research carried out at the institution. 2. While there were **a wide array of mitigation strategies employed**, institutions rarely used redaction or blocked publications, instead focused on tailoring communication of the scientists, emphasizing the value of the research to the public and avoiding being inflammatory or drawing attention to misuse. Institutions also increased safety and security measures after conducting DURC reviews, and modified experiments to reduce the risks they posed. 3. While most of the speakers at the workshop said that DURC policies had minimal **impact on research productivity**, several participants noted examples of research slowdown, and claimed that oversight burdens had disincentivized potential DURC research, with specific examples of researchers stopping their projects once it became apparent that their research might be DURC. 4. Throughout the workshop, participants questioned whether the overall **scope of implementation of the policy** was sufficient to capture concerning research. At least six participants at the workshop noted examples of research that either had been done or could be done that could merit the label “DURC”, but that did not involve the 15 agents and 7 experiments of concern named in the USG DURC policy. We would be happy to discuss these points in more detail with the NSABB if desired. Kind Regards, Sam Weiss Evans, Program on Science, Technology & Society, Harvard University

	Daniel Greene, Bio Policy & Leadership in Society Initiative, and the Center for International Security and Cooperation Connor Hoffmann, Bio Policy & Leadership in Society Initiative, and the Center for International Security and Cooperation Stefan Lunte, Tufts University
Attachment:	Evans et al 2021 - 2017 DURC Stakeholder Engagement Workshop Summary.pdf

Submission # 4:

Date:	2/17/22
Name:	Jean Public
Organization:	
Email:	*Personal Information*@yahoo.com
Comment:	there is no need for this agency except for fake fauci to get more money from taxpayers besides the $69 billion he gets already for pushing crap vaccines on us all. the fact is the problems for biosecurity for america were when fauci sent our tax dollars to wuhan china so they could invent this pandemic to hurt the entire world. that is where we needed bioslecurity and got none. this agency is out of control entirely. and we need to haul fauci up before an investigative committee to answer questions. this commetn is for teh public record. pleae receitp. jean publiee *Personal Information*@yahoo.com