AGENDA ITEM BRIEFING

Submitted by:	Mark A. Welsh III, President
	Texas A&M University

Subject: Establishment of the Biosecurity and Pandemic Policy Center

Proposed Board Action:

Establish the Biosecurity and Pandemic Policy Center (BP2) within the Scowcroft Institute of International Affairs (Scowcroft Institute) at the Bush School of Government & Public Service (Bush School) at Texas A&M University (Texas A&M).

Background Information:

Biological threats, whether natural, accidental or deliberate in origin, pose increasing challenges to national and international security. This is highlighted in the U.S. Government's 2022 National Biodefense Strategy and Implementation Plan which calls for a whole-of-society response guided by prudent and assertive government policy.

Despite impressive advances in modern medicine, the COVID-19 pandemic demonstrated the world's continued vulnerability to the devastating impacts of uncontrolled infectious disease outbreaks. COVID-19 caused over seven million deaths worldwide and cost the U.S. economy upward of \$16 trillion. This experience additionally affirmed the fact that emerging and reemerging infectious disease threats do not respect borders and can quickly become regional or global security crises. Today, Highly Pathogenic Avian Influenza A (H5N1) has spread from poultry to cause an ongoing outbreak in dairy cattle. Trends such as a proliferation of high-containment biological laboratories without international consensus on biosafety standards or the ability to monitor compliance, rapid advances in biotechnology that are outpacing governance frameworks, increased interest in biological weapons by U.S. adversaries, and increased frequency of emerging infectious disease outbreaks point to the persistent—if not growing—need for policy solutions to address biological threats.

In recognition of this need, and in consultation with Lt. Gen. Brent Scowcroft, USAF (Ret.), the Scowcroft Institute at the Bush School initially launched its Pandemic and Biosecurity Policy Program in 2014. This program raised external funding to host educational events and conduct impactful research that positioned Texas A&M as a leader in the field and informed key policymakers. As an example, the program's director, Dr. Gerald Parker, is a national and international thought leader whose experience and expertise are in high demand; he was called to testify before the U.S. Congress three times in 2023 and was asked to meet with high-level U.S. national security staff on multiple occasions. Post COVID-19, the Texas A&M Vice President for Research and Texas A&M AgriLife Research have additionally identified biosecurity research as an area of increasing priority. However, the current Pandemic and Biosecurity Policy Program has a limited capacity for fundraising and developing long-term collaborations with Texas A&M and external partners. In response, Texas A&M proposes elevating and expanding the program by establishing the BP2 within the Scowcroft Institute to better support The Texas A&M University System (A&M System) research enterprise. Establishing the proposed center will strengthen the

Agenda Item No. 6.14 Agenda Item Briefing

policy component of the expanding A&M System biosecurity research enterprise and ensure adequate resources will be available to continue leading the inevitable evolution of national and international biosecurity policies in pursuit of our vision: a world safe, secure, and resilient against existential biological threats.

To achieve this vision, the proposed center will leverage Texas A&M's expertise and close ties across academia, industry, and government to accomplish five mission objectives:

- 1. Conduct and disseminate impactful, high-quality, and nonpartisan research to develop policy options and inform policy stakeholders on crucial issues.
- 2. Create training and educational programs to develop the experts and leaders needed across academia, industry, and government to mitigate biological threats.
- 3. Develop partnerships between the A&M System and public and private organizations with complementary missions in biosecurity and related fields.
- 4. Convene decision-makers and subject matter experts to exchange knowledge across fields and advance pragmatic solutions to difficult technical and policy problems.
- 5. Serve as a technical resource to inform biological threat mitigation and pandemic preparedness policy, inform the public and support the A&M System, state, and national responses to future biological crises, which are inevitable.

A&M System Funding or Other Financial Implications:

Current projects from the proposed center are funded through existing grants and fellowships. In addition to funds independently raised, the Scowcroft Institute received a grant from the A&M System in 2021 that has supported the Pandemic and Biosecurity Policy Program. The program has approximately \$3 million in its operating accounts. With the elevation of the program to a center, this funding will be used to support the BP2. As a result, the proposed center's operations are fully funded through 2030. It is expected that by the end of 2030, the center will be self-sustaining through extramural funding from philanthropic and government sources.

Strategic Plan Imperative(s) this Item Advances:

The BP2 will advance A&M System strategic imperatives 3, 4 and 7. Specifically, BP2's educational and mentorship activities will support strategic imperative 3; BP2's focus on impactful, high-quality and non-partisan policy research will complement existing A&M System laboratory and field research capabilities and support strategic imperative 4; and BP2's focus on biosecurity and the national security implications of emerging biotechnology will advance strategic imperative 7.

Agenda Item No. 6.14

TEXAS A&M UNIVERSITY

Office of the President May 15, 2024

Members, Board of Regents The Texas A&M University System

Subject: Establishment of the Biosecurity and Pandemic Policy Center

I recommend adoption of the following minute order:

"The Biosecurity and Pandemic Policy Center is hereby established as an organizational unit of Texas A&M University within the Scowcroft Institute of International Affairs at the Bush School of Government & Public Service."

Respectfully submitted,

[ORIGINAL SIGNED BY]

Mark A. Welsh III President

Approval Recommended:

Approved for Legal Sufficiency:

[ORIGINAL SIGNED BY]

John Sharp Chancellor

[ORIGINAL SIGNED BY] Billy Hamilton Deputy Chancellor and Chief Financial Officer

[ORIGINAL SIGNED BY]

James R. Hallmark, Ph.D. Vice Chancellor for Academic Affairs

[ORIGINAL SIGNED BY]

Ray Bonilla General Counsel

TEXAS A&M UNIVERSITY

Biosecurity and Pandemic Policy Center (BP2)

EXECUTIVE SUMMARY

1. Rationale for the Creation of the Biosecurity and Pandemic Policy Center (BP2)

Texas A&M University (Texas A&M) proposes the establishment of the Biosecurity and Pandemic Policy Center (BP2) within the Scowcroft Institute of International Affairs (Scowcroft Institute) at the Bush School of Government & Public Service (Bush School). BP2 will support policymakers in confronting vital national and international biosecurity challenges, whether involving biological threats that emerge deliberately, accidentally, or naturally. To address these challenges, BP2 will educate students to be future leaders; conduct high-impact policy research across multiple disciplines and sectors; convene stakeholders to improve understanding of the issues and build coalitions to solve them; foster collaborations between industry, academia, and government; and develop policy options for decision-makers across the public and private sectors. BP2 will expand on the excellent work in this area already occurring at the Bush School and enable the widespread collaboration required to address these multifaceted national and international challenges, both within The Texas A&M University System (the A&M System) and with external partners. This will additionally help cement the national leadership of the A&M System in biosecurity.

The COVID-19 pandemic clearly demonstrated how difficult it is to contain and mitigate a highly transmissible respiratory pathogen, especially a pathogen with atypical asymptomatic transmission. After emerging in Wuhan, China, SARS-CoV-2, the virus that causes COVID-19, rapidly spread around the globe despite efforts to contain the pathogen, exacting a heavy medical, economic, social, and political toll worldwide. Based on member state reporting, the World Health Organization attributes over seven million deaths to COVID-19, and some economists estimate that the pandemic cost \$16 trillion in lives lost and economic damage in the U.S. alone. That these losses occurred despite modern medical technology, which enabled the development of a vaccine in record time, highlights the scope of the challenge of preventing, preparing for and responding to infectious disease outbreaks with epidemic and pandemic potential.

The challenge becomes even more pressing when considering the significant and growing risk posed by the accidental or deliberate release of laboratory-engineered pathogens. History demonstrates that high-containment laboratory accidents and breaches do occur. Most are quickly contained, but they can be serious. The last death from smallpox resulted from a breach at a laboratory in the United Kingdom in 1978. The last three outbreaks of Severe Acute Respiratory Syndrome (SARS), the disease caused by SARS-CoV-1, in 2003-2004 were traced to laboratories. High-containment laboratories (BSL-3 and BSL-4 facilities) are proliferating around the world, raising the risk of accidents, especially as some facilities struggle with operations and maintenance funding shortfalls, weak biosafety practices, and a lack of adequate oversight.

New gene editing technologies and falling costs for the synthesis of genetic material have made synthetic biology more accessible and improved the ability of scientists to engineer organisms. While this has enabled many positive applications, it may raise the risk of biological weapons proliferation or make accidents with modified organisms more consequential. New artificial intelligence, automation and data collection technologies may exacerbate these trends. The U.S. Department of State reports that several countries are or may be developing biological weapons in defiance of the Biological Weapons Convention that bans their production, stockpiling and use. Several terrorist and extremist organizations, including Al Qaeda, the Aum Shinrikyo cult in Japan and the Rajneesh cult in Oregon, attempted to acquire pathogens for use in bioterrorism attacks; although Al Qaeda and Aum Shinrikyo were unsuccessful, the Rajneesh cult infected 751 members of a small Oregon town in a bid to influence local elections. The 2001 anthrax attacks, which investigators believe were the work of a single scientist suffering from mental health issues, illustrate another danger: insider threats from within the biodefense enterprise.

Agricultural systems in the U.S. and around the world also face serious biosecurity threats. African swine fever threatens pork production, foot and mouth disease endangers cattle herds and avian influenza perennially menaces the poultry industry. Today, Highly Pathogenic Avian Influenza A (H5N1) has spread from poultry to cause an ongoing outbreak in dairy cattle. Additionally, fungal infections threaten the extinction of the banana and bacterial infections are destroying citrus crops in Florida and Texas. To make matters worse, many past biological weapons programs included work to develop agents targeting agriculture, and current adversaries may have a goal of threatening U.S. food production.

Within the U.S., the White House established the National Biodefense Strategy and Implementation Plan through an executive order with ambitious goals that include the rapid development of medical countermeasures after identifying a threat, improving threat awareness through biological intelligence and detection, developing biological attribution capabilities, and strengthening laboratory biosafety and biosecurity. Mandated by Congress in the 2022 PREVENT Pandemics Act, the White House also established the Office of Pandemic Preparedness and Response Policy to lead efforts across the federal interagency and with state, local and private partners. Within Texas, the state government has allocated funding for the Texas Department of Emergency Management to maintain a stockpile of medical supplies in preparation for future biological and other emergencies. New technologies such as rapid vaccine manufacturing processes and improved personal protective equipment additionally offer the prospect of revolutionizing preparedness and response efforts.

The proposed BP2 will engage with these state and national strategies and promote and help focus the A&M System's biosecurity research enterprise on Texas and national priorities. The Bush School's centers and institutes prioritize cross-college collaborations – as then-Dean Welsh said, *"Collaboration between Bush School faculty and others with specialized knowledge in the Texas A&M System ensures that solutions proposed through research can be effectively implemented as policies."* Texas A&M internal collaborations facilitated by BP2 will help increase the probability of obtaining federal funding for basic and applied research related to biosecurity across the A&M System. Collaborators within this enterprise are listed in Section 3. The center will also serve as an essential and sought-after national leader as biosecurity policy inevitability evolves, as well as advising national, state, local, and private sector implementation.

The great national and international need for solutions combined with the complexity of the problem requires new collaborative and adaptable institutions. Establishing BP2 will help fill an important policy research gap and drive meaningful progress on these complex issues by building on the success of the Scowcroft Institute within the Bush School and its current Pandemic and Biosecurity Policy Program, leveraging the unique strength of Texas A&M's ties across academia, industry, and local, state, and federal government to achieve its mission.

In keeping with Texas A&M's mission as a land-grant university, BP2's education, research, and public policy engagement will save lives by promoting sound policies and contributing to a world safe, secure, and resilient against existential biological threats. BP2's teaching and mentorship activities will connect students with biosecurity professionals and prepare them for careers in public service. BP2's research will continue to emphasize several priority areas identified by the Texas A&M Division of Research. Additionally, BP2 will focus on pandemics and the national security implications of emerging biotechnology, two urgent international priorities. BP2's work will also support the Texas A&M research strategic themes of National Security (Sub-Theme: Biodefense and Biosecurity) and Emerging Technologies and Innovations (Sub-Themes: Biotechnology and Biomanufacturing & AI, Learning, and Autonomy).

2. General Description of the Center and Its Mission and Goals

2.1 Mission

The BP2 aims to position the Scowcroft Institute, the Bush School, and Texas A&M as international leaders in policy to strengthen biosecurity, improve pandemic preparedness and response, and counter biological weapons.

2.2 Vision

A world safe, secure, and resilient against existential biological threats.

2.3 Description of the center

In fulfilling its tripartite focus on research, service, and education, the BP2 will draw on expertise from a range of disciplines as well as faculty from across the university focused on advancements in biosecurity, pandemic preparedness and response, and emergency management. BP2 will leverage this expertise to conduct and disseminate impactful, high-quality, and nonpartisan policy research that informs policy stakeholders on the crucial issues of biosecurity and pandemic preparedness. To accomplish this, BP2 will collaborate with other Texas A&M components and A&M System members as described in Sections 3.2 and 3.3. The center will also convene local, national, and international experts and decision-makers in these fields and develop collaborations with other leading organizations, increasing awareness of state and federal priorities within Texas A&M's and the A&M System's biosecurity research enterprises. BP2 will additionally offer educational programs and real-world training that develop students' skills and networks, preparing them for public policy and biosecurity careers in Texas, national-level public service and around the world. BP2 will serve our local communities, nation, and world in advance of and during future biological crises by acting as a technical resource to inform preparedness policy, providing reliable information to the public and supporting the Texas A&M, state and national public health emergency responses.

2.4 Responsible administrative unit and members

The BP2 will be located within the Scowcroft Institute at the Bush School, where it will draw on the Bush School's deep expertise and extensive network within the field of national security. In addition to annual summits hosted in College Station, BP2 will make use of the Texas A&M DC Teaching Site, which contains event and meeting space situated four blocks north of the White House, making it an ideal venue for functions that inform and foster collaboration with policymakers, federal partners, and policy experts. The Texas A&M DC Teaching Site frequently hosts events for students, faculty, staff, and the public with current and former government officials and is also home to the Bush School DC, which offers Master of International Policy and Master of National Security and Intelligence degree programs.

3. Potential Faculty Associated with the Center and Potential Intra-system and Other Collaborations

BP2 will seek and facilitate collaboration with A&M System members and professional staff across the university, policy research organizations, other respected universities, national laboratories, industry partners, international organizations, stakeholders, and agencies and departments at all levels of government who are working to create a world resilient against biological threats, whether natural, accidental, or deliberate.

3.1 Core faculty

Gerald W. Parker, D.V.M., Ph.D., will be the director of BP2. Dr. Parker will be responsible for providing leadership, strategic vision, and administrative oversight. Dr. Parker is currently the associate dean for Global One Health at the School of Veterinary Medicine & Biomedical Sciences and director of the Pandemic and Biosecurity Policy Program at the Scowcroft Institute. Dr. Parker is an internationally recognized expert on biosafety, biosecurity, and pandemic and all-hazards preparedness and response. He serves as a member of the Defense Science Board at the U.S. Department of Defense (DOD), an ex officio member of the Bipartisan Commission for Biodefense and chairperson for the National Science Advisory Board for Biosecurity at the U.S. National Institutes of Health. Dr. Parker served as a senior advisor to the Assistant Secretary for Preparedness and Response at the U.S. Department of Health and Human Services (HHS) from August 2020 to February 2021 to assist with the federal COVID-19 response. Prior to his appointment to Texas A&M, he held technical to executive leadership positions throughout 36 years of public service, including 26 years on active duty leading military medical research and development programs and organizations. He is a former Commander and Deputy Commander of the U.S. Army Medical Research Institute of Infectious Diseases. Dr. Parker held senior executive level positions at the U.S. Department of Homeland Security (DHS), HHS, and the DOD, including serving as the Principal Deputy Assistant Secretary for Preparedness and Response at HHS, and Deputy Assistant Secretary of Defense for Chemical and Biological Defense at DOD. Dr. Parker holds degrees from the Texas A&M College of Veterinary Medicine, the Baylor College of Medicine Graduate School of Biomedical Sciences, and the Industrial College of the Armed Forces.

Professor Andrew S. Natsios will oversee BP2 as director of the Scowcroft Institute. Andrew S. Natsios is an Executive Professor at the Bush School (2012-present) and director of the Scowcroft Institute (2014-present). He was previously a Distinguished Professor in the Practice of Diplomacy at Georgetown University's Walsh School of Foreign Service (2006-2012). Professor Natsios served as Administrator of the U.S. Agency for International Development from 2001 to January 2006. He was the U.S. Special Envoy to Sudan (2006-2007) to deal with the Darfur crisis and the North-South peace agreement. He was the CEO of the Big Dig in Boston, the largest construction project in American history, after a cost-overrun scandal. Professor Natsios was Vice President of the NGO World Vision U.S. (1993-1998). He served in the U.S. Army Reserves for 23 years, on active duty during the Gulf War in 1991 and was a Lt. Colonel when he retired in 1995. He is a graduate of Georgetown University (B.A.) and Harvard University's Kennedy School of Government (M.P.A.). Professor Natsios, with President George H. W. Bush's Deputy Chief of Staff Andrew H. Card Jr., edited Transforming Our World: President George H. W. Bush and American Foreign Policy. Professor Natsios is the author of three additional books and has published opinion pieces in The New York Times, The Washington Post and The Wall Street Journal. He has published twenty-eight journal articles in, among others, Foreign Affairs, The Washington Quarterly, The Foreign Service Journal, Parameters, and PRISM.

Mr. Joshua Wentzel will be the assistant director of BP2. Mr. Wentzel has six years of experience working in the U.S. Congress, including as a professional staff member on the Senate Health, Education, Labor, and Pensions (HELP) Committee working on pandemic preparedness policies, the Strategic National Stockpile and emergency response medical supplies and biosecurity issues including the Prepare for and Respond to Existing Viruses, Emerging New Threats and Pandemics Act (PREVENT Pandemics Act), which became law in 2022. During the COVID-19 pandemic response, Mr. Wentzel worked for the HHS in 2020 and 2021, working closely with the Assistant Secretary for Preparedness and Response on national distribution of COVID-19 medical countermeasures, daily situational awareness reports across federal agencies such as DHS and HHS, the Assistant Secretary's testimony to Congress, and regular communication with state and local governments. Mr. Wentzel formerly held a faculty position at the Johns Hopkins University Bloomberg School of Public Health in the Department of Environmental Health and Engineering.

The Scowcroft Institute Pandemic and Biosecurity Policy Program is also currently accepting applications for up to two new research assistant scientists or adjuncts who would be housed within the Department of International Affairs to teach courses to students in Bush School degree programs, contingent on the approval of the Department of International Affairs, in addition to conducting research work under BP2.

Faculty Affiliates:

- John R. August, BVetMed., Carl B. King Dean of Veterinary Medicine, School of Veterinary Medicine & Biomedical Sciences
- Shawn G. Gibbs, Ph.D., M.B.A., Dean, School of Public Health
- Glenn Laine, Ph.D., Regent's Professor, School of Veterinary Medicine & Biomedical Sciences, Vice President for Research Emeritus, and Director, Michael E. DeBakey Institute for Comparative Cardiovascular Science and Biomedical Devices
- Jason Moats, Ph.D., Professor of Practice, School of Public Health, and Director, USA Center for Rural Health Preparedness
- Christy Blackburn, Ph.D., Assistant Professor, School of Public Health

3.2 Current collaborators

BP2 intends to cultivate partnerships within the A&M System and externally while increasing the visibility of its work and building on the reputation of Texas A&M among communities of experts, practitioners, and other stakeholders. BP2 will strategically partner with organizations with complementary missions to conduct research projects and co-host or participate in events. BP2 will disseminate its policy research products and advertise its events widely to the public and students, especially the broader A&M System, College Station, and Washington, DC communities through the Washington D.C. teaching site.

Texas A&M schools and A&M System members:

- Texas A&M School of Veterinary Medicine & Biomedical Sciences (VMBS)
- Texas A&M School of Public Health, including USA Center for Rural Health Preparedness
- Texas A&M Agrilife Research, including Cross-Border Threat Screening and Supply Chain Defense Center of Excellence

External policy researchers and academics:

- Johns Hopkins University Center for Health Security
- Georgetown University Center for Security and Emerging Technology

- Brown University Pandemic Center
- Bipartisan Commission on Biodefense
- Federation of American Scientists

Commercial enterprises, non-profits, and professional associations:

Medical Countermeasures Coalition (MC2), a leading non-profit group supporting medical countermeasures development, procurement and deployment policy.

3.3. Potential collaborators with complementary biosecurity, public health, emergency response, and/or agricultural security expertise

Texas A&M Schools, Colleges and units and A&M System members:

- Texas A&M Irma Lerma Rangel School of Pharmacy
- Texas A&M Department of Soil and Crop Sciences
- Texas A&M Global Health Research Complex (GHRC)
- Texas Division of Emergency Management (TDEM)
- Texas A&M AgriLife Extension Service, including the Texas A&M Veterinary Medical Diagnostic Laboratory (TVMDL)
- Texas A&M Engineering Extension Service (TEEX)
- Texas A&M Engineering Experimental Station (TEES)
- National Center for Therapeutics Manufacturing (NCTM)

External policy researchers:

- MITRE Corporation, a not-for-profit company operating six federally funded research and development centers that provide analysis and operational support to the U.S. Government
- RAND Corporation, a nonprofit institution dedicated to providing research and analysis with a major focus on national security
- National Academies of Sciences, Engineering, and Medicine
- Commercial enterprises, non-profits and professional associations:
 - Global Health Investment Corporation, a venture fund focused on global health security
 - American Hospital Association, a national organization that represents and serves hospitals, health care networks and their patients
 - Biotechnology Innovation Organization (BIO), a biotechnology trade association
 - ABSA International, formerly the American Biological Safety Association

International organizations:

- World Health Organization
- European Commission Health Emergency Preparedness and Response Authority (HERA)

4. Core Activities

BP2's work will align with its five mission objectives:

Research: BP2 will produce timely and relevant policy research products including policy papers, event summaries and Congressional testimony (as applicable), to inform policy stakeholders and improve their decision-making.

BP2 will focus on U.S. domestic and international biosecurity policy, including participating in state and local policy discussions in Texas. In addition to conducting its own policy research, BP2 will consider funding policy research proposals from the A&M System or external partners for projects that address priority issue areas such as the ongoing outbreak of highly pathogenic avian influenza A (H5N1) in dairy cattle.

BP2's proposed staff, as part of the Scowcroft Institute's Pandemic and Biosecurity Policy Program, have applied for federal funding through the National Science Foundation's (NSF's) Responsible Design, Development, and Deployment of Technologies (ReDDDoT) program, with Dr. Gerald Parker and Mr. Joshua Wentzel as Co-PIs, and with a researcher from Georgetown University joining as an unfunded collaborator.

Education and Training: BP2 aims to provide experiential educational opportunities to develop expertise and leadership across academia, industry, and government to mitigate biological threats. See Section 5 below for more details.

Convening: BP2 will convene experts and decision-makers from across academia, industry, all levels of government, international organizations, and private nonprofits to inform research projects, foster connections and provide information that leads to progress on biosecurity and pandemic policy and intellectual challenges. BP2 will hold workshops to reflect real-time policy developments and where academic convening and expertise may be of greatest value. BP2 will also host regular summits at the Annenberg Presidential Conference Center open to students and the local community. Students working for the Scowcroft Institute have assisted with workshops organized by staff and have attended DC-based events to assist staff who were presenting.

Serve as a Technical Resource: BP2 will serve as a technical resource for ongoing biosecurity and pandemic preparedness priorities and support the A&M System, state, national, and international responses to future biological crises, which are inevitable.

Researchers under the Department of International Affairs will be hired to work with BP2, alongside staff with subject matter expertise that can offer policy guidance to government officials and other relevant decision-makers. BP2 will also deepen and maintain connections with stakeholders through sharing educational and research materials, hosting events and attending networking opportunities. During the COVID-19 pandemic, Dr. Gerald Parker helped form and co-lead the Texas Emergency Management Advisory Group, a coalition of the willing and able that advised A&M System and Texas officials on the COVID-19 response. Dr. Parker also joined HHS as a senior executive advisor to the nation's COVID-19 response under the Intergovernmental Personnel Act, as well as serving on the Texas Experts Vaccine Advisory Group that helped guide vaccine distribution decisions at a time when vaccine supplies were limited, and demand was high. BP2 plans to maintain talent and funding to offer similar assistance during future crises.

Outreach and Collaboration: See Sections 3.2 and 3.3 above for a description of outreach and collaborations. BP2 will encourage staff and faculty to participate in professional conferences and other networking opportunities that broaden and deepen their connections.

5. Impact on Education and Training of Students

BP2 will cultivate and support student interest in public service careers and develop future leaders in biosecurity, a critically important area for national and international security and global health.

Upon graduation from the Bush School (or their respective School or College), students working for BP2 in College Station or at the Washington DC Teaching Site or taking BP2-sponsored classes will have had exposure to biosecurity and pandemic policy practitioners; will be more familiar with core concepts, the process for policy development and careers in relevant federal and non-federal entities; and will be better prepared to secure an in-demand position in the workforce.

BP2's educational activities and outputs will expose students to subject area experts and to research about cutting-edge biotechnology and the emerging bioethics and safety challenges that accompany it. Of particular interest to graduate students, BP2 is aligned with students considering careers in biosecurity policy and pandemic preparedness and response, such as the students enrolled in the Master of International Affairs and Master of Public Health (MIA/MPH) combined degree program at the Bush School. BP2 will additionally support the MIA concentration in Pandemic Preparedness & Disaster Response cross-listed in both the National Security and Diplomacy (NSD) and International Development and Economic Policy (IDEP) tracks within the MIA degree. In pursuit of these goals and to expand BP2's bandwidth, BP2 will hire up to two researchers, to be housed in the Department of International Affairs, for policy research and to teach graduate courses upon agreement of the Department of International Affairs that count toward the MIA/MPH degrees and Pandemic Preparedness & Disaster Response concentration.

The Scowcroft Institute Pandemic and Biosecurity Policy Program has demonstrated a history of support for research projects that provide opportunities for student researchers. This support has included field research for faculty and students as well as groundbreaking research to understand the drivers of vaccine hesitancy in Africa, which is now resulting in the publication of several new papers at the forefront of this research area. The Scowcroft Institute, through the Pandemic and Biosecurity Policy Program, has sponsored tabletop exercises for students to understand the dynamics of a government response to an infectious disease emergency. Students have been able to present findings from this exercise at an annual summit, future iterations of which BP2 will host at the Annenberg Presidential Conference Center. The creation of BP2 will ease the coordination required to support similar projects for students and faculty.

6. Resource Requirements

BP2 is resourced through 2030 with the capability to support a director, assistant director, one to two researchers, and a small administrative staff including administrators shared with and jointly funded by the Scowcroft Institute, program assistants, and student workers. Annual budget requirements for salaries are estimated at \$350,000 to support the director, assistant director, and student workers, and to support work travel, annual summits, numerous smaller workshops and other events, and supplies. A portion, 17.5% of the salary of the director, Dr. Parker, is paid by the center with the remaining portion of the salary supported by other university components. The center may provide seed grants to recipients outside of the Scowcroft Institute subject to availability of funding. Computers, office space, information technology support, and other services are provided by the Bush School.

Additional activities will be conducted subject to successful fundraising. In the unexpected event of a funding shortfall, the Scowcroft Institute will provide support for shared administrative staff. The creation of BP2 as a formal center will enhance the visibility of this work to external audiences and will be leveraged to generate new external interest from potential donors.

7. Sources and Future Expectations of Financial Support

Current funding sources

The Scowcroft Institute received a grant from the A&M System in 2021 that has supported the Pandemic and Biosecurity Policy Program. The program has approximately \$3,000,000 in its operating accounts. With the elevation of the program to BP2, this funding will be used to support BP2. The Horizon Institute of Public Service is supporting all the expenses, including salary and overhead, for a visiting scholar (fellow) based in DC to work on biosecurity policy from August 2023 to August 2024.

Future funding sources

BP2 anticipates a mixture of funding from private philanthropic organizations with an interest in mitigating biological threats and government contracts or grants for events and research. BP2 will leverage its current funding position to apply for additional grants and support over the long term. The program has raised \$1.2 million of which \$520,000 is from private philanthropic organizations.

Possible government funders include NSF, DHS (especially for collaborations with the Cross Border Threat Screening and Supply Chain Defense Center of Excellence at Texas A&M), HHS, the U.S. Agency for International Development, and the Texas Department of State Health Services. The Scowcroft Institute Pandemic and Biosecurity Policy Program has applied for funding from the NSF's ReDDDoT program in the amount of \$47,030. The program director has previously received federal funding for projects at Texas A&M outside of the Scowcroft Institute. The program has previously received funding from DHS.

Possible philanthropic funding sources include the Horizon Institute for Public Service, the Gates Foundation, Open Philanthropy, Effective Giving, Longview Philanthropy, Schmidt Futures, Arnold Ventures, and others. BP2 will also work to generate support from individual private donors, including those who have a history of contributing to the Scowcroft Institute. The Scowcroft Institute has successfully raised funds from outside the university through private donors including law firms, individuals associated with the Presidency of President George H. W. Bush, and others.

8. Governance and Advisory Structure

BP2 will be structured under A&M System Policy *11.02, Creation of Centers and Institutes* and led by a director reporting to the director of the Scowcroft Institute.

BP2 will also have a five-person internal steering committee composed of three representatives connected to the center's structure and two independent executive-level advisors from the A&M System. An External Advisory Board will be created, following A&M System and Texas A&M requirements, to help promote the mission, vision, and values of BP2 and to enhance innovation, collaboration and productivity of BP2. The external advisory board will be composed of nationally and internationally recognized biosecurity experts and will additionally advise the BP2 director. Both the steering committee and external advisory board will meet at least once per year, and members will serve at the pleasure of the board or committee. The external advisory board will consist of 3-5 members. Potential members will be selected by the BP2 director and, following required approval, will be invited to serve on an uncompensated basis.

Internal steering committee members will be as follows:

- BP2 Director (serves as chair) Dr. Gerald Parker
- Scowcroft Institute Director Professor Andrew Natsios
- BP2 Assistant Director Mr. Joshua Wentzel
- Independent executive-level member TBD
- Independent executive-level member TBD

See Figure 1 for a visual representation of BP2's structure.

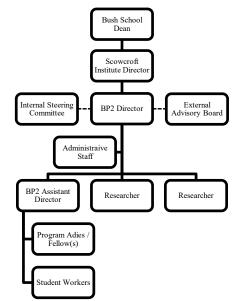


Figure 1. Structure of the Biosecurity and Pandemic Policy Center.

9. Mechanisms for Periodic Review

The BP2 will be reviewed in accordance with policies established for institutes and centers (i.e., A&M System Policy 11.02, Creation of Centers and Institutes, A&M System Regulation 11.02.01 Management and Evaluation of Centers and Institutes, and Texas A&M Standard Administrative Procedure 11.02.99.M0.01, Centers and Institutes). The BP2 director will provide an annual report to the director of the Scowcroft Institute and the dean of the Bush School, who will forward to the vice president for research. An in-depth review will be performed every five years by a review committee as required by A&M System Regulation 11.02.01 and Texas A&M SAP 11.02.99.M0.01 which will provide feedback to the dean of the Bush School and the director of the Scowcroft Institute regarding the center's effectiveness in meeting its mission. Both the five-year review and annual reports/internal reviews will be shared with Texas A&M vice president for research who will review the reports and may provide comments and/or recommendations as to improvements or other actions that may be indicated. The final report of the periodic review will be submitted to the System Office of Academic Affairs and System Office of Research.