

Lessons from COVID-19 for the Public Health Emergency Enterprise: What Happened to the Plans?

May 17-18, 2022

Meeting Briefing Materials

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TAB 1

Workshop Information

Lessons from COVID-19 for the Future of the Public Health Emergency **Enterprise: What Happened to the Plans?**

A Workshop

May 17-18, 2022

Please Register [Here](#)

Day 1 – May 17

09:00 AM

Welcome and Opening Remarks

Speakers:

Suzet McKinney (Co-chair), Principal and Director of Life Sciences, Sterling Bay

Richard Serino (Co-chair), Distinguished Senior Fellow, National Preparedness Leadership Initiative, Harvard School of Public Health

Dan Hanfling, VP Technical Staff, In-Q-Tel

09:15 AM

Session I – PHEP Planning before the Pandemic

Moderator: **Suzet McKinney** (Co-chair), Principal and Director of Life Sciences, Sterling Bay

Presenter:

Ali S Khan, Dean, College of Public Health at University of Nebraska Medical Center

09:30 AM

Keynote Discussion

Moderator: **Suzet McKinney** (Co-chair), Principal and Director of Life Sciences, Sterling Bay

Keynote Co-Speakers:

Deborah Birx, former Coronavirus Response Coordinator at the Office of the Vice President

Jennifer Nuzzo, Director, Pandemic Center, School of Public Health, Brown University

10:00 AM

BREAK

10:15 AM

Session II – Assessing PHE Preparedness Capabilities, Authorities & Funding

Moderator: **Lisa Koonin**, Founder and Principal, Health Preparedness Partners

Discussants:

Jessica Bell, Senior Director, Global Biological Policy and Program Nuclear Threat Initiative

Dara Lieberman, Director of Government Relations, Trust for America's Health
Marisa Voelkel, Physical Environment Specialist, Joint Commission (*virtual*)
James Lawler, Executive Director of International Programs and Innovation at the Global Center for Health Security, University of Nebraska Medical Center

11:15 AM

Session III – Global & Domestic Surveillance

Moderator: **Vivian Singletary**, Director, Public Health Informatics Institute

Discussants:

Caitlin Rivers, Senior Scholar at the Johns Hopkins Center for Health Security & Associate Director at Center for Forecasting and Outbreak Analytics, U.S. CDC

Janet Hamilton, Executive Director at Council of State and Territorial Epidemiologists

Eric Blank, Senior Advisor for Public Health Systems, Association of Public Health Laboratories

12:15 PM

LUNCH BREAK

1:15 PM

Session IV – Medical Countermeasures and other Medical Supply Chain Considerations

Moderator: **Monique K. Mansoura**, Executive Director for Global Health Security and Biotechnology, The MITRE Corporation

Discussants:

Gigi Gronvall, Senior Scholar at the Johns Hopkins Center for Health Security, Hopkins & Co-chair of the NASEM PHEMCE Study

Pinar Keskinocak, William W. George Chair and Professor in the H. Milton Stewart School of Industrial and Systems Engineering, Georgia Tech (*virtual*)

Jarrold Goentzel, Founder and Director of the MIT Humanitarian Supply Chain Lab (*virtual*)

2:15 PM

COFFEE BREAK

2:30 PM

Session V – Ethics, Equity & Engagement with Historically Marginalized Populations

Moderator: **Joneigh Khaldun**, Vice President and Chief Health Equity Officer at CVS Health

Presenters:

Robinsue Frohboese, Principal Deputy Director for the Office of Civil Rights at HHS

Daniel Dodgen, Senior Advisor for Strategy, Policy, Planning, and Requirements, Office the Assistant Secretary for Preparedness & Response, at HHS

Discussants:

Jean Accius, SVP, Global Thought Leadership, AARP, & Vice Chair,
Justice in Ageing (*virtual*)
Jacque Gray, Research Associate Professor & Associate Director,
Indigenous Programs, Center for Rural Health, University of North Dakota
& Director of the National Indigenous Elder Justice Initiative

3:30 PM

Session VI – Risk Communication and Public Engagement

Moderator: **Richard Serino** (Co-Chair), Distinguished Senior Fellow, National
Preparedness Leadership Initiative, Harvard School of Public Health

Discussants:

Howard Koh, Harvey V. Fineberg Professor of the Practice of Public Health
Leadership at the Harvard T. H. Chan School of Public Health

Brian Castrucci, President and Chief Executive Officer of the de Beaumont
Foundation.

Tara Kirk Sell, Senior Scholar at the Johns Hopkins Center for Health
Security

Christina Farrell, First Deputy Commissioner, NYCEM

4:30 PM

Closing Remarks & Adjourn

Suzet McKinney (Co-chair), Principal and Director of Life Sciences, Sterling
Bay

Richard Serino (Co-chair), Distinguished Senior Fellow, National
Preparedness Leadership Initiative, Harvard School of Public Health

Day 2 – May 18

09:00 AM

Welcome and Recap of Day One

Speakers:

Suzet McKinney (Co-chair), Principal and Director of Life Sciences, Sterling Bay

Richard Serino (Co-chair), Distinguished Senior Fellow, National Preparedness
Leadership Initiative, Harvard School of Public Health

09:10 AM

Session VII – Coordination, Governance, and Leadership

Moderator: **Steven Mitchell**, Associate professor of Emergency Medicine,
Washington University & Medical Director, Washington Medical Coordination
Center

Presenter: **John Wiesman**, Professor of the Practice in the Department of Health
Policy and Management, frm. Washington State Secretary of Health

Panel A: Cross-Jurisdictional Government Coordination (FSTLT)

Discussants: *Washington State – Deep Dive Case Study*

Kathy Lofy, former State Health Officer, Washington State Department of Health

Jeff Duchin, Health Officer and the Chief of the Communicable Disease Epidemiology & Immunization Section for Public Health–Seattle & King County
(virtual)
Stephen Kutz, Chair of American Indian Health Commission & Suquamish Tribe Health Clinic Director
Colonel David Adam, Army State Surgeon, Washington Army National Guard

10:25 AM

BREAK

10:40 AM

Session VII – Coordination, Governance, and Leadership

Panel B: Federal Coordination

Moderator: **Richard Serino** (Co-chair), Distinguished Senior Fellow, National Preparedness Leadership Initiative, Harvard School of Public Health

Discussants:

Pete Gaynor, former Acting Secretary of Homeland Security & former FEMA administrator

Bob Kadlec, former Assistant Secretary for Preparedness and Response

David Smith, Acting Principal Deputy Assistant Secretary of Defense for Health Affairs

Christine Kosmos, Director of the Division of State and Local Readiness in the Center for Preparedness and Response, U.S. CDC

Brigadier General Carl T. Reese, Deputy Surgeon General for Army National Guard, Office of the Surgeon General

David Bibo, Deputy Associate Administrator, Office of Response and Recovery, FEMA

11:40 AM

Session VII – Coordination, Governance, and Leadership

Panel C: Public-Private Partnerships for Regional Coordination

Moderator: **Eileen Bulger**, Chair of the Committee on Trauma for American College of Surgeons

Discussants:

Lisa Villarroel, Medical Director for the Division of Preparedness, Arizona Department of Health Services *(virtual)*

Ronald Stewart, Chair of Department of Surgery, UT Health San Antonio

Melissa Harvey, Assistant Vice President for Enterprise Emergency Operations for HCA Healthcare

Onora Lien, Executive Director, Northwest Healthcare Response Network

12:40 PM

LUNCH BREAK

1:35 PM

Session VII – Coordination, Governance, and Leadership

Panel D: Elected and Appointed Leaders

Moderator: **Michael Fraser**, CEO, ASTHO

Discussants:

Bill Driscoll, Massachusetts State Representative and Chair of the Joint Committee on COVID-19 and Emergency Preparedness and Management
Anne Zink, Chief Medical Office, Alaska
Umair A. Shah, Secretary of Health, Washington State Health Department
Phil Maytubby, Deputy Chief Executive Officer, Director Division
Oklahoma City, County Health Department
Andrea (Andi) Tenner, Director, Public Health Emergency Preparedness & Response, San Francisco Department of Public Health

2:45 PM

Session VIII – Planning Committee Reflection

Moderator: **John Armstrong**, Division Director, University of South Florida Morsani College of Medicine and Member of American College of Surgeons Committee on Trauma

Discussants:

David Zonies, Professor of Surgery and Associate Chief Medical Officer for Critical Care Professor of Surgery, Division of Trauma, Critical Care and Acute Care Surgery, School of Medicine
Steven Mitchell, Associate professor of Emergency Medicine, Washington University
Jeanne Benincasa Thorpe, Massachusetts Undersecretary for Homeland Security and Homeland Security Advisor to the Governor, Executive Office of Public Safety and Security

3:25 PM

Closing Remarks

Dan Hanfling, VP Technical Staff, In-Q-Tel
Suzet McKinney (Co-chair), Principal and Director of Life Sciences, Sterling Bay
Richard Serino (Co-chair), Distinguished Senior Fellow, National Preparedness Leadership Initiative, Harvard School of Public Health

3:40 PM

Adjourn

Future Planning for the Public Health Emergency Preparedness Enterprise: Lessons Learned from the COVID-19 Pandemic *A Workshop*

A planning committee of the National Academies of Sciences, Engineering, and Medicine will organize and convene a day and half public health workshop. During this workshop, invited participants from government, NGO, and private sector organizations will explore the nation's Public Health Emergency (PHE) preparedness enterprise, including existing PHE preparedness and response plans, systems, and structures, through the lens the COVID-19 response in the United States.

The activity will explore key components, success stories, as well as failure points throughout the entire PHE preparedness and response enterprise in order to identify opportunities for more effective catastrophic disaster, pandemic, and other large scale PHE's planning at the federal, state, local, tribal, and territorial levels. Using key components of past NASEM reports¹ to frame workshop discussions, participants will examine specific lessons learned from the COVID-19 pandemic and explore potential paths forward. Specifically, the workshop will examine:

- Weaknesses and opportunities in the PHE's systems architecture, including but not limited to
 - Global disease surveillance;
 - Healthcare delivery and core public health functions;
 - Supply chain viability and vulnerabilities;
 - Medical Counter Measure (MCM) development, distribution & administration/delivery;

- Data systems and other promising opportunities for preparedness and response technology platforms etc.
- The continuum of local-state-regional-national coordination challenges and leadership incident command structure disparities, including:
 - Preparedness and response capabilities, authorities, and funding streams;
 - Staffing challenges and potentially strength of community partnerships to assist in preparedness, community organizing and vaccine advocacy; and
 - Risk communication and messaging failures.

The planning committee will define the specific topics to be addressed, develop the agendas, and select and invite speakers and other participants. After the workshop, a proceedings-in-brief will be prepared by a designated rapporteur in accordance with institutional guidelines, based on the presentations and discussions held during the workshop. The proceedings-in-brief will be subject to appropriate review procedure before release.

Planning Committee

Suzet McKinney, DrPH, MPH (Co-chair),
Principle and Director of Life Sciences,
Sterling Bay

Richard Serino (Co-chair), Distinguished
Visiting Fellow, National Preparedness
Leadership Initiative, Harvard School of Public
Health

John Armstrong, Division Director, University
of South Florida Morsani College of Medicine
and Member of American College of Surgeons
Committee on Trauma

Jeanne Benincasa, Massachusetts Undersecretary
for Homeland Security and Homeland Security

¹ Evidence-Based Practice for Public Health Emergency Preparedness and Response; Healthy, Resilient, and Sustainable Communities after Disasters: Strategies, Opportunities, and Planning for Recovery

Advisor to the Governor, Executive Office of
Public Safety and Security

Joneigh Khaldun, Chief Medical Executive and
Chief Deputy Director for Health, State of
Michigan

Steve Mitchell, MD, Medical Director of the
Emergency Department at Harborview
Medical Center; Associate Professor,
Department of Emergency Medicine,
University of Washington

Andrew Pavia, MD, George and Esther Gross
Presidential Professor; Chief, Division of
Pediatric Infectious Diseases, University of
Utah

Win Rawls, Director, ASTHO Evolution of the
Public Health Preparedness project.

Lt. Col. Carlo Rossi, CCFP Canadian Armed
Forces Health Attaché, Health Readiness
Policy, Oversight Office of the Assistant
Secretary of Defense (Health Affairs)

David Zonies, MD, MPH, Professor of Surgery
and Associate Chief Medical Officer for
Critical Care; Professor of Surgery, Division of
Trauma, Critical Care and Acute Care Surgery,
School of Medicine, Oregon Health Sciences
University

Project Staff

Scott Wollek, Forum Director

Lisa Brown, Senior Program Officer

Aurelia Attal-Juncqua, Program Officer

Michael Berrios, Research Associate

Kimberly Sutton, Senior Program Assistant

Andrew M. Pope, Director, Board on Health
Sciences Policy

Background

The Forum on Medical and Public Health Preparedness for Disasters and Emergencies convenes public and private sector leaders to improve the nation's preparedness for, response to and recovery from disasters, public health emergencies and emerging threats. The Forum fosters in-depth policy discussion and collaboration to identify barriers and explore solutions to ensure and sustain national security, promote recovery and enhance resilience.

The Forum is a self-governing body composed of members and other key stakeholders at the federal, state, and local levels representing government, non-government, and the private sectors. Its membership identifies meeting and workshop topics for exploration and discussion and creates strategic direction to advance the field of medical and public health preparedness.

Over the next year, the Forum membership will be focusing their attention on the following topic areas:

Global Health Security

Global health security focuses on ongoing efforts to accelerate progress toward a world safe and secure from emerging infectious diseases and other threats. The Forum will concentrate its discussion on strengthening the U.S. health care and public health systems capacity to detect, prevent, plan for, respond to, and recover from naturally-occurring outbreaks and intentional or accidental releases of dangerous pathogens.

Communication and Coordination

Ensuring timely communications and effective coordination within all levels of government and between government, the private sector, and the public during large-scale disasters and incidents is critical to ensuring the health and

welfare of the nation. The Forum will center its attention on ways to improve situational awareness, threat intelligence sharing, risk communication, and collaboration among multi-sector disaster response networks including public, academic, private, governmental, and non-governmental organizations.

Personal and Community Resilience

Personal and community resilience is the sustained ability of an individual and a community to utilize available resources to respond to, withstand, and recover from adverse situations following a catastrophic event. The Forum will explore opportunities and barriers to enhancing the resilience of individuals and communities through disaster risk reduction; ensuring that health is included in post-disaster recovery planning efforts; work with non-traditional sectors, and exploring special considerations needed to strengthen a community after a mass casualty incident.

Critical Infrastructure

Critical infrastructure protection focuses on ongoing efforts to secure the assets, systems, and networks, whether physical or virtual, vital to the security, public health, and safety of the nation. The Forum centers its discussion on the health care and public health sector and interdependent sector vulnerabilities, consequences of cascading and prolonged failures of infrastructure, threats from chemical, biological, radiological, nuclear, and high yield explosives, and the increasing threat and consequences of cyber-attack.

Project Staff

Lisa Brown, Forum Co-Director
Scott Wollek, Forum Co-Director
Aurelia Attal-Juncqua, Program Officer
Michael Berrios, Research Associate
Kimberly Sutton, Senior Program Assistant
Andrew M. Pope, Director, Board on Health Sciences Policy

MEMBERSHIP ROSTER

CRAIG VANDERWAGEN (Co-Chair)
East West Protection, LLC

SUZET MCKINNEY (Co-Chair)
Executive Director and CEO
Illinois Medical District

JOANNE ANDREADIS
Centers for Disease Control and Prevention DHHS

AUBREY MILLER
National Institute of Environmental Health Sciences
National Institutes of Health

EILEEN BULGER
Committee on Trauma
American College of Surgeons

BARBARA MULACH
National Institute of Allergy and Infectious Diseases
National Institutes of Health

MARY CASEY-LOCKYER
American Red Cross

IRA NEMETH
American College of Emergency Physicians

BROOKE COURTNEY
Office of Counterterrorism and Emerging Threats
U.S. Food and Drug Administration

JOHN OSBORN
Mayo Clinic College of Medicine

DAVID EISENMAN
University of California, Los Angeles

TARA O'TOOLE
In-Q-Tel

BRUCE EVANS
National Association of Emergency Medical Technicians

ANDREW PAVIA
Infectious Diseases Society of America

DAVID FERRARO
Society for Critical Care Medicine

LEWIS RADONOVICH
National Personal Protective Technology Laboratory
National Institute for Occupational Safety and Health

PRITESH GANDHI
Department of Homeland Security

TERRY RAUCH
Defense Health Agency
Department of Defense

ASHA GEORGE
Bipartisan Commission on Biodefense

WIN RAWLS
Association of State and Territorial Health Officials

NATALIE GRANT
Administration for Children and Families
Department of Health and Human Services

COURTNEY ROMOLT
Healthcare Ready

DAN HANFLING
In-Q-Tel

SARA ROSZAK
National Association of Chain Drug Stores

JOHN HICK
Hennepin County Medical Center

COLLEEN RYAN
American Bum Association

THOMAS KIRSCH
National Center for Disaster Medicine and Public Health
Uniformed Services University of the Health Sciences

ROSLYNE SCHULMAN
American Hospital Association

JAMES LAWLER
Global Center for Health Security
University of Nebraska Medical Center

RICHARD SERINO
Harvard T.H. Chan School of Public Health

FREDA LYON
Emergency Nurses Association

ALAN SINISCALCHI
Council of State and Territorial Epidemiologists

MONIQUE MANSOURA
MITRE Corporation

TENER VEENEMA
Johns Hopkins University

CHRIS MANGAL
Association of Public Health Laboratories

JENNIFER WARD
Trauma Center Association of America

PHILLIP MAYTUBBY
National Association of County and City Health Officials

GAMUNU WIJETUNGE
National Highway Traffic Safety Administration
Department of Transportation

BRIGITTE MESSERSCHMIDT
National Fire Protection Association

MATTHEW WYNIA
University of Colorado, Denver

NAS 1st Floor Conference Layout



COVID-19 Policies for Non-Staff Access to National Academies Facilities

Current Operating Status:

Effective April 8, 2022

All facilities of the National Academies of Sciences, Engineering, and Medicine are **open**.

To prevent infection and spread of the COVID-19 virus, and as an integral measure towards the safety and health of everyone in our buildings, the National Academies require that all visitors to NASEM facilities be up-to-date on their vaccinations against COVID-19 per CDC guidance. Those with up-to-date vaccinations may choose to wear a mask in NASEM facilities. Wearing a mask is highly recommended.

Visitors must show their official COVID-19 Vaccination Record Card (or a digital photo of the card) before entering any National Academies building. For more details regarding access to NASEM facilities and expectations for visitors, please visit our [operating status webpage](#).

Volunteers and invited guests should not feel obligated to travel to participate in a meeting being held at one of our facilities during this time. We encourage remote attendance to the meeting for anyone who is not comfortable traveling to or participating in an in-person meeting. The National Academies have made investments in new equipment in our meeting rooms to accommodate interactive, hybrid meetings so that the experience for those not in the room will be as engaging as possible. In certain circumstances, such as for meetings involving classified or controlled information or events of significant importance, a request for participants to attend in-person may be extended. Please reach out to the meeting organizer to discuss needed accommodations for hybrid meetings if you are unable to attend in-person.

COVID-related Resources and Reminders

- Hand sanitizer is provided throughout the NAS Building.
- All visitors must present their vaccine card (or a digital photo of it) to access the building.
- Wearing a mask in the building is encouraged, though it is not required at this time.
- Nearest drugstore with rapid antigen test:
 - There are several nearby CVS locations.
 - The closest CVS: 2000 Pennsylvania Avenue NW, Washington, DC 20006, approx. 11-minute walk from NAS Building
- Nearest COVID-19 testing site:
 - CVS Minute Clinic 2240 M Street Northwest, Washington, DC 20037 – Appointment required

TAB 2

Planning Committee and Speaker Biosketches

Planning Committee for “*What Happened to the Plans: A workshop*”

COMMITTEE MEMBER BIOSKETCHES



Richard Serino (Co-chair)
*Distinguishes Senior Fellow,
Harvard TH Chan School of Public Health
National Preparedness Leadership Initiative*

The Hon. Richard Serino spent more than forty years in public service. During that time, he provided extensive leadership on emergency management, emergency medical and homeland security at local, state, federal and international levels. Mr. Serino is currently a Distinguished Senior Fellow at Harvard TH Chan School of Public Health, National Preparedness Leadership Initiative and a Senior Advisor at MIT’s Urban Risk Lab.

Serino was appointed by President Obama, confirmed by the Senate as the Federal Emergency Management Agency’s 8th Deputy Administrator in October 2009, and served until 2014. In this role, he also served as the Chief Operating Officer (COO) of the agency with more than \$25 billion budget. Prior to his appointment as Deputy Administrator, he spent 36 years at Boston EMS where he rose through the ranks to become Chief. He also served as the Assistant Director of the Boston Public Health Commission.

Mr. Serino responded to over 60 national disasters while at FEMA and during Super Storm Sandy, he was the lead federal area commander for New York and New Jersey. Serino was also on scene at the Boston Marathon bombings as the Department of Homeland Security senior official. A sampling of federally declared disasters Mr. Serino responded to include flooding in North Dakota, New England, Georgia and Colorado; the wildfires in Colorado and Texas; the tornadoes in Mississippi, Alabama, Georgia, Joplin, Missouri; tsunami destruction in the American Samoa; and the Hurricane stricken areas from hurricanes Isaac, Irene, and Earl. Serino briefed the President of the United States on a number of disasters, briefed, and traveled with Vice President Biden to a number of affected communities to survey the destruction.

As the Agency’s COO, Mr. Serino fundamentally changed how FEMA operates. He helped FEMA reorient its activities and improve its programs to be “Survivor centric,” ensuring that the agency supports the delivery of services focused on easing the recovery experience of survivors – as individuals, neighborhoods, and communities. As Deputy Administrator, he also led administrative improvements that were focused on emphasizing financial accountability, created FEMA Stat, which improved the use of analytics to drive decisions, advanced the workforce training and engagement and fostered a culture of innovation.

Under His leadership, FEMA launched initiatives such as FEMA Corps, a dedicated unit of 1,600 service corps members within AmeriCorps National Civilian Community Corps (NCCC) solely devoted to disaster preparedness, response, and recovery. His leadership took FEMA Corps from idea to implementation in nine months. FEMA Corps is a presidentially recognized model program of national service that provides eighteen to twenty-four year olds with an opportunity to serve their country during disasters. When the program is at full operational capability, and in an average disaster year, there will be an expected savings of approximately \$60 million in a year.

Mr. Serino was also instrumental in developing the FEMA Think Tank, a program that provides a transparent way for citizens to speak directly to government leadership and offer their input and ideas. The monthly calls portion of the Think Tank have not just trended globally on Twitter, but have also given the “Whole of Community” a voice directly to leadership.

During his tenure at Boston EMS, he transformed it to one of the best and nationally recognized EMS systems in the country. He bolstered the city’s response plans for major emergencies, including chemical, biological, and radiological attacks. He also led citywide planning for the first influenza pandemic in more than 40 years. Mr. Serino served as an Incident Commander for over thirty & five mass casualty incidents and for all of Boston’s major planned events, including the Boston Marathon, Boston’s Fourth of July celebration, First Night, and the 2004 Democratic National Convention, a National Special Security Event.

He has received more than thirty & five local, national and international awards for public service and innovation; including Harvard University National Public Leadership Institute’s “Leader of the Year”; nationally recognized as an Innovator in EMS with the “Innovators in EMS Award” and Boston’s highest Public Service award, “Henry L Shattuck Public Service Award”, and was a Tribeca Disruptive Innovation Fellow. Mr. Serino published many articles, including: “Emergency Medical Consequence Planning and Management for National Special Security Events After September 11: Boston: 2004,” Disaster Medicine and Public Health Preparedness, August 2008; and “In a Moment’s Notice: Surge Capacity for Terrorist Bombings,” U.S. Department of Health and Human Services, Centers for Disease Control and Prevention, April 2007.

Mr. Serino attended Harvard University’s Kennedy School of Government Senior Executives in State and Local Government program in 2000, completed the Kennedy School’s National Preparedness Leadership Initiative in 2005, and graduated the Executive Leadership Program, Center for Homeland Defense and Security at the Naval Postgraduate School.



**Suzet McKinney, DrPH, MPH, (Co-Chair)
Principle & Director of Life Sciences
Sterling Bay**

Dr. Suzet M. McKinney is a public health expert, medical executive, thought leader, strategic thinker and nationally recognized expert in emergency preparedness and response. As Principal and Director of Life Sciences for Sterling Bay, Dr. McKinney oversees relationships with the scientific, academic, corporate, tech, and governmental sectors involved in the life sciences ecosystem. She also leads the strategy to expand Sterling Bay’s footprint in life sciences nationwide. She previously served as CEO and Executive Director of the Illinois Medical District, where she managed a 24/7/365 environment that included 560 acres of medical research facilities, labs, a biotech business incubator, universities, raw land development areas, four hospitals and more than 40 healthcare-related facilities. Within two years of leadership, Dr. McKinney accomplished a financial turnaround of the IMD, successfully retiring more than \$40 million in debt. In 2020, Dr. McKinney was appointed by Illinois Governor JB Pritzker as Operations Lead for the State of Illinois’ Alternate Care Facilities, a network of alternate medical locations designed to decompress the hospital system during the COVID-19 pandemic. She worked with the U.S. Army Corps of Engineers and multiple construction, architecture and project management teams to prepare five facilities to open for overflow patient care.

Dr. McKinney is also an experienced on-camera expert who has frequently discussed healthcare disparities and racial inequities amplified by the pandemic, climate-related emergencies, biological and

chemical threats and natural disasters. She has been featured on CNN, ABC, NBC Nightly News, The Wall Street Journal, Forbes, Crain's Chicago Business and The Chicago Tribune.

Prior to leading the IMD, Dr. McKinney served as the Deputy Commissioner of the Bureau of Public Health Preparedness and Emergency Response at the Chicago Department of Public Health (CDPH), where she oversaw the emergency preparedness efforts for the Department and coordinated those efforts within the larger spectrum of the City of Chicago's Public Safety activities, in addition to overseeing the Department's Division of Women and Children's Health. She also provided support to the U.S. Department of Defense's Defense Threat Reduction Agency, lending subject matter expertise in biological terrorism preparedness to the country of Poland.

Previously, she served as the Sr. Advisor for Public Health and Preparedness at the Tauri Group, where she provided strategic and analytical consulting services to the U.S. Department of Homeland Security's (DHS), BioWatch Program. Her work at DHS included providing creative, responsive and operationally based problem solving for public health, emergency management and homeland security issues, specifically chemical and biological early detection systems and the implementation of those systems at the state and local levels.

Dr. McKinney serves on numerous boards and advisory committees. Her current board memberships include the Board of Directors for Lurie Children's Hospital, Thresholds, and the Fifth Third Bank Advisory Board. Dr. McKinney is Co-Chair of the National Academies of Science, Engineering and Medicine (NASEM), Health and Medicine Division is Forum on Medical and Public Health Preparedness for Disasters and Emergencies and is a member of the NASEM Board on Health Sciences Policy. She also serves on the Science and Security Board for the Bulletin of the Atomic Scientists, and is Chairperson of the Board of Scientific Counselors for the U.S. Centers for Disease Control, Center for Public Health Preparedness and Response. She has led multiple emergency response efforts, including Chicago's 2014-2015 Ebola response; the operational response to the 2009 H1N1 outbreak; as well as CDPH's participation in the 2012 NATO Summit response and the 2010 Haiti Earthquake response. She is currently serving the State of IL as Operations Lead for the COVID-19 Alternate Care Facilities. She is a member of The Chicago Network and the Economic Club of Chicago.

In academia, Dr. McKinney serves as an Instructor in the Division of Translational Policy and Leadership Development at Harvard University's T.H. Chan School of Public Health and as Adjunct Assistant Professor of Health Policy Administration at the University of Illinois at Chicago School of Public Health. Additionally, she serves as a mentor for the Biomedical Sciences Careers Project, also at Harvard University. She is the co-author of the text: Public Health Emergency Preparedness: Practical Solutions for the Real World (2018) and was named one of Chicago's 50 Most Powerful Women (2020), and one of Chicago's Notable Women in Healthcare (2018 & 2019).

Dr. McKinney holds her Doctorate degree from the University of Illinois at Chicago School of Public Health, with a focus on preparedness planning, leadership and workforce development. She received her Bachelor of Arts in Biology from Brandeis University (Waltham, MA) where she was also a Howard Hughes Medical Institute Fellow. She received her Master of Public Health degree (Health Care Administration) and certificates in Managed Care and Health Care Administration from Benedictine University in Lisle, IL.



**John H. Armstrong, MD, FACS, FCCP,
Division Director, University of South Florida Morsani College of Medicine
Member of American College of Surgeons Committee on Trauma**

Dr. Armstrong is a trauma surgeon, medical educator, and national health leader. He is Professor of Surgery, University of South Florida (USF), Tampa, FL, and Adjunct Professor of Surgery, Uniformed Services University of the Health Sciences, Bethesda, MD; Executive Committee member, American College of Surgeons (ACS) Committee on Trauma (COT); and member, Council on Long Range Planning and Development, American Medical Association (AMA). He has served as a member of the Defense Health Board and its Trauma and Injury Subcommittee; AMA Secretary and Young Physician Trustee; and President of the ACS Florida Chapter.

From 2012 to 2016, Dr. Armstrong served as Florida's Surgeon General and Secretary of Health. With his leadership, Florida achieved the lowest infant mortality rate in its history, remained above the national average in life expectancy, and moved from 24th to 12th in healthy weight. Further, the Florida Department of Health received first-in-the-nation national accreditation as an integrated department of health. He was the first Chief Medical Officer of the USF Health Center for Advanced Medical Learning and Simulation (CAMLS), Tampa, FL; Trauma Medical Director at the University of Florida, Gainesville (covering 1.1 million people in 12 counties); and Director of the award-winning US Army Trauma Training Center, Miami, FL. He completed his Army career as a Colonel in 2005. Dr. Armstrong is a graduate of Princeton University, the University Of Virginia School Of Medicine, and the US Army Command and General Staff College. He performed his surgical residency at Tripler Army Medical Center in Honolulu, HI, his trauma/surgical critical care fellowship at the University of Miami/Jackson Memorial Hospital, and his Master Educators in Medical Education Fellowship at the University of Florida. He is a global leader in mass casualty readiness training and has served as Co-Editor of the ACS Disaster Management and Emergency Preparedness Course (1st edition); Editor-in-Chief of Advanced Disaster Life Support, v3.0; and principal faculty of the Joint Counterterrorism Awareness Workshop Series (JCTAWS). His research interests include trauma system development, mass casualty triage, and simulation-based trauma skills training.



**Jeanne Benincasa
Massachusetts Undersecretary for Homeland Security and Homeland
Security Advisor to the Governor
Executive Office of Public Safety and Security**

Undersecretary of Homeland Security and Homeland Security Advisor to the Governor, Jeanne Benincasa Thorpe is an accomplished senior government leader and advisor with more than 20 years of Executive Leadership and Public Policy experience in Homeland Security, Public Safety, Emergency Management and Public Health Preparedness. Presently, she leads the Commonwealth's public safety system response efforts to the COVID-19 pandemic while overseeing statewide fire services, emergency management, homeland security grants, fusion center (anti-terrorism intelligence) and National Guard agencies and operations. Undersecretary Benincasa-Thorpe is the appointed Homeland Security Advisor to Massachusetts Governor Charlie Baker. She has high level expertise in Emergency Preparedness and Response Planning, Exercises, Evaluations and Trainings, Emergency Operations, Crisis Communication, and Program Management and Development for federal (FEMA/DHS), state, and local governments. Undersecretary Benincasa-Thorpe authored and implemented the Statewide Medical Surge Plan, the

Ambulance Task Force Mutual Aid Plan, the Statewide Mass Casualty Plan and the State EMS Communications Plan. These critical plans were successfully operationalized with lifesaving success during major disasters such as the 2013 Boston Marathon Bombing, the 2011 Ice Storm, 2011 Western MA Tornadoes, Tropical Storm Irene. She also authored and implemented the Massachusetts Health and Medical Coordinating Coalitions (HMCC) Strategic Plan that is the statewide framework for health care and public health response in disasters, such as coordinated response to the COVID-19 pandemic.



Joneigh S. Khaldun, MD, MPH, FACEP
Vice President, Chief Health Equity Officer, CVS Health

Dr. Khaldun is the Vice President and Chief Health Equity Officer for CVS Health. She leads the CVS Health strategy to advance health equity for patients, members, providers, customers, and the communities served across all lines of the CVS Health business. Prior to this role, she served as the Chief Medical Executive for the State of Michigan and Chief Deputy Director for Health in the Michigan Department of Health and Human Services (MDHHS), where she was responsible for public health and aging programs, Medicaid, and behavioral health. She led Michigan's COVID-19 response and is credited for Michigan's early identification of and strategy to address disparities in COVID-19 outcomes. In 2021, she was named by President Biden to the COVID-19 Health Equity Task Force. Prior to her role at MDHHS, she was the Director and Health Officer for the Detroit Health Department, where she oversaw a robust community health assessment, spear-headed new human service and maternal and infant health efforts, and led Detroit's response to the largest Hepatitis A outbreak in modern U.S. history. Her efforts contributed to Detroit having the lowest infant mortality rate in recorded history in 2019. Previously, Dr. Khaldun was the Baltimore City Health Department's Chief Medical Officer, where she expanded and modernized the department's clinical services. She has held previous positions as the Director of the Center for Injury Prevention and Control at George Washington University, Founder and Director of the Fellowship in Health Policy in the University of Maryland Department of Emergency Medicine, and Fellow in the Obama-Biden administration's Office of Health Reform in the U.S. Department of Health and Human Services. She currently serves on the National Advisory Board for the Institute for Healthcare Policy and Innovation at the University of Michigan, the Board of Directors of Big Brothers Big Sisters of Metropolitan Detroit, and on the Health and Medicine Committee of the National Academies of Science, Engineering and Medicine. She is an Adjunct Professor in the Department of Health Policy and Management in the University of Michigan School of Public Health. Dr. Khaldun has received numerous awards, including the 40 Under 40 Leaders in Minority Health Award by the National Minority Quality Forum, the 40 Under 40 Leaders in Public Health award from the deBeaumont Foundation, and the George Washington University Monumental Alumni award. In 2020, she was named a Notable Woman in Health and Newsmaker of the Year by Crain's Detroit. Dr. Khaldun obtained her undergraduate degree from the University of Michigan, medical degree from the University of Pennsylvania, MPH in Health Policy from George Washington University, and completed residency in emergency medicine at SUNY Downstate Medical Center/Kings County Hospital in Brooklyn, NY, where she was elected chief resident in her final year. She practices emergency medicine part-time at Henry Ford Hospital in Detroit.

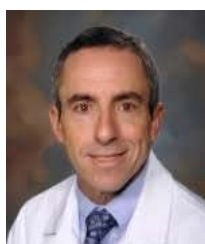


Steve Mitchell, M.D.

Medical Director of the Emergency Department at Harborview Medical Center

**Associate Professor, Department of Emergency Medicine
University of Washington**

Dr. Mitchell is an emergency physician and the Medical Director of the Emergency Department (ED) at Harborview Medical Center. For the COVID-19 pandemic, he is also serving as the Western Washington COVID Coordination Center (RC3) Medical Director. He cares for patients in the ED at Harborview. He works with the HMC ED operations team to optimize the collaboration, coordination and collegiality required to care for patients seeking care in the emergency department. Dr. Mitchell studies emergency department operations, emergency airway management, and geriatrics. Currently he is participating in multi-center trials, which evaluate the effectiveness of intubation techniques and medications on emergency airway management, and evaluating the impacts of outside radiologic interpretation discrepancies on ED operations. During the COVID-19 pandemic, he founded and is leading the coordination center, which manages the distribution and level loading of COVID-19 patients requiring hospitalization across Washington State. He has received funding from the Washington Department of Health and the Department of Health and Human Services to carry out these efforts. As of September, 2021 the WMCC has managed over 1,200 requests from Washington state hospitals seeking assistance in load leveling hospitals and gaining access to higher levels of care. The primary goal of the WMCC is to level load the health system and prevent any one hospital or region entering crisis standards of care when capacity exists elsewhere in Washington State. This work has allowed their team the opportunity to deeply understand the pandemic impacts across the statewide healthcare continuum. As such, the team routinely brief senior state governmental, hospital association, public health and hospital executive leadership. Dr. Mitchell also assisted in the creation of the HHS/ASPR MOCC toolkit to guide the creation of MOCCs across the United States. The creation of the statewide MOCC required work with regional hospital coalition partners (Northwest Healthcare Response Network and REDI Coalition), the WA State Hospital Association, WA State Dept. of Health and the WA State Governor's office.



**Andrew Pavia, M.D., FAAP, FIDSA,
George and Esther Gross Presidential Professor
Chief, Division of Pediatric Infectious Diseases
University of Utah**

Andrew T. Pavia is the George and Esther Gross Presidential Professor and Chief of the Division of Division of Pediatric Infectious Diseases at the University of Utah and Director of Hospital Epidemiology at Primary Children's Medical Center. His current research focuses on the epidemiology, diagnosis and management of influenza and other respiratory and emerging infections. He is a member of the Board of Directors of the Infectious Diseases Society of America and chairs the Pandemic Influenza and Bio-emergencies Task Force. He is also a member of the Board of Scientific Counselors of the Director of the Office of Infectious Diseases at the U.S. Centers for Disease Control and Prevention (CDC) and has served as a member of the National Biodefense Science Board, and the National Vaccine Advisory Board. He has been an adviser to CDC on pandemic influenza- and anthrax-related issues. He has served on committees for the National Academies of Sciences, Engineering, and Medicine (NASEM), exploring the distribution of antivirals

during influenza pandemics and the prepositioning of countermeasures for anthrax. He received his B.A. and M.D. degrees at Brown University. He trained as a resident and chief resident at Dartmouth Hitchcock Medical Center, as an Epidemic Intelligence Service officer and Preventive Medicine Resident at the CDC, and an infectious disease fellow at the University of Utah.



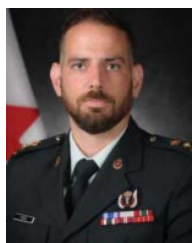
Win Rawls

Director, Preparedness and Evaluation Association of State and Territorial Health Officials

Mr. Rawls is the Director of Preparedness and Evaluation at the Association of State and Territorial Health Officials (ASTHO), Arlington, Virginia. Mr. Rawls is responsible for identifying opportunities for public health to strengthen connections and partnerships with emergency management, critical infrastructure, supply chain, and other applicable disciplines and specialties and providing ASTHO representation and expertise to the practice community.

Prior to joining ASTHO, Mr. Rawls served as Deputy Director for the Illinois Department of Public Health, Office of Preparedness and Response and prior to state government, he served 20 years of distinguished military service. His military career culminated in preparedness roles at the Pentagon and the White House during September 11th. After military service, Mr. Rawls joined private industry as an Information Technology Executive where he served as Assistant Chief Information Officer, Vice President of Information Technology in the semi-conductor and pharmaceutical industries.

Mr. Rawls formal education includes a Master of Business Administration, M.S. in Telecommunications Management and a B.B.A. in Business Administration and Accounting with specialized training in leadership, management, operations, information technology, telecommunications, logistics, and public health and health care emergency preparedness. He is also a graduate of the National Preparedness Leadership Institute at Harvard.



Lt. Col. Carlo Rossi

**CCFP Canadian Armed Forces Health Attaché
Health Readiness Policy**

Oversight Office of the Assistant Secretary of Defense (Health Affairs)

Lieutenant Colonel Carlo Rossi enrolled in the Canadian Armed Forces under the Medical Officer Training Program in 2004 at McGill University (Montreal) prior to completing Family Medicine residency at the University of British Columbia (Victoria). He served as the medical officer for the 1st Battalion Royal Canadian Regiment where he deployed to Balkh Province, Afghanistan (2010) as the Primary Care and Emergency Medicine mentor to the Afghan National Army. He was promoted to Major in 2013, accepted for postgraduate training in Preventive Medicine at the Uniformed Services University of Health Sciences where he also completed a Masters of Tropical Medicine and Hygiene (2015). On return to Canada, he was assigned as Staff Officer Medical Intelligence (2015), deployed as the Joint Task Force Surgeon Operation UNIFIER (Ukraine) where he was awarded the Ukrainian Medal of Honor for Medicine and later the Canadian Meritorious Service Medal for advancing pre-hospital care training programs. He returned to Canada as the Medical Chief of Staff Canadian Forces Health Services Centre Ottawa, a position he held until promoted to his current rank and assuming the duties of National Capital Region and Formation Europe Surgeon. He deployed again (2018) as Joint Task Force Surgeon Op PRESENCE as part of the first Canadian Forward Air Evacuation operation in support of the United Nations

Multidimensional Integrated Stabilization Mission in Mali (MINUSMA). Upon his return, he assumed responsibilities as Senior Staff Officer Communicable Disease Control and Prevention (2019). He was the medical officer in charge of the initial COVID-19 pandemic response for Canada. Since 2015, he has been an ex-officio member of the Committee to Advise on Tropical Medicine and Travel, which sets the clinical standards for tropical/travel medicine in Canada. He was appointed Canadian Defense Health Attaché (Washington) in July 2020.



David Zonies, MD, MPH
Professor of Surgery & Associate Chief Medical Officer for Critical Care
Division and Acute Care Surgery, School of Medicine
Oregon Health Sciences University

David Zonies, MD, MPH, MBA, is the Associate Chief Medical Officer for OHSU Health System, where he oversees strategic, operational, quality, and safety practices for all critical care services. He is a Professor of Surgery in the OHSU School of Medicine and adjunct professor of surgery at the Uniformed Services University. He is a practicing acute care surgeon and has additional specialty training in critical care and hospice and palliative medicine. Dr. Zonies retired from the Air Force last spring after 21 years of active and reserve service. He has a special interest in disaster management and is the incoming chair of the American College of Surgeons Disaster Committee. During the COVID-19 pandemic, he has been responsible for his health system's critical care response that included crisis care guideline development and implementation, the development of a multi-state regional ECMO consortium, and expansion of their virtual ICU platform to expand coverage to the region.

SPEAKER BIOSKETCHES

Jean Accius, Ph.D., is a passionate champion and catalyst for changing how the world sees and values aging. He is an internationally recognized thought leader on aging, longevity, equity, health systems transformation and modernizing the delivery and financing of long-term care. With tri-sector experience and deep knowledge, he has a strong track record of building high-performing teams, managing cross-functional operations and processes, and developing innovative and actionable solutions, policies, and programs to close the opportunity gap so that everyone can live longer, healthier and more productive lives.

As Senior Vice President of Global Thought Leadership at AARP, he leads a team in positioning AARP as a global thought leader by identifying emerging trends around the world, cultivating and elevating new ideas, forging global strategic alliances that become the foundation for collaboration and sparking bold solutions to change systems and improve the lives of the global population as it ages.

Dr. Accius is an Executive Leadership Council Fellow, member of G100's Transformational Leadership Network, and holds a bachelor's degree in hospitality administration and a master's degree in aging studies from the Claude Pepper Institute at Florida State University. He also holds a Ph.D. in public administration from American University. Dr. Accius is a graduate of Leadership Maryland's Class of 2014, the Harvard T.H. Chan School of Public Health program on health reform, and Stanford University's Graduate School of Business Corporate Innovation program.

COL David James Adam was born and raised in Tacoma, Washington. He began his military career in August 1988. COL Adam's first assignment was with the 40th Aeromedical Evacuation Squadron McChord Air Force Base, WA where he served as an Aeromedical Evacuation Medic in the Air Force Reserves. His first deployment was to Saudi Arabia in support of Desert Shield/Storm. He received a direct commission as an Aeromedical Operations Officer in the Air Force Reserves in 1997. COL Adam transferred his commission to the United States Army in 2000 and finished medical school in 2004 under the Health Professions Scholarship Program.

COL Adam completed a residency in Family Medicine at Foot Hood, Texas, in 2007. Upon graduation, he was assigned to the 4/6 Air Cavalry Squadron Fort Lewis, WA as the unit Flight Surgeon and deployed in support of (ISO) Operation Iraqi Freedom from August 2007 to August 2008. COL Adam became the Assistant Program Director for the Madigan Army Medical Center Family Medicine residency in 2010 and deployed in 2011 with the 86th Combat Support Hospital ISO Operation New Dawn.

In 2013, COL Adam completed Command General and Staff College in residence at Fort Leavenworth, Kansas. His follow-on assignment was with 2nd Battalion, 5th Group Special Forces (Airborne) Fort Campbell, Kentucky. While at 5SFG, COL Adam deployed as the Special Operations Task Force 52 Surgeon, RC-West, Afghanistan in 2013 and the Combined Joint Special Operations Task Force – Syria Surgeon in 2015.

COL Adam joined the Washington Army National Guard in late 2015, where he served as the 66th Theater Aviation Command Flight Surgeon. COL Adam deployed as the NATO Special Operations Combatant Command – Special Operations Joint Task Force – Afghanistan (NSOCC-A/SOJTF-A) Command Surgeon in 2019.

COL Adam graduated, Superior Graduate, US Army War College, Distant Education, 2020. He deployed in 2021-2022 with 1-168 GSAB ISO Operation Inherent Resolve. His awards include the Bronze Star Medal, Defense Meritorious Service Medal, Meritorious Service Medal (three bronze oak leaf cluster), Army Commendation Medal (one silver oak leaf cluster), Air Force Commendation Medal, Army Achievement Medal (one bronze oak leaf cluster), Air Force Achievement Medal, (one bronze oak leaf cluster), Valorous Unit Award (one bronze oak leaf cluster), Joint Meritorious Unit Award (one bronze oak leaf cluster), Meritorious Unit Award and multiple campaign awards.

COL Adam is married to Kristine Adam of 27 years. They enjoy hiking with their children, Lauren, Cale, Grace, Yonatan, and Sarah. He also enjoys team sports, rock climbing, and CrossFit. Currently, COL Adam is a primary care physician at Madigan Army Medical Center and the WAARNG State Surgeon.

John H. Armstrong, MD, FACS, FCCP, is a trauma surgeon, medical educator, and national health leader. He is Professor of Surgery, University of South Florida (USF), Tampa, FL, and Adjunct Professor of Surgery, Uniformed Services University of the Health Sciences, Bethesda, MD; Executive Committee member, American College of Surgeons (ACS) Committee on Trauma (COT); and member, American Medical Association (AMA) Council on Long Range Planning and Development. He serves as a member of the Defense Health Board and chairs its Trauma and Injury Subcommittee. He is a past AMA Secretary and Young Physician Trustee.

From 2012 to 2016, Dr. Armstrong served as Florida's Surgeon General and Secretary of Health. With his leadership, Florida achieved the lowest infant mortality rate in its history, remained above the national average in life expectancy, and moved from 24th to 12th in healthy weight. Further, the Florida Department of Health received first-in-the-nation national accreditation as an integrated department of health. He was the first Chief Medical Officer of the USF Health Center for Advanced Medical Learning and Simulation (CAMLs), Tampa, FL; Trauma Medical Director at the University of Florida, Gainesville (covering 1.1 million people in 12 counties); and Director of the award-winning US Army Trauma Training Center, Miami, FL. He completed his Army career as a Colonel in 2005.

Dr. Armstrong is a graduate of Princeton University, the University of Virginia School of Medicine, and the US Army Command and General Staff College. He performed his surgical residency at Tripler Army Medical Center in Honolulu, HI, his trauma/surgical critical care fellowship at the University of Miami/Jackson Memorial Hospital, and his Master Educators in Medical Education Fellowship at the University of Florida. He is a global leader in mass casualty readiness training and has served as Co-Editor of the ACS Disaster Management and Emergency Preparedness Course (1st edition); Editor-in-Chief of Advanced Disaster Life Support, v3.0; and principal faculty of the Joint Counterterrorism Awareness Workshop Series (JCTAWS). His research interests include trauma

system development, mass casualty triage, simulation-based trauma skills training, health care system performance improvement, and public health.

Jessica A. Bell serves as a senior director on NTL's Global Biological Policy and Programs team (NTI | bio). In this role, she works on projects to strengthen global health security, primarily focusing NTL's Global Health Security Index and broader advocacy efforts.

Prior to joining NTL, Jessica served as a senior advisor to the Defense Threat Reduction Agency's Cooperative Threat Reduction (CTR) program, where she helped to shape CTR's strategic messaging, engage key stakeholders across the nuclear, chemical, and biological threat reduction communities, and coordinate congressional and departmental requirements. She also served in a leadership role supporting the Biological Threat Reduction Program, where she assisted in the development of programmatic guidance, threat-reduction metrics, and requirements documentation while also managing a large team of global health specialists.

Jessica has consulted for multiple offices within the Defense Threat Reduction Agency, the Office of the Deputy Assistant Secretary of Defense for Countering Weapons of Mass Destruction, and the Department of Homeland Security's Office of Health Affairs. She also served as an operational research and development team member of 'Project Argus,' a disease-prevention initiative at Georgetown University focused on detecting catastrophic biological events on an international scale.

She holds an M.S. in Biohazardous Threat Agents and Emerging Infectious Diseases from Georgetown University and a B.S. in Forensic Biology from West Virginia University.

David Bibo is Deputy Associate Administrator for Response and Recovery and serves as the senior career official supporting Associate Administrator Anne Bink in leading FEMA's response, recovery, logistics, and field operations nationwide.

From January 2020 - November 2021, Mr. Bibo served as the Acting Associate Administrator for Response and Recovery, spearheading FEMA's leadership of COVID-19 pandemic response operations. Under his leadership, the FEMA team delivered assistance through an unprecedented number of disaster declarations with all 55 states and territories, as well as the District of Columbia under a major disaster declaration at the same time; managed the largest supply chain mission in the Agency's history; deployed thousands of staff to support tribal nations and state, local, and territorial governments; delivered 5.6 million vaccinations at 39 FEMA Pilot Community Vaccination Centers across 26 states; supported more than 1,300 vaccination sites nationwide; and obligated over \$60 billion from the Disaster Relief Fund in support of the nationwide pandemic response.

Mr. Bibo led FEMA's nationwide response and recovery operations during the historic 2020 Atlantic hurricane and West Coast wildfire seasons and oversaw award of the Agency's largest infrastructure grants in history to assist with Puerto Rico's ongoing recovery from hurricanes Irma and Maria.

A career member of the Senior Executive Service since 2012, Mr. Bibo first joined FEMA in 2009, and has served in roles including Deputy Associate Administrator for Response and Recovery, Deputy Associate Administrator and Associate Administrator for Policy, Program Analysis and International Affairs, and Acting FEMA Chief of Staff. He served in senior roles during the 2017

and 2018 hurricane seasons including Hurricanes Harvey, Irma, Maria, and Michael, the 2017 and 2018 California wildfires, the 2020 Puerto Rico earthquakes, and has overseen FEMA operations nationwide in the COVID-19 pandemic.

Mr. Bibo served as Director and then Senior Director for Preparedness on the staff of the White House National Security Council (NSC) from November 2011 – December 2013. In these roles, he oversaw development and implementation of policy on national preparedness, national security and emergency preparedness communications, and medical and public health preparedness for natural and manmade biological incidents. Mr. Bibo also served previously as a Special Advisor to the Director of the United States Secret Service.

Prior to joining Federal service, Mr. Bibo served in state and local government. In 2007, as one of Harvard's inaugural Dukakis Governors' Fellows, he supported the Massachusetts Governor's Homeland Security Advisor in building the Commonwealth's preparedness. Mr. Bibo served from 2004 – 2006 as Assistant Homeland Security Director for the City of Boston and eight metropolitan communities, designing and implementing initiatives to build the region's preparedness and response capabilities in the wake of September 11th.

Mr. Bibo is a recipient of the Secretary of Homeland Security's Outstanding Service Medal.

Mr. Bibo holds a Master's in Public Policy with a concentration in International Security and Political Economy from Harvard's Kennedy School of Government and a Bachelor of Arts from Stonehill College in Easton, MA. Mr. Bibo worked his way through college as an EMT in metro-Boston. He lives in Washington, DC, with Dr. Erin Ward Bibo and their three children.

Deborah Birx, M.D., is ActivePure's chief scientific and medical advisor. Formerly, Dr. Birx was appointed to the Office of the Vice President under the Trump administration to aid in the whole of government response to COVID-19 as the Coronavirus Response Coordinator. Ambassador Birx is a world-renowned medical expert and leader in the field of HIV/AIDS.

From 2005-2014, Ambassador Birx served successfully as the Director of CDC's Division of Global HIV/AIDS (DGHA), which is part of the agency's Center for Global Health. Recognized for her distinguished and dedicated commitment to building local capacity and strengthening quality laboratory health services and systems in Africa, in 2011, Ambassador Birx received a Lifetime Achievement Award from the African Society for Laboratory Medicine. In 2014, CDC honored her leadership in advancing the agency's HIV/AIDS response with the highly prestigious William C. Watson, Jr. Medal of Excellence.

Ambassador Birx has published over 220 manuscripts in peer-reviewed journals, authored nearly a dozen chapters in scientific publications, as well as developed and patented vaccines. She received her medical degree from the Hershey School of Medicine, Pennsylvania State University, and beginning in 1980 she trained in internal medicine and basic and clinical immunology at the Walter Reed Army Medical Center and the National Institutes of Health. Ambassador Birx is board certified in internal medicine, allergy and immunology, and diagnostic and clinical laboratory immunology.

Eric C. Blank, Dr.P.H., M.P.H., is the Chief Program Officer at the Association of Public Health Laboratories (APHL). He received his B.S. degree from Utah State University (1973), and his MPH (1980) and Dr.P.H. (1982) from the University of North Carolina-Chapel Hill. He has spent his entire career in public health focusing on public health laboratory practice and leadership. He was the director of the Missouri State Public Health Laboratory for 21 years and retired from that position in 2008. He served on the ASTHO Senior Deputies Committee from 2002-2008 and the national Exploring Public Health Accreditation Task Force (2006-2007). He has participated in numerous consultations domestically and internationally advising on public health laboratory science, practice and policy. He has been in his present position since 2011.

Eileen Bulger, MD, FACS, is a University of Washington professor of Surgery and Chief of Trauma for Harborview Medical Center.

Dr. Bulger enjoys caring for injured patients and their families for the time of injury and throughout the hospital stay. Her aim is to optimize the trauma system to get the right patient to the right place at the right time.

Dr. Bulger specializes in trauma, critical care and acute surgical emergencies. Her research focus involves advancements in pre-hospital care, the early resuscitation of injured patients, and the management of necrotizing soft tissue infections. She also enjoys instructing surgical residents and medical students.

Brian C. Castrucci, DrPH, MA, is the president and chief executive officer of the de Beaumont Foundation. He has built the Foundation into a leading voice in health philanthropy and public health practice.

An award-winning epidemiologist with 10 years of experience working in the health departments of Philadelphia, Texas, and Georgia, Brian brings a unique perspective to the philanthropic sector that allows him to shape and implement visionary and practical initiatives and partnerships and bring together research and practice to improve public health.

Under his leadership, the de Beaumont Foundation is advancing policy, building partnerships, and strengthening the public health system to create communities where people can achieve their best possible health. Among the projects he has spearheaded are CityHealth, the BUILD Health Challenge, and the Public Health Workforce Interests and Needs Survey (PH WINS). He is also an editor and contributing author to several books including *The Practical Playbook. Public Health. Primary Care. Together*, *Public Health Under Siege: Improving Policy in Turbulent Times*, and *Leading Systems Change in Public Health: A Field Guide for Practitioners*.

Brian has published more than 85 articles in the areas of public health systems and services research, maternal and child health, health promotion, and chronic disease prevention. His recent work has focused on the public health needs of large cities, the need for better data systems, and public health system improvements.

Brian earned his Doctorate in Public Health Leadership at the Gillings School of Global Public Health at the University of North Carolina at Chapel Hill. He graduated summa cum laude with a

Bachelor of Arts degree in political science from North Carolina State University and a Master of Arts degree in sociomedical sciences from Columbia University.

Daniel Dodgen, Ph.D., is the Senior Advisor for Strategy, Policy, Planning, and Requirements at the U.S. Department of Health and Human Services. Dr. Dodgen served as the Executive Director of the White House directed national advisory group on disaster mental health and led the nation's mental health response to Hurricanes Harvey, Irma, Maria, Katrina, Sandy, and others; the H1N1 epidemic, the BP oil spill, the Boston Marathon bombing, multiple mass shootings, and other natural and manmade disasters. He was one of the lead authors for *The Impacts of Climate Change on Human Health in the United States: A Scientific Assessment*. Dr. Dodgen also served as an advisor to the government of Greece and the State Department for the 2004 Olympics in Athens.

Before joining HHS, Dr. Dodgen was Senior Federal Affairs Officer at the American Psychological Association (APA) following a Fellowship with the U.S. House of Representatives. With the Red Cross, he responded to the Los Angeles riots, the Northridge earthquake, the Oklahoma City bombings, and the September 11 Pentagon attack. He received the American Psychological Association 2005 Early Career Award and was elected a Fellow of APA in 2012. He is on the Board of Directors of the International Association of Applied Psychology and is a Harvard Senior Executive Fellow. He is also a licensed clinical psychologist in Washington, DC.

Bill Driscoll Jr. has served in the Massachusetts House of Representatives since January 2017. He currently serves as Co-chair of the Joint Committee on COVID-19 and Emergency Preparedness and Management. This newly formed committee is devoted to oversight of the Commonwealth's response to the COVID-19 pandemic as well as broader emergency management issues.

For more than a decade, Bill provided leadership in the U.S. disaster response arena, organizing volunteers and coordinating across organizations, emergency management professionals, and all levels of government to help families and communities rebuild following natural disasters.

Bill has served in executive leadership roles for three nonprofit organizations, including as Interim President and CEO of National VOAD, the nonprofit industry's association for organizations active in disaster response.

Jeffrey Duchin, M.D. is the Health Officer and the Chief of the Communicable Disease Epidemiology & Immunization Section for Public Health–Seattle & King County, Professor of Medicine in the Division of Infectious Diseases, and Adjunct Professor in the School of Public Health at the University of Washington, Seattle. Jeff currently serves on the Centers for Disease Control & Prevention's (CDC) Board of Scientific Counselors (Office of Infectious Diseases) and the Board of Directors for the Infectious Disease Society of America where he is the IDSA liaison to the CDC's Advisory Committee on Immunization Practices.

Jeff is a member of the National Academy of Medicine's (NAM) Standing Committee on Emerging Infectious Diseases and 21st Century Health Threats and a past member of the NAM's Forum on Microbial Threats and Forum on Medical and Public Health Preparedness.

Jeff received his medical degree from Rutgers Medical School and trained in internal medicine at Thomas Jefferson University Hospital, completed a fellowship in general internal medicine and

emergency medicine at the Hospital of the University of Pennsylvania, and did his infectious disease subspecialty training at the University of Washington in Seattle. Jeff is a graduate of the CDC's Epidemic Intelligence Service (EIS) Officer training where he was assigned to the National Center for Infectious Diseases where he also completed the CDC's Preventive Medicine Residency program. Jeff worked for CDC as a medical epidemiologist in the Divisions of Tuberculosis Elimination and HIV/AIDS Special Studies Branch before assuming his current position. His peer review publications and research interests focus on communicable diseases of public health significance.

Christina Farrell serves as the First Deputy Commissioner of the New York City Emergency Management Department. Farrell joined the City of New York in 1994 as a coordinator in the Mayor's Office of the Criminal Justice Coordinator. She has also served as the deputy director of the NYC High Intensity Drug Trafficking Area (HIDTA) and the deputy director and director of the Mayor's Office of Grants Administration. She worked on the creation of the Twin Towers Fund after 9/11.

She joined NYC Emergency Management in 2003 as the agency's first director of grants. She created the agency's external affairs division, first serving as the assistant commissioner of the division and then the deputy commissioner. During her tenure in external affairs, she oversaw various programs and initiatives used to bolster the agency's mission to educate the public, including the agency's emergency preparedness campaign with the Ad Council, expanded elected official outreach, the use of social media to keep New Yorkers informed, and working with the private sector. She has responded to many major New York City disasters over the past 20 years, including the citywide blackout of 2003, Hurricane Sandy, severe heat, snowstorms, power outages, steam pipe and building explosions, and coastal storms.

Farrell holds a bachelor's degree in international relations and economics from Colgate University and a Master of Public Administration from the University of North Carolina at Chapel Hill. She is also a graduate of the executive leaders program at the Naval Postgraduate School in Monterey, California.

Michael Fraser, Ph.D., MS, CAE, FCPP serves as the Chief Executive Officer of the Association of State and Territorial Health Officials. ASTHO is the national nonprofit organization representing the public health agencies of the United States, the U.S. territories, and the District of Columbia, as well as the more than 100,000 public health professionals these agencies employ. ASTHO members, the chief health officials of these jurisdictions, are dedicated to formulating and influencing sound public health policy and to ensuring excellence in state-based public health practice. Under his leadership, ASTHO has received multiple Power of "A" Awards from the American Society of Association Executives for ASTHO's outstanding performance and the contributions the ASTHO team has made to advance the work of our members. ASTHO has grown in influence and organizational capacity since his arrival, including increasing the size and diversity of the ASTHO team and growing the organization's budget with significant new investments from both federal agencies and national and global philanthropies.

Michael is a dynamic leader in the health care and public health fields and brings to this position experience leading both public health associations and medical societies. He has been featured in interviews with the Washington Post, New York Times, Politico, The Hill, CNN, Bloomberg, MSNBC, and other national and regional media outlets. Michael is a co-editor and author of *A Public Health Guide to Ending the Opioid Crisis* published by the Oxford University Press in early 2019 and is currently an editor and author of *Leading Systems Change in Public Health: A Field Guide for Practitioners*. Michael is an Affiliated Faculty in the Department of Global and Community Health and the Department of Health Administration and Policy at the George Mason University College of Health and Human Services.

Prior to joining ASTHO, he served as the executive vice president and CEO of the Pennsylvania Medical Society in Harrisburg, PA. Michael has been a distinguished leader in public health for twenty years. He served as CEO of the Association of Maternal and Child Health Programs (AMCHP) from 2007 to 2013, where his leadership was recognized nationally by the Maternal and Child Health Bureau's Director's Award in 2014. In addition, the American Public Health Association's MCH Section awarded AMCHP the Outstanding Leadership and Advocacy Award. Prior to joining AMCHP, he was the deputy executive director of the National Association of County and City Health Officials from 2002 to 2007 and served in several capacities at the U.S. Department of Health and Human Services, including positions at the Health Resources and Services Administration and the Centers for Disease Control and Prevention. In Spring 2015, he was admitted as a Fellow in the College of Physicians of Philadelphia, one of just a handful of non-physician Fellows in the nation's oldest professional society.

Michael received his doctorate and masters degrees in sociology from the University of Massachusetts at Amherst and a masters of science in management with a concentration on management, strategy and leadership from the Eli Broad School of Management at Michigan State University. He received his B.A. in sociology from Oberlin College in 1991.

Since coming to ASTHO, Mike has crisscrossed the nation to meet with members, partners, and public health leaders to further advance ASTHO's mission as an advocate, voice and resource for state and territorial public health. He has served on several national boards and advisory committees throughout his career. He is the Founding Treasurer of PHPAC – the Public Health Political Action Committee, is active in the American Society of Association Executives, serves on the Editorial Board of the *Journal of Public Health Management and Practice* and serves as expert review for multiple scholarly publications on public health practice.

Robinsue Frohboese, J.D., Ph.D., is the senior career official and Principal Deputy in the HHS Office for Civil Rights (OCR) in the U.S. Department of Health and Human Services (HHS). She has more than 40 years of Federal government leadership experience in federal health care and human services policy and enforcement. During her tenure with OCR, Dr. Frohboese has served in a variety of leadership positions, including Acting OCR Director during four Administration transitions. She has been integral to many OCR civil rights initiatives over the years and OCR implementation of the HIPAA Privacy rule. She has also led a number of special projects for the HHS Office of the Secretary on behalf of OCR, including reports to the President on the Olmstead community integration Federal blueprint and a report to the President on preventing another

Virginia Tech tragedy, and has represented the Department on key initiatives, including serving for ten years on the U.S. Disability Treaty Delegation to the United Nations and the Secretary's Advisory Committee on Genetics, Health and Society.

Prior to joining OCR in 2000 as the Principal Deputy, Dr. Frohboese worked for 17 years in the Civil Rights Division, Special Litigation Section, at the U.S. Department of Justice, first as a Senior Trial Attorney and then as a Deputy Chief, overseeing major pattern or practice civil rights litigation against states. She began her Federal career as counsel to the U.S. Senate's Health, Education, Labor, and Pensions Committee following a Congressional Science Fellowship sponsored by the American Psychological Association and American Association for the Advancement of Science. In addition to her law degree, she has a Ph.D. in Psychology and has received a number of high commendations during her Federal tenure, including a Presidential Meritorious Executive Rank Award and various awards for outstanding service by multiple HHS Secretaries and Attorneys General.

Peter T. Gaynor joined The LiRo Group in April 2021, as the Senior Vice President and Director, National Resilience Response and Recovery Programs. In leading LiRo's national disaster response, Mr. Gaynor oversees recovery programs that help clients prepare for, respond to, and recover from disasters by delivering outcome-based innovative practical solutions.

On January 11, 2021, Mr. Gaynor was designated as the Acting Secretary of Homeland Security by President Donald J. Trump. Mr. Gaynor was officially confirmed by the U.S. Senate to be FEMA Administrator on January 14, 2020. Previously, he served as the Senate-confirmed Deputy FEMA Administrator. Since his selection by the President, Mr. Gaynor led FEMA's response to over 300 presidentially declared emergencies and major disasters. Mr. Gaynor oversaw the agency's close collaboration with federal, state, local, tribal and territorial partners, making it possible to serve millions of Americans in their time of need through locally executed, state managed and federally supported disaster response. During his time at FEMA, he led the agency's response to more than 300 presidentially declared emergencies and major disasters. During the historic year of 2020, Mr. Gaynor oversaw FEMA's first ever operational response to a nationwide pandemic while simultaneously responding to a record number of disasters. As a member of the White House Coronavirus Task Force, Mr. Gaynor directed FEMA's operational coordination for the whole-of-Government response to COVID-19. During this time, FEMA deployed over 5,300 staff and obligated over \$57 billion from the Disaster Relief Fund in support of the nationwide pandemic response.

In 2020, Mr. Gaynor led the federal response to the most active Atlantic hurricane season in history, with a record of 30 named storms. Mr. Gaynor also directed the response to a historic West Coast wildfire season, resulting in 78 Fire Management Assistance Grant declarations to assist governments in fighting wildfires.

As Administrator, Mr. Gaynor oversaw FEMA's award of the agency's largest infrastructure project grants in history to assist with Puerto Rico's ongoing recovery from hurricanes Irma and Maria. Gaynor has more than 13 years of experience in emergency management. Prior to coming to FEMA, Gaynor served as the Director of Rhode Island's Emergency Management Agency (RIEMA)

in 2015. During that time, RIEMA responded to numerous small and large disasters, including one presidentially declared disaster and at least seven pre-existing active federal disasters. Gaynor oversaw response and recovery efforts to blizzards, floods, tropical storms and public health emergencies. He also coordinated evacuations, mass care, special events, and school safety.

Gaynor served as the policy advisor to Governor Gina Raimondo on emergency management matters. He was also the Chair of the State Interoperable Communications Committee, the State Emergency Response Commission, and was Vice Chair of the State Emergency Management Advisory Committee. Additionally, he served as a Commissioner and a member for the Program Review Committee for the Emergency Management Accreditation Program (EMAP), which fosters excellence and accountability in emergency management and homeland security programs across the nation. From March 2008 to December 2014, Gaynor served as the Director of the Providence Emergency Management Agency (PEMA) and Office of Homeland Security, where he was the only Certified Emergency Manager assigned as a municipal emergency manager in Rhode Island. He was responsible for ensuring the planning and operations of the agency, coordinating community exercise programs, managing the Emergency Operations Center (EOC), and advising the Mayor of the City of Providence on local government emergency operations.

During his tenure at RIEMA and PEMA, Gaynor oversaw multiple response and recovery operations and managed numerous federally declared disasters. Under Pete Gaynor's leadership, in 2010, PEMA became the first municipality in the United States to receive accreditation from EMAP. In 2017, Rhode Island became the 36th state to be EMAP-accredited, making Gaynor the first emergency management director awarded EMAP accreditation at the local and state levels. In January 2018, under Gaynor's direction, Rhode Island was the first state designated as StormReady by the National Weather Service.

Gaynor was awarded the International Association of Emergency Managers USA & Global Partners in Preparedness Award for Operation SMART EXIT, a planned full-scale evacuation of several high-rise commercial buildings in Downtown Providence, RI. During his tenure at FEMA, Gaynor was awarded the Department of Homeland Security, Distinguished Service Medal and the United States Coast Guard, Distinguished Public Service Medal. Prior to his experience as an emergency manager, Gaynor served for 26 years as an enlisted Marine and Infantry Officer in the United States Marine Corps. During his tenure in the Marines, he was assigned as the Executive Officer responsible for the security of Presidential Retreat, Camp David; assigned as the Head of Plans, Policy, & Operations at the Headquarters Marine Corps during the September 11, 2001 attacks; and deployed in support of Iraqi Freedom with the 1st Marine Expeditionary Force where he coordinated combat operations in the Al-Anbar Province of Iraq for Multi-National and Marine forces.

Gaynor received a bachelor's degree in history from Rhode Island College and a master's degree in national security and strategic studies from the Naval War College in Newport, RI. He is also a graduate of the Center for Homeland Defense and Security's Executive Leaders Program.

Jacque Gray, Ph.D., is a Choctaw/Cherokee research associate professor emerita in Department of Population Health at the University of North Dakota (UND) School of Medicine & Health

Sciences. She also serves as director of the National Indigenous Elder Justice Initiative (NIEJI) a national resource center to address elder abuse in Indian Country. In addition, Gray is the lead for the Strong Heart Study Psychosocial Work Group, a longitudinal study of cardiovascular disease and metabolic disorders in American Indians that began in 1988. Gray also leads the Tribal Elder Abuse Services Survey funded by AARP to determine the types and locations of elder abuse services available. She is a consultant with the National Center for Native Behavioral Health with the University of Iowa where she works with tribes developing crisis and resilience teams to address emergency situations. Gray has worked to address health, mental health, and health disparities across Indian Country for 40 years and internationally, working with Māori suicide prevention. She participated in the White House Conference on Aging in 2015 to address elder justice issues. Gray received a doctorate from Oklahoma State University in 1998 and has been at UND since 1999. Gray is a member of the Society of Indian Psychologists; she is a fellow of the American Psychological Association.

Jarrod Goentzel, Ph.D., M.A., M.S., is founder and director of the MIT Humanitarian Supply Chain Lab in the MIT Center for Transportation & Logistics. His research focuses on meeting human needs in resource-constrained settings through better supply chain management, information systems, and decision support technology. Dr. Goentzel leads fieldwork in a range of contexts to develop insights that improve response efforts during emergencies and strengthen supply chains in vulnerable communities. Research involves direct engagement with the private sector, government agencies, humanitarian, international development, and community organizations on several continents. Dr. Goentzel has created residential and online courses in humanitarian logistics, international operations, and supply chain finance, and has extensive experience using simulation games to build intuition and leadership skills.

Previously, Dr. Goentzel was Executive Director of the MIT Supply Chain Management (SCM) Program, a nine-month master's degree program. He joined MIT in 2003 to establish the Zaragoza Logistics Center in Spain, which was the first node in the MIT Global SCALE Network. He received a Ph.D. from the School of Industrial and Systems Engineering at the Georgia Institute of Technology.

Gigi Gronvall, Ph.D., is a Senior Scholar at the Johns Hopkins Center for Health Security and an Associate Professor in the Department of Environmental Health and Engineering at the Johns Hopkins Bloomberg School of Public Health. She is an immunologist by training.

During the COVID-19 pandemic, she has led the Center's ongoing efforts to track the development and marketing of molecular and antigen tests and serology tests, as well as the development of national strategies for COVID-19 serology (antibody) tests and SARS-CoV-2 serosurveys in the United States. She also has written about the scientific response to the COVID-19 pandemic, the contested origin of SARS-CoV-2, and the implications for national and international security.

Dr. Gronvall is the author of *Synthetic Biology: Safety, Security, and Promise*. In the book, she describes what can be done to minimize technical and social risks and maximize the benefits of synthetic biology, focusing on biosecurity, biosafety, ethics, and US national competitiveness—important sectors of national security. Dr. Gronvall is also the author of *Preparing for Bioterrorism: The*

Alfred P. Sloan Foundation's Leadership in Biosecurity. Through her description of major grants that represented the foundation's investments in civilian preparedness, public health law, law enforcement, air filtering in buildings, influenza preparedness, and business preparedness, she constructed, for a nontechnical audience, a chronicle of early gains in US efforts to confront the threat of bioterrorism.

Dr. Gronvall is a member of the Novel and Exceptional Technology and Research Advisory Committee, which provides recommendations to the Director of the National Institutes of Health and is a public forum for the discussion of the scientific, safety, and ethical issues associated with emerging biotechnologies. From 2010 to 2020, Dr. Gronvall was a member of the Threat Reduction Advisory Committee, which provided the Secretary of Defense with independent advice and recommendations on reducing the risk to the United States, its military forces, and its allies and partners posed by nuclear, biological, chemical, and conventional threats. During 2014-2015, she led a preparatory group that examined the US government response to the Ebola outbreak in West Africa as a case study for the Department of Defense's strategic role in health security and made recommendations for future Department of Defense actions in response to disease outbreaks. She served as the Science Advisor for the Commission on the Prevention of Weapons of Mass Destruction Proliferation and Terrorism from April 2009 until the Commission ended in February 2010. She has testified before Congress about the safety and security of high-containment biological laboratories in the United States and served on several task forces related to laboratory and pathogen security. Dr. Gronvall has investigated and presented policy recommendations on the governance of science to the Biological Weapons Convention in Geneva, Switzerland.

In addition to being a life member of the Council on Foreign Relations, Dr. Gronvall is an Associate Editor of the journal *Health Security* (formerly *Biosecurity* and *Bioterrorism*). She is a founding member of the Center. Prior to joining the faculty, she worked at the Johns Hopkins University Center for Civilian Biodefense Strategies. She was a National Research Council Postdoctoral Associate at the US Army Medical Research Institute of Infectious Diseases in Fort Detrick, Maryland.

Dr. Gronvall received a PhD from Johns Hopkins University for work on T-cell receptor/MHC I interactions and worked as a protein chemist at the Memorial Sloan-Kettering Cancer Center. She received a BS in biology from Indiana University, Bloomington.

Janet Hamilton, MPH, assumed the role of CSTE's Executive Director in April 2020. As Executive Director, Janet works directly with the Executive Board and senior management team to lead and shape CSTE's mission of advancing the field of applied public health epidemiology in the U.S. Janet received her Master of Public Health in Epidemiology from the University of Michigan and is a graduate of the American Medical Informatics Association (AMIA) 10 X 10 program. She was a member of CSTE's Executive Board, serving from 2011 to 2015 as the Surveillance and Informatics Steering Committee Chair and was CSTE President from 2017-2018.

Janet is an epidemiologist with over 15 years of public health work experience at the national, state, local, tribal, and territorial levels overseeing policy development and liaising with CSTE members and strategic partners. She started her career as fellow in the Florida-based Epidemic Intelligence

Service with the Florida Department of Health in 2003 where she focused primarily on conducting outbreak investigations. Prior to her selection as Executive Director, Janet served as CSTE's Senior Director of Science and Policy, leading organizational efforts to strategically combine applied epidemiology science with policy efforts to advance public health and applied epidemiologic public health practice. One focus of her work at CSTE has been to lead public health surveillance data modernization through the "Data: Elemental to Health" campaign, which seeks to secure \$1 billion in federal funding over 10 years to support this foundational need.

In her previous role with the Florida Department of Health, Janet played leadership roles in Florida's response to 2009 H1N1, MERS-CoV, Zika, fungal meningitis, Deep Water Horizon Gulf oil spill, 11 major hurricanes including the 2004 season where the state was impacted by four major storms, the threat of imported Ebola from West Africa in 2014 and other outbreaks and public health events. She oversaw both the design, development and maintenance of the disease/condition surveillance systems themselves, as well as the rules and regulations to support data collection efforts. Additionally, she oversaw Meaningful Use activities for the Florida Department of Health in the areas of electronic laboratory reporting and syndromic surveillance. Her efforts developing and running the Florida Department of Health's infectious disease surveillance systems made Florida a leader in innovation in both reportable disease and syndromic surveillance.

Janet's work has been recognized in 2011 with the receipt of the Healthcare Information and Management Systems Society (HIMSS) Davies Award for positively impacting population health by optimizing health information technology. She has also been actively involved in numerous national committees to advance public health surveillance. At CSTE, she continues her work to support effective public health surveillance and sound epidemiologic practice through training, capacity development, and peer consultation.

Melissa Harvey, MSPH, BSN, RN is the Assistant Vice President for Enterprise Emergency Operations for HCA Healthcare, the nation's largest health system, comprised of 185 hospitals and 2,000+ sites of care in 20 states and the United Kingdom. She is responsible for advancing healthcare system preparedness across the organization and developing next-generation response capabilities to ensure a more resilient healthcare enterprise.

Melissa also serves as an advisor to the COVID Commission Planning Group, which is preparing the way forward for a nonpartisan National COVID Commission that could be initiated by the White House, chartered by Congress, or privately funded, to preserve the lessons learned during the crisis and recommend solutions to safeguard the nation from future threats.

Previously, Melissa served as the Director of Strategic Projects at the Global Center for Health Security at the University of Nebraska Medical Center (UNMC) and Nebraska Medicine, where she developed public-private partnerships to advance the nation's health security. She has more than a decade of federal healthcare experience, most recently at the U.S. Department of Homeland Security, where she served as the Director of Health Systems. In this role, Melissa oversaw the Department's emergency care, electronic health records, and health security portfolios. During the COVID-19 response, she was detailed to the FEMA-HHS Healthcare Resilience Task Force, where she led the Hospital Team.

Until 2019, Melissa served as the Director of National Healthcare Preparedness Programs in the Office of the Assistant Secretary for Preparedness and Response (ASPR) at the U.S. Department of Health and Human Services, where she developed and advanced the implementation of policies, capabilities, and performance metrics that aimed to improve the nation's overall healthcare emergency readiness. Melissa led ASPR's domestic healthcare system response to Ebola, including developing a regional and tiered infectious disease strategy for the nation's healthcare facilities. She also concurrently served as the ASPR Chief of Staff, facilitating the Office's policy and legislative priorities and its \$1.5 billion budget.

Previously, Melissa served at the Central Intelligence Agency, and was the Manager of Emergency Management for Northwell Health in New York. At Northwell, she was responsible for all-hazards planning and response for New York State's largest healthcare system. Melissa has clinical experience as an RN and an EMT. She attended Harvard University (MSPH), Boston College (BA), and George Mason University (BSN).

Robert Kadlec, M.D., is the former Assistant Secretary for Preparedness and Response (ASPR) at the U.S. Department of Health & Human Services (HHS). The ASPR serves as the Secretary's principal advisor on matters related to public health emergencies, including bioterrorism. The office leads the nation in preventing, responding to and recovering from the adverse health effects of manmade and naturally occurring disasters and public health emergencies. As such, the office coordinates interagency activities between HHS, other federal agencies, and state and local officials responsible for emergency preparedness and the protection of the civilian population from public health emergencies.

Dr. Kadlec spent more than 20 years as a career officer and physician in the United States Air Force before retiring as a Colonel. Over the course of his career, he has held senior positions in the White House, the U.S. Senate, and the Department of Defense. Most recently, he served as the Deputy Staff Director to the Senate Select Committee on Intelligence. Dr. Kadlec previously served as staff director for Senator Richard Burr's subcommittee on bioterrorism and public health in the 109th Congress. In that capacity, he was instrumental in drafting the Pandemic and All-Hazard Preparedness Bill which was signed into law to improve the nation's public health and medical preparedness and response capabilities for emergencies, whether deliberate, accidental, or natural.

Dr. Kadlec also served at the White House from 2002 to 2005 as director for biodefense on the Homeland Security Council, where he was responsible for conducting the biodefense end-to-end assessment, which culminated in drafting the National Biodefense Policy for the 21st Century. He served as Special Assistant to President George W. Bush for Biodefense Policy from 2007 to 2009. Earlier in his career, he served as the Special Advisor for Counter proliferation Policy at the Office of the Secretary of Defense, where he assisted DOD efforts to counter chemical, biological, radiological, and nuclear (CBRN) threats in the wake of 9/11 and contributed to the FBI investigation of the anthrax letter attacks. He began his career as a flight surgeon for the 16th Special Operations Wing and subsequently served as a surgeon for the 24th Special Tactics Squadron and as Special Assistant to J-2 for Chemical and Biological Warfare at the Joint Special Operations Command. He was named U.S. Air Force Flight Surgeon of the Year in 1986.

Dr. Kadlec holds a bachelor's degree from the United States Air Force Academy, a doctorate of medicine and a master's degree in tropical medicine and hygiene from the Uniformed Services University of the Health Sciences, as well as a master's degree in national security studies from Georgetown University.

Pinar Keskinocak, Ph.D., is the William W. George Chair and Professor in the H. Milton Stewart School of Industrial and Systems Engineering at Georgia Tech. She is also co-founder and director of the Center for Health and Humanitarian Systems. Previously, she served as the College of Engineering ADVANCE Professor and as interim associate dean for faculty development and scholarship. Prior to joining Georgia Tech, she worked at IBM T.J. Watson Research Center. She received her Ph.D. in Operations Research from Carnegie Mellon University, and her M.S. and B.S. in Industrial Engineering from Bilkent University.

Dr. Keskinocak's research focuses on the applications of operations research and management science with societal impact, particularly health and humanitarian applications, supply chain management, and logistics/transportation. Her recent work has addressed infectious disease modeling (including Covid-19, malaria, Guinea worm, pandemic flu), evaluating intervention strategies, and resource allocation; catch-up scheduling for vaccinations; hospital operations management; disaster preparedness and response (e.g., prepositioning inventory); debris management; centralized and decentralized price and lead time decisions. She has worked on projects with companies, governmental and non-governmental organizations, and healthcare providers, including American Red Cross, CARE, Carter Center, CDC, Children's Healthcare of Atlanta, Emory University, and Intel Corporation.

She is an INFORMS Fellow and currently serves as the president of INFORMS. Previously she served as the Secretary of INFORMS, a department editor for Operations Research (Policy Modeling and Public Sector area), associate editor for Manufacturing & Service Operations Management, and INFORMS Vice President of Membership and Professional Recognition. She is the co-founder and past-president of INFORMS Section on Public Programs, Service, and Needs, and the president of the INFORMS Health Applications Society.

Ali S. Khan, MD, MPH, MBA, is Dean of the College of Public Health at the University of Nebraska Medical Center (UNMC) and a former Assistant Surgeon General with the US Public Health Service. As Dean of the UNMC College of Public Health, his focus is on health system and community-based health transformations. His vision is for the College to play an integral role in creating the next generation of Public Health Guardians and establishing national and global models to address the most public health challenges. Dean Khan is committed to measuring the impact of the College's educational programs and initiatives and has established a goal to make Nebraska the healthiest and most equitable state in the Union.

Dr. Khan's professional career has focused on health security, global health, and emerging infectious diseases. He completed a 23-year career as a senior director at the Centers for Disease Control and Prevention (CDC), which he joined as a disease detective, and where he led and responded to numerous high profile domestic and international public health responses. Dr. Khan was one of the main architects of CDC's national health security program and continues this work at UNMC, which

has been nationally designated to prepare the American healthcare system to respond to outbreaks of high hazard pathogens. He also continues to actively support global outbreak responses such as the response for the West Africa Ebola outbreak in Sierra Leone and the Rohingya refugee crisis in Bangladesh as a member of World Health Organization (WHO) Global Outbreak Alert and Response Network (GOARN).

Dr. Khan received his medical degree from the State University of New York Downstate Medical Center in Brooklyn and has a Master of Public Health from Emory University's Rollins School of Public Health. He completed his pediatrics and internal medicine training at the University of Michigan. He has authored numerous papers and publications and has consulted extensively for multiple US organizations, ministries of health, and the World Health Organization where he serves on the steering committee for GOARN. Dr. Khan is the author of *The Next Pandemic: On the Front Lines Against Humankind's Gravest Dangers*.

Dr. Howard K. Koh is the Harvey V. Fineberg Professor of the Practice of Public Health Leadership at the Harvard T. H. Chan School of Public Health and the Harvard Kennedy School as well as Faculty Co-Chair of the Harvard Advanced Leadership Initiative. Since 2014, in these roles, he advances interdisciplinary leadership education and training at the Harvard T.H. Chan School of Public Health as well as across Harvard University. He also serves as the inaugural Chair of the Harvard T. H. Chan School of Public Health Initiative on Health and Homelessness and Co-Director of the Initiative on Health, Spirituality and Religion at Harvard University. Previously at Harvard School of Public Health (2003-2009), he was Associate Dean for Public Health Practice and Director of the School's Center for Public Health Preparedness.

From 2009-2014, Dr. Koh was the 14th Assistant Secretary for Health for the U.S. Department of Health and Human Services (HHS), after being nominated by President Barack Obama and being confirmed by the U.S. Senate. During that time, he oversaw 12 core public health offices, including the Office of the Surgeon General and the U.S. Public Health Service Commissioned Corps, 10 Regional Health Offices across the nation, and 10 Presidential and Secretarial advisory committees. He served as senior public health advisor to the HHS Secretary and in that capacity oversaw Healthy People 2020 (the nation's public health agenda), promoted the disease prevention and public health dimensions of the Affordable Care Act, advanced outreach to enroll underserved and minority populations into health insurance coverage, helped to coordinate federal response during the 2009 H1N1 pandemic and was the primary architect of landmark HHS strategic plans for tobacco control, health disparities (including Asian American Native Hawaiian and Pacific Islander health) and chronic hepatitis. He led interdisciplinary implementation of the National HIV/AIDS Strategy as well as initiatives in nutrition and physical activity (including HHS activities for Let's Move!), cancer control, adult immunization, environmental health and climate change, women's health, adolescent health, behavioral health and substance use disorders, health literacy, multiple chronic conditions, organ donation and epilepsy.

In his academic career, Dr. Koh has been Principal Investigator for over \$27 million in research grant activities and published more than 300 articles in the medical and public health literature. His publications and writing address broad areas, such as disease prevention and health promotion, health reform, health equity (including Asian American, Native Hawaiian and Pacific Islander

health), health and spirituality, public health emergency preparedness and the Covid-19 pandemic, health literacy and public health leadership. He has also published on specific topics such as tobacco control and cancer control, melanoma and skin oncology, the opioid crisis, health issues of the homeless, chronic hepatitis, climate change, organ donation and epilepsy.

From 1997-2003, Dr. Koh was Commissioner of Public Health for the Commonwealth of Massachusetts after being appointed by Governor William Weld. As Commissioner, he led the Massachusetts Department of Public Health, which included a wide range of health services, four hospitals, and more than 3,000 health professionals. He emphasized the power of prevention and strengthened the state's commitment to eliminating health disparities, while advancing progress in areas such as tobacco control, bioterrorism response after 9/11 and anthrax, newborn screening, organ donation, suicide prevention and international public health partnerships.

Dr. Koh graduated from Yale College, where he was President of the Yale Glee Club, and the Yale University School of Medicine. He completed postgraduate training at Boston City Hospital and Massachusetts General Hospital, serving as chief resident in both hospitals. He has earned board certification in four medical fields: internal medicine, hematology, medical oncology, and dermatology, as well as a Master of Public Health degree from Boston University. At Boston University Schools of Medicine and Public Health, he was Professor of Dermatology, Medicine and Public Health as well as Director of Cancer Prevention and Control.

He has earned over 70 awards and honors for interdisciplinary accomplishments in medicine and public health, including six honorary doctorate degrees. President Bill Clinton appointed Dr. Koh as a member of the National Cancer Advisory Board (2000-2002). He has received the Dr. Martin Luther King Jr. Legacy Award for National Service and the Distinguished Service Award from the American Cancer Society. He was awarded the 2014 Sedgwick Memorial Medal from the American Public Health Association (APHA) (the highest honor of the organization) and at the same time was named one of the first four inductees into the APHA's Asian Pacific Islander Caucus. He is an elected member of the National Academy of Medicine (formerly the Institute of Medicine). A past Chair of the Massachusetts Coalition for a Healthy Future (the group that pushed for the Commonwealth's groundbreaking tobacco control initiative), Dr. Koh was named by the New England Division of the American Cancer Society as "one of the most influential persons in the fight against tobacco during the last 25 years". He was named to the K100 (the 100 leading Korean Americans in the first century of Korean immigration to the United States) and has received the Boston University Distinguished Alumnus Award. He has been named by Modern Healthcare as one of the country's Top 100 Most Influential People in Healthcare as well as one of the Top 25 Minority Executives in Healthcare.

He serves on the Board of Directors of the Journal of the American Medical Association (JAMA), Truth Initiative, the Network for Public Health Law, the Josiah Macy Jr. Foundation and New England Donor Services. Dr. Koh and his wife Dr. Claudia Arrigg are the proud parents of three adult children and the proud grandparents of three granddaughters.

Dr. Lisa Koonin, DrPH., MN, MPH, is the Founder of Health Preparedness Partners, LLC, a company that helps businesses, health departments, healthcare facilities, and other organizations

prepare for a health emergency to protect their organization, workforce, customers, and communities. She previously served in a number of leadership positions during a 30+ year career with the Centers for Disease Control and Prevention (CDC). During that time, she led the development of national preparedness plans and policies, led and conducted large-format exercises, and consulted with businesses, state and local governments, healthcare facilities, non-governmental organizations, academia, and ministries of health around the world, to improve emergency preparedness. Dr. Koonin served as a leader in multiple national and international health emergency responses while at CDC, including the 2016 Zika response, 2014-2015 Ebola response, 2013 H7N9 avian influenza outbreak in China, 2009 - 2010 H1N1 influenza pandemic, 2005 Hurricanes Katrina, Rita, and Wilma, and the 2005 Marburg virus outbreak in Africa.

Dr. Koonin's focus is to improve national response to future pandemic emergencies by identifying and tackling complex preparedness issues, establishing mutually beneficial public-private partnerships, and developing new strategies, tools, and capabilities. Dr. Koonin is a frequent lecturer at national and international conferences on pandemic and infectious disease preparedness and response, and has published more than 80 peer-reviewed scientific publications on an array of public health and preparedness topics. Dr. Koonin has experience as a family nurse practitioner and epidemiologist. She earned master of nursing and master of public health degrees from Emory University and a doctorate in public health from the University of North Carolina at Chapel Hill.

Christine Kosmos, R.N., B.S.N., M.S. is the Director of the Division of State and Local Readiness in the Center for Preparedness and Response. Ms. Kosmos has served in this role since 2009 and has directed several important initiatives designed to improve state and local readiness to respond to emergencies. Ms. Kosmos has more than 20 years of experience in emergency preparedness, planning, and response in a variety of settings.

Before joining CDC, she spent 20 years with the City of Chicago Department of Public Health where she held several leadership positions, including serving as the Deputy Commissioner. In that role, she managed both public health and healthcare system preparedness and response.

She also served as the director of the Chicago Trauma System, a network of designated trauma centers, and Deputy Commissioner for Clinical Operations, a network of 23 public health clinics in Chicago. Ms. Kosmos is a registered nurse. She began her career as a staff nurse and later served as the senior manager of one of the busiest trauma centers in Chicago.

Stephen Kutz, MPH, BSN, LTC US Army (RET) has served as a Tribal Council Member for approximately 20 years. He received his Bachelor of Science in Nursing from Eastern Washington University and has worked as a nurse for 48 years. He received my Master's in Public Health & Tropical Medicine from Tulane University in 1992. He served 20 years on active duty as a nurse in the U.S. Army with 13 of those years spent in Preventive Medicine and Community Health. He also worked for over 12 years in a County Health Department in Washington State as Director of Public Health Nursing while also serving as the Health Department Director for 7 years. He has worked for this Tribe for 16 years, for six years he managed the Medical and Mental Health Clinic in Longview Washington as well as the Mental Health Clinic in Vancouver and Seattle, three years as Deputy Director, and now Executive Director of the Cowlitz Tribe Health and Human Services

Department. He is involved deeply in Indian health and social services programs and policy formulation at the state and national level at numerous levels as demonstrated by my involvement on regional, statewide, and national committees and boards. He is an alternate delegate to the Affiliated Tribes of Northwest Indians along with National Congress of American Indians and serve as an Alternate and/or Delegate to the Northwest Portland Area Indian Health Board. He has served as their delegate to the HHS Health Research Advisory Committee where he served as the co-chair as well as serving on the IHS Budget Formulation Committee, delegate to the Indian Health Care Improvement Act advisory committee and is currently their delegate the National Institute of Health as well as the Center for Disease Tribal advisory committee. He also serves as a delegate to the Washington State American Indian Health Commission and serve as the elected Chair and am on the board of directors. He is the Cowlitz Tribal delegate to the Washington State Indian Policy Advisory Committee to the Department of Social and Health Services who has further assigned him to represent them on the Behavioral Health Advisory Committee to the Division of Behavioral Health and Recovery. He currently works on the State Mental Health Committee that is advising the state in their efforts to redesign how Medicaid mental health services are delivered to AI/AN. He serves on the Governor's Health Advisory Council and am currently serving as the Chair. He is a founding board member of the Southwest Washington Regional Health Alliance, the Accountable Community of Health for SW Washington as well as the King County Accountable Community of Health. He has been appointed by the Governor to the State Board of Health and have served there for approximately 10 years. The State Board of Health has appointed him as their delegate to the Governors' Council on Health Disparities. He represents Tribes as the Tribal Co-Chair of the Foundations Public Health Services Steering Committee where Tribes are working in partnership with County Public Health, State Department of Health, and the State Board of Health to develop a comprehensive Public Health system that serves all the citizens of WA State.

He has worked in Health Care for 50 years in hospitals (most all areas except for Obstetrics and Operating Room), clinics, and for Public Health. He has 13 years' experience in the Army Public Health as well as their Occupational Health programs, 12 years in the County Public Health, and 16 years in Tribal Health Care and Public Health. He was the Military Public Health Official at the Supreme Headquarters Allied Forces, Europe at Mons, Belgium for 4 years in charge of all Public Health and Occupational Health for Luxembourg, Netherlands, and Belgium. He has been serving as the Incident Commander for the Cowlitz Tribes' health response to the Covid-19 pandemic and have been serving as the Public Health Official for that response.

He has spent approximately 22 years immersed in the Indian Health Service side of Health Care. He began planning the Tribes Health and Human Services programs prior to our Tribes recognition and began serving as the Health Board Chair in 2002 where the formal planning process started. In 2002 they assumed management of their CHS program and although they received no funding for direct health care programs, initiated a primary care clinic in 2004 with a part time Family Nurse Practitioner and a volunteer Medical Assistant/Receptionist. He hired their Health Care Director in late 2004 and they integrated Mental Health, Substance Use Disorder Treatment and Vocational Rehabilitation as well as an Elders Senior Nutrition program by the end of the year. From then until now they expanded to a clinic in Vancouver, Tukwila, and next month a new clinic in Dupont, Washington. In 2008 they expanded our Contract Health Service area from 7 to 10 counties and

have developed the 10 largest user population of the 49 Tribes in the Portland Area with a user population of over 5100 tribal people from more than 286 Tribes. During this period, they received no financial backing from the Tribe and have accumulated over 30 million dollars in reserves to enhance their health Care system. They have almost 200 dedicated employees that have led to this success. Currently he is working as the Health Clinic Director for the Suquamish Indian Tribe where he is implementing their first tribal Health Clinic for their Tribe. They were a signatory of the Point Elliot Treaty in 1855 and had health care promised them in their treaty.

James Lawler, M.D., M.P.H., Dr. James Lawler is Executive Director for International Programs and Innovation for the Global Center for Health Security at the University of Nebraska Medical Center. He is also an Associate Professor of Medicine in Infectious Disease and Deputy Medical Director for the Nebraska Biocontainment Unit. In 21 years of active service in the US Navy and subsequently at UNMC, Dr. Lawler's work has spanned a broad array of research, policy, and field activities related to emerging and high-consequence infectious diseases, medical and public health preparedness, pandemic and outbreak response, and global health.

Dara Alpert Lieberman is TFAH's Director of Government Relations, overseeing the development and implementation of federal government relations strategies and working to advance and ensure implementation of TFAH policy priorities. Prior to that, Dara served as TFAH's Senior Government Relations Manager, leading the organization's advocacy around infectious disease prevention, disease surveillance, and strengthening the nation's public health emergency preparedness and response capabilities. Ms. Lieberman previously served as a legislative representative for the American Counseling Association, where she advocated for mental health access issues. Ms. Lieberman has also served as a staff member for the Senate Committee on Armed Services.

She secured an MPP from the Gerald R. Ford School of Public Policy at the University of Michigan. She graduated magna cum laude with a BA in Public Policy Studies from Duke University. Ms. Lieberman currently serves on the board of directors for Healthcare Ready, a nonprofit that works to protect patient access to healthcare in the face of disaster through collaboration with public health and healthcare. She also serves on the board of directors for the Coalition for Health Funding, a nonprofit alliance working to preserve and strengthen public health investments.

Onora Lien is the Executive Director of the Northwest Healthcare Response Network, a large non-profit health care coalition and backbone organization that leads coordinated healthcare disaster preparedness and response across western Washington state and supports these initiatives throughout Washington and the greater Pacific Northwest region. Ms. Lien has led the Network since it became a non-profit organization in 2013. Prior to her tenure as Executive Director she spent eight years as a program manager for the Network's predecessor coalition at Public Health - Seattle & King County.

Under her leadership, the Network has developed into a nationally recognized public-private partnership, highly regarded for its continuous efforts to effectively engage healthcare, public health and other public and private entities, build strategic partnerships, and foster a high degree of

collaboration and coordination among public and private organizations throughout the disaster life cycle.

Ms. Lien has more than 20 years of experience working on issues of health security in the non-profit, government and academic sectors, ranging from research and public policy to local practice including non-profit administration. As a research and policy analyst, she worked for the UPMC Center for Biosecurity (now Johns Hopkins Center for Health Security). Ms. Lien has a Master's in Sociology from Johns Hopkins University, where her research focused on the individual and organizational dimensions of preparedness and response to public health emergencies and disasters.

Kathy Lofy, MD is the Program Director at the Northwest Public Health and Primary Care Leadership Institute and a clinical professor at the University of Washington School of Public Health. During 2014–2020, she served as the State Health Officer / Chief Science Officer at the Washington State Department of Health. In this role, she provided medical and scientific guidance to the Governor, secretary of health, and agency programs on a broad range of health issues including the response to the COVID-19 pandemic.

Monique K. Mansoura, Ph.D., joined The MITRE Corporation as the Executive Director for Global Health Security and Biotechnology in September 2017. She brings technical, policy and business expertise from both the public and private sectors. Her current efforts focus on the sustainability of the biodefense industrial base and the public-private partnerships that are vital to national and global health security as well as the bioeconomy. These issues are especially relevant to the challenges our nation and the world faces in addressing threats such as the 2019 Novel Coronavirus (2019-nCoV) and the surety and security of medical supply chains.

She is an internationally recognized executive in the biopharma industry and biomedical research and development ecosystem (industry, government, and academia) with proven success designing and driving missions of international importance through innovative public-private partnerships, particularly in market-challenged environments. She brings unique skills and perspectives given training and expertise in business, science, and policy. She has been deeply engaged with two of the most vital issues of our times – the Human Genome Project (1996-2001) and Biodefense/Global Health Security (2002-present) for threats including chemical, biological, radiological and nuclear (CBRN) agents, pandemic influenza and other emerging infectious diseases. Her pivotal career transition was driven by a call to service following 9/11 and the 2001 anthrax attacks. She led strategic policy, planning and budgeting for a pioneering multibillion-dollar medical countermeasure development and acquisition program in the U.S. that still stands a model for the world under the authorities of the Project BioShield Act of 2004 and the Pandemic and All-Hazards Preparedness Act of 2006. She has been a successful senior leader in Government and industry by building effective teams across diverse organizations and functions, developing talent, leveraging multi-stakeholder networks through effective engagement with partners in biotech and multinational companies, academia, professional and patient advocacy organizations and international governments through the Global Health Security Initiative. She served on the Board of the Alliance for Biosecurity from 2012-2016 and is currently on the Board of the International Cancer Expert Corps (ICEC).

During a recent sabbatical, Monique examined innovative financing approaches in healthcare as a Research Affiliate of the MIT Laboratory for Financial Engineering (LFE), Sloan School of Management. She led an LFE healthcare finance initiative in global health security with Professor Andrew Lo and his colleagues. This initiative explored new business models and financial vehicles for raising and deploying funds to enhance global health security.

In 2018, Dr. Mansoura participated in the Public-Private Analytic Exchange Program sponsored by the Office of the Director of National Intelligence. Her team developed a report in July 2018 on “Threats to Pharmaceutical Supply Chains” focusing on Hurricane Maria and the 2017-2018 seasonal influenza epidemic as a case study for the risks and implications of pharmaceutical supply chain disruptions.

Monique earned a PhD in Bioengineering and a M.S. in Human Genetics from the University of Michigan, a B.S. in Chemical Engineering from Wayne State University, and an MBA in the Sloan Fellows Program in Innovation and Global Leadership at MIT.

Phil Maytubby is the Deputy Chief Executive Officer, Director Division for the Oklahoma City County Health Department (OCCHD). A 1986 graduate of the University of Central Oklahoma with a BS in Biology, Phil has worked in Public Health for 27 years. His preparedness and response experience dates back to the 1995 Oklahoma City Bombing. Phil has been an Incident Commander for public health for numerous events in the Oklahoma City area including tornado strikes, Ice storms, 2008 Hurricane Evacuation shelters, 2009 H1N1 Pandemic, 2012 West Nile Virus Outbreak, 2014 Ebola outbreak and Ricin Cleanup and the 2015/2106 Zika Virus Outbreak.

Phil presents frequently on preparedness and response issues and is an advocate for Public Health policy and funding at the national, state and local levels. He is a member of many boards and organizations, including the NACCHO Preparedness Policy Advisory Group, NACCHO Big Cities Work Group, Harvard Chan Local Multi Agency Stakeholders Preparedness Committee, Oklahoma Senior Advisory Committee on Preparedness and Response, the Central Oklahoma Resiliency Project and Medical Reserve Corps for Oklahoma County.

Jennifer Nuzzo, DrPH is a senior fellow for global health at the Council on Foreign Relations (CFR). She is also a professor of epidemiology and inaugural director of the Pandemic Center at Brown University School of Public Health. An epidemiologist by training, her work focuses on global health security, public health preparedness and response, and health systems resilience. Together with colleagues from the Nuclear Threat Initiative and Economist Impact, she co-leads the development of the first-ever Global Health Security Index, which benchmarks one hundred and ninety five countries’ public health and healthcare capacities and capabilities, their commitment to international norms and global health security financing, and socioeconomic, political, and environmental risk environments. She also directs the Outbreak Observatory, which conducts, in partnership with frontline public health practitioners, operational research to improve outbreak preparedness and response. Prior to coming to Brown, Dr. Nuzzo was an associate professor at the Johns Hopkins Bloomberg School of Public Health and the Johns Hopkins School of Medicine. She was also a senior scholar at the Johns Hopkins Center for Health Security.

Brigadier General Carl T. Reese, M.D. is currently the Deputy Surgeon General for Mobilization, Readiness, and National Guard Affairs, Office of the Surgeon General, Headquarters, Department of the Army and a member of the Pennsylvania Army National Guard. He assumed the duties of his current assignment on June 2, 2021. As Deputy Surgeon General, he assists in providing consultative services and strategic planning in all aspects of medical readiness, health care, medical personnel, medical operations and training issues that comprise the critical medical readiness indicators pertaining to the Army National Guard.

BG Reese enlisted in the Pennsylvania National Guard as a private and served as a combat medic. He rose to the rank of Sergeant E-5 in the 1st BN 109th Infantry Pennsylvania Army National Guard. Upon completion of Physician Assistant school he was appointed as a Warrant Officer 1 and served as that infantry Battalion's Physician Assistant. He then arose to the ranks of Chief Warrant 2 until he was then appointed as a 1st Lieutenant Specialist Corps. He continued to serve as a Physician Assistant until graduation from Medical School and his appointment as a Captain in the Medical Corps. BG Reese's has served as a Medic, Physician Assistant and Physician with the 1st BN 109th Infantry, and as a physician at the Co C 328th Brigade Support Medical Company, Forward Logistical Element and on a Division Level Staff. He served the 28th Division, Pennsylvania Army National Guard, as the Division Surgeon for 10 years, during a time of high operational tempo. He has also served as the Commander of the Pennsylvania Army National Guard Medical Detachment. Prior to his current assignment he served as the Assistant Surgeon General for Mobilization, Readiness and National Guard Affairs at the Office of the Surgeon General. BG Reese has also served as a Physician on deployments during Stabilization Force (SFOR) 12 to Bosnia-Herzegovina 2002-2003, and Operation Iraqi Freedom in 2005.

BG Reese is a graduate of the Lackawanna County Area Vocational Technical School Practical Nursing Program, Scranton, PA. He earned a certificate from the Physician's Assistant Program, King's College, Wilkes-Barre, PA. He received his Bachelor of Science degree in Physician Assistant Studies from King's College, Wilkes-Barre, PA. He holds a Doctor of Medicine from the Pennsylvania State University College of Medicine, Hershey, PA. He completed his residency in Urology at the Milton S. Hershey Medical Center, Hershey PA. BG Reese also received a Master's of Science in Health Evaluation Science from the Pennsylvania State University and a Master's in Strategic Studies from the U.S. Army War College, Carlisle, PA. His military education includes the AMEDD Officer Basic and Advanced courses, the Command and General Staff College and the U.S. Army War College.

His military awards and decorations include the Expert Field Medical Badge, Meritorious Service Medal (3 bronze Oak Leaf Clusters), Army Commendation Medal (2 bronze Oak Leaf Clusters), Air Force Commendation Medal, Army Achievement Medal (1 bronze Oak Leaf Cluster), Army Reserve Components Achievement Medal (2 silver Oak Leaf Clusters), National Defense Service Medal, Armed Forces Expeditionary Medal, Iraq Campaign Medal (with 1 Campaign Star), Global War on Terror Service Medal, Armed Forces Reserve Medal (Gold Hour Glass, M Device, Numeral 2 Device), Army Reserve Components Overseas Training Ribbon (Numerical 4 Device), Noncommissioned Officer Professional Development Ribbons (Numerical 2 Device), Army Service Ribbon, NATO Medal, Pennsylvania Thomas J. Stewart Medal (1 bronze Oak Leaf Cluster),

Pennsylvania Commendation Medal, Pennsylvania Major General R. White Medal, Pennsylvania Service Ribbon, Pennsylvania Twenty Year Service Medal (4 Silver Star Devices).

BG Reese is member of the Official Order of Military Medical Merit, a Diplomat of the American Board of Urology, a member of the Association of Military Surgeons of the United States, Fellow Member of the American College of Surgeons, a member of the Keystone Chapter American College of Surgeons, American Urological Association, Mid Atlantic Section of the American Urologic Association, a Life member of the National Guard Association of the United States, Life member of the Pennsylvania National Guard Association, and a life member of the Veterans of Foreign Wars.

Caitlin Rivers, Ph.D. serves as associate director in CDC's Center for Forecasting and Outbreak Analytics (CFA). Dr. Rivers holds a BA from the University of New Hampshire and an MPH and PhD from the University of New Hampshire. Before joining CFA, Dr. Rivers worked as a senior scholar at the Johns Hopkins Center for Health Security and as an assistant professor in the Department of Environmental Health and Engineering at the Johns Hopkins Bloomberg School of Public Health. Her research focuses on improving public health preparedness and response, particularly by improving capabilities for outbreak science and infectious disease modeling to support public health decision-making. Dr. Rivers participated as author or contributor in influential reports that are guiding the U.S. response to COVID-19, including *National Coronavirus Response: A Roadmap to Reopening*; *A National COVID-19 Surveillance System: Achieving Containment*; *Filling in the Blanks: National Research Needs to Guide Decisions about Reopening Schools in the United States*; and *A National Plan to Enable Comprehensive COVID-19 Case Finding and Contact Tracing in the U.S.* She is the lead author on the report *Public Health Principles for a Phased Reopening During COVID-19: Guidance for Governors*, which is being used by the National Governors Association, the state of Maryland, and the District of Columbia to guide reopening plans. In May 2020, Dr. Rivers testified to the House Appropriations Subcommittee on Labor, Health and Human Services, Education and Related Agencies on the COVID-19 response. Before joining the Center for Health Security in 2017, Dr. Rivers worked as an epidemiologist for the United States Army Public Health Center as a Department of Defense SMART Scholar. She also participated in a National Science and Technology Council's pandemic prediction and forecasting science and technology working group. Dr. Rivers also serves as an associate editor of the journal *Health Security*.

Tara Kirk Sell, Ph.D., is a Senior Scholar at the Johns Hopkins Center for Health Security and an Assistant Professor in the Department of Environmental Health and Engineering at the Johns Hopkins Bloomberg School of Public Health. At the Center, she conducts, manages, and leads research projects to develop a greater understanding of potentially large-scale health events. She also serves as an Associate Editor of the peer-reviewed journal *Health Security* (formerly *Biosecurity and Bioterrorism*). Dr. Sell codirects the *Health Security* PhD track within the Department of Environmental Health and Engineering.

Dr. Sell's work focuses on improving public health policy and practice in order to reduce the health impacts of disasters and terrorism. Her primary research interests focus on health security: the broad intersection of public health and national security. She studies past responses to public health emergencies to discover ways to improve future preparedness and response. From terrorism to

pandemics and natural disasters, she employs mixed methods and multidisciplinary approaches to examine how the public, practitioners, and policymakers prepare for and respond to public health emergencies. In turn, she works to build the evidence base to advance policies and practices to minimize impacts of emergent threats. Though seemingly distinct, these topics are all linked by crosscutting preparedness and response needs critical to the improvement of the field of health security.

A hallmark of her work is the discovery of scientifically rigorous results while simultaneously interfacing with policymakers, public health practitioners, and the general public to translate research findings into actionable and evidence-based practices. She works collaboratively and purposefully to translate and disseminate findings and recommendations to target audiences in meaningful ways, such as engaging in collaborative work with the Centers for Disease Control and Prevention (CDC) to improve public communication or codeveloping Event 201, an immersive pandemic scenario to engage new stakeholders such as the private sector in pandemic preparedness.

Dr. Sell currently leads a number of projects focused on improving responses to emerging outbreaks. These include efforts to understand and find solutions for misinformation during highly feared infectious disease outbreaks and to use the wisdom of the crowd through an infectious disease prediction platform that develops forecasts about infectious disease outcomes. Another project, developed with Johns Hopkins University Whiting School of Engineering collaborators, seeks to improve understanding of the health impacts and public health response priorities for longer-term electrical power outages.

During the COVID-19 pandemic, Dr. Sell has worked on a range of projects to help improve the US response to the outbreak. She has provided input on research around the reopening of K-12 schools, advised the design of safe sports bubbles, and analyzed emerging information on the use of nonpharmaceutical interventions in the control of COVID-19. She has also collaborated with the World Health Organization on the development of the field of infodemiology in response to overwhelming amounts of disinformation and misinformation during COVID-19 and is leading research to improve understanding of better risk communication and management of misinformation during the pandemic.

Dr. Sell has been principal investigator on several CDC-funded projects. One incorporated a mixed-method approach using the Zika virus outbreak as a case study to understand more about how public health communication practices can be strengthened to improve public understanding, acceptance, and response during future infectious disease outbreaks. Another investigated how decisions on Ebola policies were made at the state level and what factors beyond CDC guidelines played the most significant roles in shaping state and local policy.

Dr. Sell has also led several research projects to provide strategic recommendations regarding the Threat and Hazard Identification and Risk Assessment process and the Chemical and Biological Defense Division in Department of Homeland Security. In addition, she conducts research and analysis of the funding and management of civilian biodefense, radiological/nuclear defense, and chemical defense programs in the US government, providing an accounting of federal funding on a yearly basis.

Her other research efforts focus on public health and resilience at a local level, evaluating local responses to recent outbreaks, local public health needs for community engagement, and local capabilities and needs. Dr. Sell coauthored the Rad Resilient City Preparedness Checklist, which provides cities and their neighbors with actions to save lives in the event of a nuclear detonation.

Prior to joining the Center in 2009, Dr. Sell was a professional athlete. She was a member of the USA national swim team for 8 years and served as captain for 6 USA national swim teams. In 2004, she broke the world record in the 100 breaststroke (Short Course Meters) and earned a silver medal at the 2004 Olympics in Athens.

Dr. Sell completed her PhD at the Johns Hopkins Bloomberg School of Public Health in the Department of Health Policy and Management, where she was a Sommer Scholar. Her dissertation work focused on public policy responses to emerging epidemics and, specifically, how the media and policy intertwine in the case of Ebola and the health consequences of these policy actions. She received a BA in human biology and an MA in anthropological sciences from Stanford University. In 2005, she was a Rhodes Scholar finalist.

Umair A. Shah, MD, MPH, was appointed Secretary of Health for the Great State of Washington by Governor Jay Inslee in December 2020. He is the first Asian-American physician and first South Asian to serve in this leadership role in the history of the state of Washington.

His appointment came at a difficult time with the winter wave of COVID-19 and arrival of vaccines into the state. In assuming this leadership role at Washington State Department of Health, Dr. Shah made the transition from fighting on the front lines of response as Executive Director and Local Health Authority for Harris County Public Health (HCPH) – the nationally respected public health agency for the nation's third largest community with nearly five million residents.

Dr. Shah earned his BA (philosophy) from Vanderbilt University; his MD from the University of Toledo Health Science Center; and completed an Internal Medicine Residency, Primary Care/General Medicine Fellowship, and MPH (management), at the University of Texas Health Science Center. He also completed an international health policy internship at World Health Organization headquarters in Switzerland.

Upon completing training, Dr. Shah began a distinguished career as an emergency department physician at Houston's Michael DeBakey VA Medical Center, where he provided clinical care for over two decades. He started his formal public health journey in 2003 as Chief Medical Officer at Galveston County's Health District before joining HCPH. Under his leadership, HCPH won numerous national awards, including recognition as Local Health Department of the Year in 2016.

Dr. Shah has held numerous leadership positions with respected entities like the National Academies of Sciences, Engineering, and Medicine; U.S. Centers for Disease Control and Prevention; Trust for America's Health; Network for Public Health Law; Patient-Centered Outcomes Research Institute; and the National Association of County and City Health Officials, where he served as president, proudly representing nearly 3,000 local health departments nationwide.

Over his career, Dr. Shah has been a clinician, innovator, educator, and leader in the field of health. He has been a champion of underserved communities, the intersection of health and healthcare, and

charting a new course in health centering on cornerstone values of equity, innovation, and engagement.

Vivian Singletary, MBA serves as Director of the Public Health Informatics Institute (PHII), a program of the Task Force for Global Health. In this role, Ms. Singletary guides PHII's work to improve health outcomes worldwide by strengthening health practitioners' abilities to use information effectively.

Ms. Singletary's experience combines almost 20 years in systems development and in public health. Earlier in her career, she served in leadership positions in supply chain management and information systems implementation for Home Depot and M&M before transitioning into public health. She was introduced to the Task Force for Global health in 2009 as the global supply chain manager for the International Trachoma Initiative, where she oversaw the pharmaceutical supply chain of over \$1 billion in Zithromax donations and built in-country capacity for over 15 African and Asian countries.

Ms. Singletary has played an integral role in developing PHII's global portfolio. Her work for the institute began with improving, designing, and analyzing business processes and developing functional requirements for health insurance information systems. She established PHII's Requirements Laboratory business unit in 2012. As the unit's director, Ms. Singletary played an essential part in managing informatics projects in both the U.S. and in developing countries. Key projects include her leadership role in developing the African Workforce Planning project—a tool that helps allocate health care practitioners to areas of greatest need in Mozambique and Tanzania—and acting as director of informatics practice for the Child Health and Mortality Prevention Surveillance (CHAMPS) initiative, which addresses the causes of childhood mortality in developing countries.

Ms. Singletary holds a Master of Business Administration degree from Kennesaw State University and a Juris Master's degree from Emory University School of Law, with a focus on global health. She also holds a Bachelor's degree in Industrial Engineering from the Georgia Institute of Technology.

Dr. David J. Smith is the Deputy Assistant Secretary of Defense for Health Readiness Policy and Oversight. In this role he directs Department-wide efforts to develop and implement policies and programs relating to DOD deployment medicine, force health protection, national disaster support, medical research and development, international health agreements and missions, and medical readiness for 2.3 million Service members.

Prior to his present role, he performed the duties of the Reform Leader for Health Care Management as part of an overall improvement to the quality and productivity of the business operations of the Department, including using more enterprise services and reducing costs. Smith also served in the role of the Assistant Secretary of Defense for Health Affairs from February – August 2017, and acting Principal Deputy Secretary of Defense during September and October 2017.

Smith received a Bachelor of Science degree from the University of Illinois in 1977 and completed his Doctor of Medicine degree at Northwestern University Medical School in 1981. He completed his Occupational Medicine Training at the University of Cincinnati Medical School in 1989, where he received a Master of Science in Environmental Health. Smith is a certified physician executive (CPE), fellow of the American College of Occupational and Environmental Medicine (FACOEM) and is board certified in Occupational Medicine with a certificate of added qualification in Undersea Medicine. He also has a Certificate in Medical Management from the American College of Physician Executives at Tulane University.

After receiving his Master's degree and completing his residency in Occupational and Environmental medicine, he served as the United States Navy medical exchange officer, Institute of Naval Medicine, Alverstoke, England. He then held positions as the head of the Safety and Health Department at the Armed Forces Radiobiology Research Institute; occupational health consultant for the Defense Nuclear Agency; Director of Occupational and Community Health at National Naval Medical Center, and Commanding Officer, Naval Hospital Rota, Spain.

In July 2003, Smith accepted the appointment as chief of staff, TRICARE Management Activity, Office of the Assistant Secretary of Defense (Health Affairs). Smith helped lead the migration to the new TRICARE contracts, expanded the Reserve Health Benefit, and implemented new regional governance. Afterwards, he served as the Deputy Chief for Health Care Operations (M3) at the Bureau of Medicine and Surgery and became chief of Operations in June 2005, responsible for all Navy peacetime and deployed medical operations.

In May 2008, Smith became the Joint Staff Surgeon where he served as the chief medical advisor to the Chairman of the Joint Chiefs of Staff, providing counsel to the chairman, the joint staff, and combatant commanders. In October 2010, Smith deployed as the International Security Assistance Force-Afghanistan (ISAF) medical advisor and Chief, Joint Medical overseeing medical care and health development for the Afghan theater of operations. Prior to retiring from the Navy as a Rear Admiral, upper half, in October 2012, he was Director, Medical Resources, Plans and Policy Division on the Chief of Naval Operations staff where he developed and evaluated plans and policy for medical support to current and future Navy and Marine Corps operations.

Ronald M. Stewart, M.D., graduated from medical school and completed his surgical residency at the University of Texas Health Science Center at San Antonio. Following this he completed a Trauma and Surgical Critical Care Fellowship at the University of Tennessee Health Science Center in Memphis.

He returned to San Antonio in 1993 as the Director of the Trauma Service. Dr. Stewart has served as the Board Chair of the Southwest Texas Regional Advisory Council for Trauma since 1996. In 1999 he was awarded the Faculty Member of the Year Award from The University Health System. That same year he and the Shattered Dreams development team were awarded the Bronze Quill for writings on the award winning injury prevention program Shattered Dreams/D.E.A.D. (Drinking and Driving End All Dreams).

In May 2000, Governor George W. Bush appointed Dr. Stewart to the Governor's Emergency Medical Services and Trauma Advisory Council where he served until 2014. He was the chair of the

South Texas Chapter of the American College of Surgeons (ACS) Committee on Trauma for six years, and followed for another six years as the ACS COT Region VI Chief (Texas, New Mexico, Louisiana and Arkansas). He currently serves as the Chair of the ACS Committee on Trauma. Dr. Stewart was a founding member and the first Chair of the National Trauma Institute.

At the UT Health Science Center in San Antonio he is a tenured Professor of Surgery and Anesthesia, and since 2008, he has served as the Chair of the Department of Surgery, holding the Dr. Witten B. Russ Chair in Surgery. Dr. Stewart has received numerous awards for teaching and service. A partial listing of these includes the Presidential Award for Clinical Excellence (2004), the Distinguished Alumnus of the UTHSCSA School of Medicine (2005) and the Leonard Tow Humanism in Medicine Award (2007).

In 2013 he was the recipient of the National Safety Council Surgeons Award for Service to Safety and the American College of Surgeon's Arthur Ellenberger Award for Excellence in State Advocacy.

He is a member of the American Surgical Association, the Southern Surgical Association, the Western Surgical Association, Immediate Past President of the Southwestern Surgical Congress and the Secretary of the Texas Surgical Society.

Andrea (Andi) Tenner, MD, MPH, FACEP is a board-certified physician in both emergency medicine and internal medicine. She completed a fellowship in International Emergency Medicine and an MPH with a focus on forced migration and humanitarian crisis. She also holds a Certificate of Knowledge in Clinical Tropical Medicine and Travelers' Health from the American Society for Tropical Health and Hygiene. She is currently serving as the Director for Public Health Emergency Preparedness and Response for the City and County of San Francisco. She is also an Associate Professor in the Department of Emergency Medicine at the University of California, San Francisco (UCSF) and is UCSF Global Health Sciences Affiliate Faculty.

Her career focus has been disaster preparedness and response, strengthening health and emergency care systems in the pre- and post-disaster setting, and tropical infectious disease. She has worked in multiple countries in South America and sub-Saharan Africa. Her field experience includes working in an active conflict zone in South Kivu in the Democratic Republic of Congo, responding to a building collapse in Dar Es Salaam, Tanzania, and overseeing Ebola Isolation Units for the International Rescue Committee in Sierra Leone. She has served as an instructor teaching disaster management principles for the US Department of State Office of Antiterrorism Assistance's Senior Crisis Management Seminar and as an expert consultant for the World Health Organization Academy Mass Casualty Management Course. She also serves on the National Association of City and County Health Officers' Preparedness Planning, Outcomes, and Measurement Workgroup, is a member of the World Association for Disaster and Emergency Medicine, and on the Disaster Special Interest group for the International Federation for Emergency Medicine. During the COVID response she served in various roles in the City and County of San Francisco COVID Command Center culminating in her role as the Department of Public Health Incident Command.

Lisa Villarroel, M.D., M.P.H., serves as the Medical Director for the Division of Public Health Preparedness at the Arizona Department of Health Services. She received her Bachelors in Biology

at Princeton University and her Doctor of Medicine at Northwestern University before getting her Masters in Public Health and becoming board certified in Family Medicine in Phoenix, Arizona.

At the Department she has served as the Medical Director for the emergency response to Ebola, Zika, Opioid, Vaping and COVID-19 crises.

During the COVID-19 pandemic, Dr. Villarroel has been the architect of the Arizona Surge Line (2020), the Arizona Surge Staffing Initiative (2020) and Arizona's Post-Acute Care Capacity Tracker (2020). She is currently focusing on post-pandemic recovery and strategies to build back public health and healthcare systems stronger.

In addition to her role at the Department, she is an assistant professor at the University of Arizona College of Medicine and a practicing locum tenens.

Marisa Voelkel, BSN, MBA, CHSP, CHEP, is an Engineer in the Standards Interpretation Group at The Joint Commission. In this role, she provides standards interpretation, reviews and processes survey reports, consults and provides educational programs for health care organizations and Life Safety Code Surveyors, and serves as faculty for educational programs throughout the U.S. She also supports the Environment of Care, Emergency Management and Life Safety chapters for all accreditation manuals for The Joint Commission. Ms. Voelkel has more than 13 years of health care experience having held director level roles in Safety, Security, and Emergency Management in three multi-state healthcare systems. Primarily, she was responsible for regulatory compliance and process improvement for hospitals, ambulatory surgery centers and clinics. Ms. Voelkel is a licensed Registered Nurse in Wisconsin. She is also a Certified Healthcare Safety Professional (CHSP), a Certified Healthcare Emergency Professional (CHEP), a Certified Hospital Emergency Manager (CHEC III) and a Board Certified Advanced Christian Life Coach (CACLC). She is a member of The Wisconsin Healthcare Engineers Association (WHEA), where she has been on the faculty of the Healthcare Construction Certification program and The American Society for Health Care Engineering (ASHE). Ms. Voelkel attained a Bachelor of Arts degree in Anthropology from the University of Arkansas in Fayetteville, AR; a Bachelor of Science degree in Nursing from St. John's College of Nursing in Springfield, IL; a Master of Business Administration (MBA) from William Woods University in Fulton, MO; and a Master of Pastoral Counseling from Liberty University.

John Wiesman, DrPH, MPH is a professor of the practice at University of North Carolina-Gillings School of Global Public Health, Department of Health Policy and Management. He teaches leadership, health policy, and advocacy and serves as the program director of the executive Doctor of Public Health (DrPH) degree program.

Prior to this, John served as the Washington state secretary of health for seven years where he led the nation's response to the first case of COVID-19. He has worked in four local public health departments in Washington and Connecticut. He started his public health career in Connecticut in 1986 and was in its first group trained to provide HIV counseling and testing services.

John co-chairs the Presidential Advisory Council on HIV/AIDS (PACHA). He has also served as president of both the Association of State and Territorial Health Officials (ASTHO) and the National Association of County and City Health Officials (NACCHO).

Anne Zink, MD, FACEP grew up in Colorado and moved through her training from College in Philadelphia to Medical School at Stanford and then Residency at University at Utah. As a mountaineering guide she had fallen in love with Alaska and after residency in Emergency Medicine became lucky enough to call Alaska home. Not only does she love people and the place, but also the medicine. Alaska is a small, isolated microcosm on the US health care where certain forces like the distance, lack of referral centers, and community involvement help create better systems of care that are directly related to bedside care. She quickly became involved in helping improve systems of care as the medical director of her group, then in her hospital and with state and federal legislation, including state legislation to improve care coordination, opioid addiction treatment option, integration between private systems and the VA, DOD, and IHS facilities and more. Dr. Zink had the honor of becoming the State of Alaska Chief Medical Officer in July 2019. In all the work she does, she strives to create work environments, policies, and practices that are data-driven, foster collaboration and build system efficiencies that put patients first.