

Contingency Planning and Training of Personnel Rule (APHIS-2020-0101), One Year of Implementation - A Workshop

Contingency Planning and Training of Personnel Rule (APHIS-2020-0101), One Year of Implementation

A Workshop

June 4-5, 2024 | 9:00AM - 4:30PM EDT

WORKSHOP DAY ONE: TUESDAY, JUNE 4 Time Zone: EDT

Purpose This workshop will focus on engaging with relevant communities to clarify the evolving definitions in the USDA Animal and Plant Health Inspection Service's (APHIS) Contingency Rule, analyze the adoption of the Contingency Rule across different research institutions, and delve into the evaluation of training program effectiveness and retention rates in these institutions. Additionally, this workshop will look at the rule's impact and the evolving strategies in safeguarding animal and plant health and well-being.

9:00–9:15 **Welcome, Introductions, and National Academies Overview**

Nia Johnson, National Academies of Sciences, Engineering, and Medicine

Susan Harper, National Institutes of Health, Committee Chair

Lesley Colby, University of Washington, Committee Vice Chair

9:15–10:15 **Session 1: Workshop Charge and Regulatory Overview**

Moderators: **Susan Harper**, National Institutes of Health, Committee Chair and **Lesley Colby**, University of Washington, Committee Vice Chair

Speakers:

9:15 **Louis DiVincenti**, USDA APHIS

9:45 **Taylor Bennett**, National Association for Biomedical Research

Following the presentations, workshop participants and attendees will engage in a Q&A and discussion

10:15–10:30 **Break**

10:30–11:30 **Session 2: Community Input: Results From Two National Surveys**

Moderator: **Nia Johnson**, National Academies of Sciences, Engineering, and Medicine

Speakers:

Naomi Charalambakis, Federation of American Societies for Experimental Biology

Susan Harper, National Institutes of Health, Committee Chair

Lesley Colby, University of Washington, Committee Vice Chair

Following the presentations, workshop participants and attendees will engage in a Q&A and discussion

11:45–1:00

Lunch Break

1:00–2:15

Session 3: Lessons Learned Panel Discussion

Moderator: Margaret Landi, Specialist in Animal Welfare, Bioethics, Strategy and Risks, Committee Member

Speakers:

1:00

John Bradfield, University of Nebraska Medical Center (Retired)

1:25

Gregory Reinhard, University of Pennsylvania

1:50

Warren Hess, American Veterinary Medical Association

2:15–2:30

Break

Speakers:

2:30

Kasi Russell-Lodrigue, Tulane National Primate Research Center

2:55

Dean Oliver Garden, LSU School of Veterinary Medicine

3:20

Charles Benson, University of Washington

3:45–4:15

Panelist Question and Answer Session

Moderators: Margaret Landi, Specialist in Animal Welfare, Bioethics, Strategy and Risks, Committee Member and **Kari Fiala**, Charles River Laboratories, Committee Member

4:15–4:30

Workshop Day One Wrap Up and Conclusion

WORKSHOP DAY ONE ADJOURNS

WORKSHOP DAY TWO: WEDNESDAY, JUNE 5 Time Zone: EDT

9:00–9:05 **Welcome**

9:15–11:30 **Session 4: Roles and Responsibilities in Contingency Planning**

Moderator: **Kari Fiala**, Charles River Laboratories, Committee Member

Speakers:

9:15 **Tracy Heenan**, UNC Chapel Hill

9:35 **Brian Ebert**, AbbVie

9:55 **Katia Harb**, University of Washington

10:15 **Roger Laferriere**, Rocky Mountain Laboratories/NIH

10:35–10:50 **Break**

10:50 **Gustavo Soberano**, USDA APHIS Animal Care

11:10 **Tom Lentz**, Johns Hopkins Health System

11:30 **Panelist Question and Answer Session**

Moderators: **Kari Fiala**, Charles River Laboratories, Committee Member and **Margaret Landi**, Specialist in Animal Welfare, Bioethics, Strategy and Risks, Committee Member

12:00–1:00 **Lunch Break**

1:00–2:15 **Session 5: Training for Success**

Moderator: **Wanda Wilson-Egbe**, HHS Administration for Strategic Preparedness and Response, Committee Member

Speaker:

1:00 **Edward (Ted) Kennedy**, HHS Administration for Strategic Preparedness and Response

Following the presentation, workshop participants and attendees will engage in a Q&A and discussion

2:15–2:30 **Break**

2:30–3:30 **Session 6: Resources and Planning for the Future**

Moderator: **Jason Villano**, Johns Hopkins University School of Medicine, Committee Member

Speakers from previous sessions will engage in Q&A and discussion with workshop participants and attendees

3:30–4:30 **Overview of Day Two and Final Discussion**

WORKSHOP ADJOURNS

Land Acknowledgement and DEI Statement

Land Acknowledgement

The National Academies of Sciences, Engineering, and Medicine acknowledges that the land on which we carry out our mission of engaging in science and technology policy works resides on the traditional territories of the Piscataway and Nacotchtank peoples.

This acknowledgement confirms our commitment to our community and stakeholders and our desire to broaden our engagement.

DEI Statement

The National Academies of Sciences, Engineering, and Medicine (the National Academies) value diversity in our staff, members, and volunteers; strive to foster a culture of inclusion and belonging; and aim to conduct our work through a diversity, equity, inclusion (DEI) and anti-racism lens. We define diversity as the broad spectrum of experiences, cultures, and physical attributes within a community, including, but not limited to, race or ancestry, national origin, religion, age, ability, gender, gender identity or expression, sexual identity, socioeconomic status, and perspective. We define equity as the absence of barriers, biases, and obstacles that impede equal access, fair treatment, and opportunity for contribution by all members of a community. Lastly, we define inclusion as a culture comprising a framework that allows an individual to effectively engage and thrive in a community.² The values of DEI need to be at the center of our programs, institutional policies and practices, and products. Applying a DEI lens in all that we do strengthens our ability to advise the nation in matters of science, engineering, and medicine in ways that lead to greater impact and innovation.

STATEMENT OF TASK

The National Academies of Sciences, Engineering, and Medicine will convene a planning committee to develop a workshop to understand the successes, challenges, and lessons learned from implementation of the Animal and Plant Health Inspection Service's Contingency Rule. The specific objectives of the workshop are to:

- Understand commonly used definitions of evolving terms and phrases in the rule such as “reasonably be anticipated and expected to be detrimental to good health and well-being”.
- Compare implementation of the new Contingency Rule across multiple research institution types.
- Discuss the effectiveness and retention rates of training programs conducted at various research institutions.
- Explore the effectiveness and outcomes of full-scale exercises that test the interactions with local, regional, federal agencies related to the Contingency Rule requirements.
- Discuss the use of active learning in preparedness training at the institutional and governmental levels (e.g., scenario-based learning).
- Explore implementation research related to contingency planning and personnel training.
- Discuss the roles and responsibilities of IACUCs, Environmental Health Service Programs, Emergency Management.
- Share experiences, challenges, and successes in implementation of the Contingency Rule.
- Explore the need for further guidance, technical notes, and other similar types of documents to improve implementation of the Contingency Rule.

Key themes from the workshop will be summarized in a rapporteur-prepared Proceedings-in-Brief.

SPEAKER BIOGRAPHIES

Bennett, Taylor is currently a management consultant in the area of sound public policy and regulatory compliance serving as the Senior Scientific Advisor for the National Association for Biomedical Research (NABR). He spent 36 years at the University of Illinois at Chicago overseeing their animal care and use program and then became the Associate Vice Chancellor for Research Resources where he oversaw 14 campus wide core research support facilities. He has served as the President of the Association of Primate Veterinarians, the American Association for Laboratory Animal Science (AALAS) and the American Society of Laboratory Animal Practitioners (ASLAP). He has served as a member of the Board of Directors of the National Association for Biomedical Research, which he chaired, and the American College of Laboratory Animal Medicine (ACLAM). He currently serves as Chair of the Board of the ASLAP Foundation and on the Board of Directors of the Scientist Center for Animal Welfare. He obtained his Doctor of Veterinary Medicine from Auburn University and his Ph.D. from the University of Illinois Medical School and is a Diplomate of the American College of Laboratory Animal Medicine and a Charter Diplomate of the American College of Animal Welfare.

Benson, Charles (Chuck) is the Director of IoT Risk Mitigation Strategy at the University of Washington. He has been at the University for over 15 years with experience in information security and risk mitigation, facilities IT, healthcare IT, and central IT. He is the author of, *Managing IoT Systems for Institutions & Cities*, is a contributing author to the book, *Creating, Analysing, and Sustaining Smart Cities – A Systems Perspective*, has published several articles, and maintains a blog at longtailrisk.com. He is currently writing another book on the implications of IoT risk and cybersecurity on national security. He has testified before the US-China Economic & Security Review Commission on IoT risk mitigation for institutions and cities, chaired University and national task forces on IoT risk mitigation, and chairs the University of Washington's Smart Campus Advisory Committee. Chuck has an electrical engineering degree from Vanderbilt University and an MS in computer science degree from Eastern Washington University. He is a former Marine Corps Captain and helicopter pilot.

Bradfield, John is a recently retired Attending Veterinarian and animal program Director. He has served as an Attending Veterinarian and Director at the University of Nebraska Medical Center, East Carolina University Brody School of Medicine, and the University of North Carolina at Chapel Hill. He has also served as Senior Director at AAALAC International. He is a veterinarian and a Diplomate of the American College of Laboratory Animal Medicine. Dr Bradfield also has PhD in Experimental Pathology with scholarly publications in various areas of laboratory animal medicine, wound healing, vascular and platelet biology. He has wide-ranging experience in academic laboratory animal medicine, managing animal programs and working with animal care and use committees. He also has extensive site visit experience with programs throughout the US and around the world as a member of AAALAC International's Council on Accreditation. Prior to his career in laboratory animal medicine, Dr Bradfield was a large animal practitioner.

Charalambakis, Naomi is the Associate Director of Science Policy for the Federation of American Societies for Experimental Biology (FASEB), a coalition of 22 scientific societies collectively representing over 110,000 individual biological and biomedical researchers. In this role, she leads efforts of FASEB's Science Policy Committee, guiding a broad range of policy discussions and coordinating with volunteers on future policy action opportunities. This includes preparing comments to federal Requests for Information and Notices of Proposed Rulemaking. Additionally, Dr. Charalambakis leads the Animals in Research and Education subcommittee, developing policy statements, tracking congressional legislation and agency directives related to animal use in federal research, and creating resources for the lab animal community. Dr. Charalambakis launched her policy career at FASEB in November 2018, after graduating with her doctorate in Anatomical Sciences and Neurobiology from the University of Louisville School of Medicine where she utilized mouse transgenics to evaluate the role of retinal input on inhibitory interneurons in the visual thalamus.

DiVincenti, Louis is the Senior Staff Officer for Research at the USDA. Dr. DiVincenti graduated from Louisiana State University School of Veterinary Medicine in 2010. He completed a residency in comparative medicine at the University of Rochester and Seneca Park Zoo in 2012, and was board certified by the American College of Laboratory Animal Medicine in 2013. Dr. DiVincenti earned a Master of Science in Clinical Translational Research in 2014 and was board certified by the American College of Animal Welfare in 2015. He worked in numerous academic and clinical practice settings before joining the National Policy Staff of USDA Animal Care.

Ebert, Brian has been a part of the Comparative Medicine leadership team for more than 20 years. During this time, he has had responsibility for the operation of multiple facilities including the management of animal care and cage wash staff. AbbVie has a global vivarium leadership team as well which he has been a member of for the past 10 years. This team is made up of senior leadership from each of the AbbVie sites with vivarium's. Most recently his responsibilities have expanded to include oversight of all renovation and buildouts not only within the vivarium but also the greater research facilities. This added role has allowed him to expand his knowledge in facility design and renovation while working with architects, engineers, trades, and lab owners. AbbVie has invested in his career by providing him with multiple opportunities for leadership training. I have been involved with several Leadership Development Programs which provide insight not only into AbbVie's way of doing business but also introduce leadership concepts and allow for additional mentoring. In 2021 Mr. Ebert had the opportunity to lead the North American supply council for AbbVie which he continues to support today. Currently, his official title is Senior Manager, Global Facilities at AbbVie. Mr. Ebert has fulfilled roles in animal care and husbandry, in animal health as a veterinary technician; as well as a dosing technician. Mr Ebert wears many hats at AbbVie but works most closely within facility operations and renovations.

Garden, Oliver is Dean of the School of Veterinary Medicine and Kenneth Burns Endowed Chair at Louisiana State University, was previously Chair of the Department of Clinical Sciences & Advanced Medicine at Penn Vet. After undertaking veterinary training and a PhD at the Royal Veterinary College, he completed Wellcome Trust Fellowships at the University of South Carolina and Imperial College London, as well as a Small Animal Internal Medicine Residency at Cornell University. He is board-certified in Small Animal Internal Medicine and is a Fellow of the Higher Education Academy.

Harb, Katia has over 20 years of experience in environmental, research and occupational health and safety most of which has been in higher education. Katia Harb has been the Senior Director of the University of Washington's (UW) Environmental Health & Safety Department (EH&S) since 2019. Prior to her current role, Katia Harb served as the EH&S Assistant Director for Research and Occupational Safety and her responsibilities for Biological Safety Programs, the Institutional Biosafety Committee (IBC), Research and Occupational Health and Safety Programs, and the University's Scientific Diving Safety Program. These roles include supporting EH&S emergency preparedness and response for the University. Prior to working at UW EH&S, Katia Harb worked with environmental services companies specializing in indoor air quality, microbial contamination remediation, occupational health and safety, and hazardous material exposure assessment and prevention. Prior to that, she worked in public research and private laboratories in the areas of environmental microbiology, environmental chemistry, industrial hygiene, and toxicology. Katia earned a Bachelor of Science degree in Environmental Health and a Master of Science degree in Environmental: Industrial Hygiene from the University of Washington's School of Public Health.

Heenan, Tracy is Director, Office of Animal Care and Use and Professor, Department of Pathology and Laboratory Medicine, University of North Carolina at Chapel Hill. Prior to entering the laboratory animal science field and compliance arena, Dr. Heenan was a small animal practitioner. Dr. Heenan earned her veterinary medical degree from North Carolina State University College of Veterinary Medicine and has extensive experience in Institutional Animal Care and Use Committee function, working in this area for over 30 years. She is a Certified Professional in IACUC Administration (CPIA) and served three terms on the CPIA

Council for a total of nine years. Dr. Heenan currently serves as a member of AAALAC International Council of Accreditation.

Hess, Warren is an associate director in the American Veterinary Medical Association's (AVMA) Division of Animal and Public Health and also serves as AVMA's Disaster Coordinator. Dr. Hess graduated from Colorado State University in 1989. He worked in small animal practice with an emphasis on birds and other exotic animals until 2004 when he began working for the Utah Department of Agriculture and Food (UDAF) where he served as a field veterinarian, assistant state veterinarian and 18 months as acting state veterinarian. He began working at the AVMA in 2016. Dr. Hess has led several state and national organizations including serving as president of the National Alliance of Animal and Agricultural Emergency Programs (NASAAEP). Dr. Hess was voted Veterinarian of the Year in 2014 by the Utah Veterinary Medical Association. He was the recipient of the NASAAEP Service Award in 2017 and the American Veterinary Medical Foundation (AVMF) Paws Up Award in 2018.

Kennedy, Edward (Ted) has had a long career in federal medical emergency operations and planning both as a military planner as both a Operations Chief and Planning Chief at the US Department of Health and Human Services (HHS) for close to 20 years of disaster responses. His previous positions as the lead for federal medical operations and for operational planning have made him a sought-after speaker on preparedness and response issues. He currently serves as the Training Director for National Disaster Medical System (NDMS).

Laferriere, Roger is a 24-year Coast Guard veteran and has served in several Emergency Management Positions since his retirement, including the Team Leader for the Federal Emergency Management Agency's National Incident Management Assistance Team. He has a very strong background in response that informs his contingency planning efforts. They include Incident Commander for Hurricane Katrina and Deepwater Horizon response. He has attended advanced contingency planning schools and has written over a hundred plans for various disaster and planned event scenarios. Roger has a Bachelor's Degree in Environmental Science and a Master's in Industrial Hygiene and Strategic Studies.

Lentz, Tom is the Senior Director of Facilities Management for The Johns Hopkins Health System Corporation with direct oversight of The Johns Hopkins Hospital and Johns Hopkins School of Medicine. In this role, Tom oversees a team of trades personnel supporting approximately 10M square feet of complex clinical and research space. Tom also oversees a business services team with a focus on information technology, finance, and supply chain for the Facilities Department. A native of the suburbs of Baltimore, Maryland, Tom attended Stevenson University where he received undergraduate and graduate degrees in information technology and also received a master's in business administration from the University of Baltimore. While information technology was his original passion, he later learned about, and grew a passion for, the intricacies of facilities management, frequent looking at the convergence of technology into the facilities industry. He has carried his knowledge and experience forward to lead a large, diverse, high-performing team that is responsible for maintaining mission critical spaces and systems on the Johns Hopkins East Baltimore Campus.

Reinhard, Gregory is a boarded laboratory animal veterinarian and compliance officer. Currently the Senior Director in the Office of Animal Welfare at the University of Pennsylvania. He received a B.S. in Animal Science from Rutgers University, an MBA in pharmaceutical/chemical studies at Fairleigh Dickinson University, and a DVM from the School of Veterinary Medicine, Purdue University. He was a post-doctoral fellow and staff member at The Rockefeller University. After Rockefeller, he served as the director of Comparative Medicine and Attending Veterinarian at Schering-Plough Research Institute in Kenilworth, NJ. He later moved to Merck & Co as Executive Director for Global Research Safety and Compliance and global Institutional Official over animal research. At Merck, he had oversight of 27 animal research sites. At Merck, he also served as Co-Compliance Officer for MRL and led the Biosafety and Radiation Safety departments. He has extensive

experience assessing external laboratory animal programs, having managed Merck's in-vivo outsourcing due diligence programs. He has personally evaluated over 150 programs around the world. He is an Ad Hoc specialist for AAALAC-I and serves on their Board of Members, as well as various committees. He managed over \$350 million in vivarium construction and renovation. He served on various boards, including the Scientist Center for Animal Welfare, NJ Association for Biomedical Research, the Pennsylvania Society for Biomedical Research, and the National Association for Biomedical Research. He has helped organize over 100 IACUC education conferences/workshops and has lectured extensively on animal welfare regulator compliance and IACUC operations. AALAS awarded him the National Collins Award for teaching and education.

Russell-Lodrigue, Kasi currently serves as the Associate Director and Chief Veterinary Medical Officer for the Tulane National Primate Research Center (TNPRC) and as Chair of the Division of Veterinary Medicine. She earned a DVM from Louisiana State University, completed a Laboratory Animal Medicine residency at Texas A&M University, earned a PhD in Veterinary Microbiology from Texas A&M College of Veterinary Medicine, and acquired post-doctoral training in Microbial Pathogenesis from Texas A&M Health Science Center. She is board certified by the American College of Laboratory Animal Medicine and has specific expertise in nonhuman primate clinical and surgical procedures. Dr. Russell-Lodrigue has extensive experience in ABSL2 and ABSL3 biocontainment facilities and works with investigators across the US to develop and characterize animal models for use in pathogenesis, vaccination, and therapeutic studies. In her current role, she oversees management of large-scale rhesus macaque breeding and research operations.

Soberano, Gustavo obtained his DVM from the University of California Davis (UCD) in 2003, and later in 2007 a Masters in Preventive Veterinary Medicine from the same institution. He is a board-certified Diplomate of the American College of Veterinary Preventive Medicine (ACVPM). Dr. Soberano was in private practice in California for several years, where in addition to practicing veterinary medicine, he also consulted for non-for-profit organizations (NGOs) supporting women cattle cooperatives in Central America. In 2013, he joined USDA where he has served in multiple positions including Public Health Veterinarian, Field Veterinary Medical Officer, State liaison, Emergency Coordinator, Director for Southern border ports for USDA APHIS Veterinary Services. In addition, he has deployed as Operation Section Chief to numerous Foreign Animal Disease outbreaks and natural disasters in the US and has lectured and trained international responders in Latin America and Africa. He currently serves as the Incident Commander for one of the Veterinary Services Incident Management Teams (IMTs). In 2021 he joined Animal Care as one of the Assistant Directors for Animal Welfare Operations (AWO) and works from his office in Sacramento, California.

COMMITTEE MEMBER BIOGRAPHIES

Susan B. Harper, Chair currently serves as the Deputy Director for the National Institutes of Health Office of Animal Care and Use. Prior to her federal service, she was on the faculty of Pennsylvania State University. She has consulted, lectured, and published on various topics related to agricultural animal health and welfare; aquaculture; emergency response and contingency planning; biocontainment and biosecurity relevant to animal program operations; research safety; and occupational health. Harper is an active member of numerous professional veterinary and safety organizations, maintains status as a diplomate in the American College of Laboratory Animal Medicine (ACLAM) and the American College of Veterinary Preventative Medicine (ACVPM); is a Registered Biosafety Professional (RBP) through the American Biological Safety Association (ABSA); and serves on AAALAC International Council. Harper received a B.S. in agriculture from West Virginia University and DVM from Louisiana State University, prior to starting her professional career in large animal practice. After several years in clinical medicine, she enrolled in a post-doctoral residency and master's program in comparative medicine at the Pennsylvania State University College of Medicine.

Lesley A. Colby, Vice Chair is a Professor and Senior Director of Animal Resources and Operations in the Department of Comparative Medicine (DCM) at the University of Washington. In addition to her clinical, instructional, and research duties, her responsibilities include shared oversight of the daily operations of DCM-managed animal facilities as well as coordination of the renovation, design, and construction of research facilities. Colby also serves as Director of the UW BSL3/ABSL3 Select Agent Facility. She is board certified by the American College of Laboratory Animal Medicine (ACLAM), is the Vice President of ACLAM, a past President of the American Society of Laboratory Animal Practitioners (ASLAP) and is a member of the AAALAC International Council on Accreditation. Colby received a B.S. in animal science from Virginia Tech and both her DVM and M.S. from the Virginia-Maryland College of Veterinary Medicine.

Kari Fiala is currently an Animal Welfare & Compliance Professional at Charles River Laboratories. She began her career in laboratory animal science as a Biologist at WIL Research where she worked with rodents, canines, non-human primates, and swine. In 2003, she moved to Michigan and primarily worked with rodents at MPI Research. Charles River acquired MPI Research in 2018 and she moved to the Animal Welfare & Compliance department later that same year. She is Certified Manager of Animal Resources and Laboratory Animal Technologist certified. She has been a member of AALAS at the National and local levels for many years and has held various executive council positions for MI-AALAS. Fiala received a B.S. in biomedical sciences with minors in chemistry and anthropology from Western Michigan University, an Associates of applied science in medical laboratory technology from Kellogg Community College, and an M.S. in pharmacology and toxicology from Michigan State University.

Margaret S. Landi has worked in the field of laboratory animal medicine and bioethics for 4 decades. Margaret started as a staff veterinarian and eventually became VP for Global Laboratory Animal Science at GlaxoSmithKline (GSK) Pharmaceuticals. In that role, she was accountable for successful laboratory animal programs in 8 countries and led over 400 people working across 10 animal facilities in the United Kingdom, United States, Italy, Spain, Croatia, Japan, Singapore, and China. In 2012, Margaret became the inaugural VP of Animal Welfare, Ethics, Strategy and Risk, and Chief Veterinary Officer, governing all animal programs for GSK Pharmaceuticals. Landi received the Harry C. Rowsell Award from the Scientists Center for Animal Welfare and was an invited writer on bioethics for the 2019 publication "Principles of Animal Research Ethics." She currently serves on the Boards for the Scientists Center for Animal Welfare and Chimp Haven sanctuary.

Landi received a VMD and in bioethics, from the University of Pennsylvania, an M.S. in comparative medicine from Pennsylvania State University and is a Diplomate in the American College of Laboratory Animal Medicine. She previously served on the National Academies Board for the Institute of Laboratory Animal Research (ILAR) and later chaired the ILAR Council.

Jason Villano is the Director of Rodent Resources and Director of Animal Modelling Services and Biocontainment Facilities and an Associate Professor of Molecular and Comparative Pathobiology at Johns Hopkins University. He previously served as clinical veterinarian at the Singapore General Hospital and at the University of Texas Medical Branch and on the faculty at the University of Michigan Medical School. Villano's area of expertise is infectious disease research, rodent medicine and health surveillance programs, occupational health and safety, and laboratory animal program management and operations. He currently serves as an ad hoc consultant for AAALAC International and is an active member and leader of several organizations including the American Association of Laboratory Animal Science (AALAS), the American College of Laboratory Animal Medicine, and the Association of Primate Veterinarians. Villano received a veterinary degree from the University of the Philippines, an M.S. in biomedical engineering from the Nanyang Technological University, Singapore, and an M.S. in laboratory animal medicine while pursuing residency from Pennsylvania State College of Medicine.

Temeri D. Wilder is a U.S. Public Health Service Commissioned Corps Officer currently located in the Office of Laboratory Animal Welfare (OLAW) as an Animal Welfare Program Specialist at the National Institutes of Health (NIH). She previously served as a Veterinary Medical Officer/Public Health Veterinarian with the U.S. Department of Agriculture Food Safety Inspection Service, Resident and Associate Clinical Veterinarian at the Centers for Disease Control and Prevention, and clinical veterinarian in the Comparative Medicine Branch of the National Institute of Allergy and Infectious Disease. Wilder's expertise lies in food safety, infectious diseases, management and oversight of high containment animal vivarium, disaster planning and management, and establishment and oversight of safety protocols on deployment missions. She is a member of American Association for Laboratory Animal Science, American College of Laboratory Animal Medicine, Tuskegee Veterinary Medical Alumni Association Executive Council, and a recipient of the Presidential Unit Citation, an Outstanding Service Medal, a Commendation Medal, as well as the NIH Director's Award. Wilder received a DVM from Tuskegee University College of Veterinary Medicine and her MPH from George Washington University Milken Institute School of Public Health. She is a Diplomate of the American College of Laboratory Animal Medicine.

Wanda Wilson-Egbe is Chief Veterinary Medical Officer and Director of the National Veterinary Response Team at the U.S. Department of Health and Human Services Administration for Strategic Preparedness and Response (ASPR) and National Disaster Medical System (NDMS). She has direct responsibility for the oversight, implementation, and strategic direction of the 125-member National Veterinary Response Team (NVRT). In this role, she has supervised more than 20 deployments providing care for more than 500 animals. Wilson-Egbe's areas of expertise are in veterinary medicine, public health, infectious diseases, disaster preparedness and response, public education on disaster preparedness and contingency planning. She has 15 years of service in the U.S. Public Health Service (USPHS) and has received two Outstanding Service Medals. CDR Wilson-Egbe received an MPH with a focus on infectious diseases from the University of Iowa and a DVM from Tuskegee University College of Veterinary Medicine.

STAFF BIOGRAPHIES

Kavita Berger, Ph.D. is the Board Director of the Board on Life Science and Co-Director of the Board on Animal Health Sciences, Conservation, and Research of the National Academies of Sciences, Engineering, and Medicine. She is a life scientist with extensive experience in biological science and security policy. Throughout her career, she has worked on problems at the intersection of health, science, national security, and policy. Dr. Berger was previously a Principal Scientist at Gryphon Scientific, and led several projects involving the analysis of biosecurity and biodefense policy and risk and benefits of life science research and technologies. Recently, Dr. Berger led system-based analyses of the entire U.S. biosecurity and biodefense policy landscape and of dual use capabilities of scientists. She also has led a comparative analysis of genome editing technologies, examination of biosecurity considerations associated with high-consequence pathogens and enabling biotechnologies, and development of scenario-based training exercises on laboratory biosecurity and biosafety concepts in the Middle East and North Africa. Dr. Berger was responsible for several biosecurity and biodefense initiatives at the American Association for the Advancement of Science (AAAS). At AAAS, she developed activities that engaged Washington-DC-based science policy and security experts on topics ranging from health security to biological weapons. These efforts provided opportunities for scientists to bring their knowledge and experience to current security policy dialogues and for the security policy community to better understand the broader implications of science and technology. Dr. Berger's interest in looking between the lines of policy and practice led her to initiate two significant activities at AAAS, both of which have influenced her work at Gryphon Scientific. One activity was to promote dialogue between the Federal Bureau of Investigation and university officials to enhance their familiarity with each other, find common ground, and promote trust-building. For the FBI, she led a project involving evaluation of national and transnational security implications of big data in the life sciences. The second activity was to engage scientists across the Middle East, North Africa, and South Asia to work together to prevent biosecurity threats. Dr. Berger has served on a National Research Council committee on U.S. – Russia bilateral engagement in the biological sciences and biotechnology. Dr. Berger has a Ph.D. in genetics and molecular biology from Emory University and conducted pre-clinical research on HIV and smallpox vaccines.

Robin Schoen is the Director of the Board on Agriculture and Natural Resources (BANR) of the congressionally chartered, not-for-profit National Academies of Science, Engineering, and Medicine. BANR is the program unit of the Academies responsible for bringing scientific experts together around issues related to food and agricultural production, forestry, wildlife, and the use of land, water, and other natural resources, in response to requests from Congress and the federal agencies, states, and the private sector. BANR's recent work is diverse and includes a study to identify science breakthroughs to advance food and agricultural research by 2030; a review of the citrus greening research portfolio of the Florida citrus growers; and a technical document of the nutrient requirements of poultry, among other activities. Robin joined BANR in 2005 from the Academies' Board on Life Sciences and Office of International Affairs, and before that, the National Institutes of Health. A native Washingtonian, Robin received a B.S. in biology and chemistry from Frostburg State College, Maryland, and an M.A. in Science and Technology Policy from George Washington University.

Nia Johnson, recently joined the Division of Earth and Life Studies as a Program Officer in the Board on Life Sciences. She currently oversees the Roundtable on Science and Welfare in Laboratory Animal Use and is supporting the Engaging a Trusted Scientific Network in Southeast Asia to Counter Misleading Information about Biological Threats study. As the Roundtable responsible staff officer, she will also be overseeing the two upcoming Roundtable workshops, Effective Communication with the General Public about Scientific Research that Requires the Care and Use of Animals - A Workshop and the Contingency Planning and Training of Personnel Rule (APHIS-2020-0101), One Year of Implementation - A Workshop. Nia is a nineteen-year veteran of the National Academies and has spent much of her career at NAS in the Division on Engineering and Physical Sciences supporting the work of the Board on Army Science and Technology, the Board on Army Research and Development, and the Intelligence Community Studies Board. Nia's portfolio of experience includes managing standing committees, workshops, colloquia and meetings of experts. Nia holds an M.S. in Biological Sciences from the University of Massachusetts Lowell and a B.S. in Biological Sciences from Morgan State University.

Jessica De Mouy is a Research Associate for the Board on Life Sciences at the National Academies of Sciences, Engineering, and Medicine. Her projects include workshops for the Standing Committee on Use of Emerging Science for Environmental Health Decisions and Standing Committee on Advances and National Security Implications of Transdisciplinary Biotechnology and studies on Addressing Inaccurate and Misleading Information about Biological Threats through Scientific Collaboration and Communication and Biological Collections: Ensuring Critical Research and Education for the 21st Century. She received a Bachelor of Arts in Sociology from the University of Maryland, College Park.

Mariah Waul is a senior program assistant for the Board on Animal Health Sciences, Conservation, and Research at the National Academies of Sciences, Engineering, and Medicine. Since joining the National Academies in July 2023, Waul has supported various activities under the auspices of the board such as the Standing Committee for the Care and Use of Animals in Research and the Roundtable on Science and Welfare of Animals Involved in Research. Prior to the National Academies, Waul worked as a Lead Veterinary Surgery Technician for VCA Animal Hospital Centre Park. She is also active in her community as a volunteer. Her philanthropic work includes volunteering as a volunteer coordinator with NAMI Howard County, where she also serves on the Board of Directors and is the chair of the Volunteer Management Committee. She also participates in remote outreach volunteering with the Rattlesnake Conservancy in Jacksonville, FL. Waul is completing a B.A. in mathematics from Southern New Hampshire University and a college diploma in Wildlife/Forestry Conservation from Penn Foster College.

NATIONAL ACADEMIES' STAFF

Robin Schoen, Co-Director

Kavita Berger, Co-Director

Nia Johnson, Senior Program Officer

Jessica De Mouy, Research Associate

Mariah Waul, Senior Program Assistant

Jeanne Aquilino, Financial Business Partner