

## **SPEAKER BIOGRAPHIES**



### **George W. Anderson, Jr., PhD, RBP**

Chair of the Institutional Biosafety Committee at Lawrence Livermore National Labs

George W. Anderson, Jr. received his BS and MS degrees in biology from the Florida Institute of Technology and his doctorate in immunology from the Johns Hopkins University. Dr. Anderson's research experience includes work with rickettsia, hemorrhagic fever viruses and bacterial agents in high containment laboratories. Dr. Anderson's research interests include animal models for infectious

diseases, pathogenesis, and vaccine development and testing. Dr. Anderson was responsible for the set-up and commissioning of a Biosafety Level (BSL) 3/Animal Biosafety Level (ABSL) 3 laboratory in the United States that operated under the Good Laboratory Practices to meet Federal Drug Administration (FDA) requirements. Dr. Anderson has training and experience in Good Manufacturing Practices as well as Good Clinical Practices. Dr. Anderson has been an associate investigator on clinical protocols as well as the principal investigator on numerous animal protocols.

Dr. Anderson has been engaged in biological safety assessments at research and production facilities in the former Soviet Union (FSU) as well as biological safety and laboratory training for BSL-2/BSL-3 laboratories in the FSU for the Defense Threat Reduction Agency (DTRA). This work also included responsible for the set-up and operation of a number of BSL-2 laboratories. Dr. Anderson participated in the laboratory oversight of Defense Advanced Research Project Agency (DARPA) funded research projects at a number of high containment laboratories in Russia, which also included facility upgrades and training personnel to meet the US Animal Welfare regulations and US Department of Defense requirements for care and use of animals in biological research as well as biosafety. Dr. Anderson has been a safety consultant on the dismantlement of former biological agent production facilities in the United States and in the FSU. Dr. Anderson is a retired Medical Service Corps officer, U.S. Army and is a Registered Biological Safety Professional with the American Biological Safety Association. He is the current Chair of the Institutional Biosafety Committee (IBC) and of the Institutional Animal Care and Use Committee (IACUC) and the Select Agent Manager at the Lawrence Livermore National Laboratory.



**Ellen Jo Baron, PhD**

Professor Emerita, Department of Pathology, Stanford University School of Medicine. She was formerly Director of the Clinical Microbiology and Clinical Virology Laboratories at Stanford University Medical Center.

Until 2009 Dr. Baron served as Associate Chair of Pathology for Faculty Development and Diversity. She holds a Ph.D. in Medical Microbiology from Univ. of Wisconsin, Madison, and completed a post-doctoral fellowship in Clinical Microbiology and Laboratory Medicine at UCLA and the Wadsworth VAMC. She is a Diplomate of the American Board of Medical Microbiology, a Fellow of the American Academy of Microbiology, and a Fellow of the Infectious Diseases Society of America. She is currently a Microbiology representative on the Center for Medicaid and Medicare Services Clinical Laboratory Improvement Advisory Committee and a member of the Council of Clinical Advisors for the NIH Clinical Laboratories. She serves as a representative on the Clinical Laboratory Standards Institute's Microbiology Area Resource Committee. She also is past-Chair of Division C (Clinical Microbiology), the largest scientific division of the American Society for Microbiology.

Dr. Baron is very active in the field of diagnostic microbiology as a symposium presenter and author. For the World Health Organization, she co-developed the program for antimicrobial resistance detection and basic microbiology, which she presented in a number of resource-poor countries from 1995-1998 and again in 2005. In 2007 she developed a new basic microbiology training program for developing world, and it has been presented in Colombia, Laos, Cambodia, Botswana, Zambia, Mozambique, China, Panama, as well as in the U.S. The program will eventually be used throughout the entire developing world.

Dr. Baron has been on the editorial boards of key clinical microbiology journals, and was a volume editor (bacteriology) for the ASM's Manual of Clinical Microbiology for the last 4 editions. She has written or edited >30 books and chapters and is widely published in peer-reviewed journals in the area of diagnostic microbiology and infectious diseases. She was the recipient of the ASM's BioMerieux Sonnenwirth Award for Leadership in Clinical Microbiology in 2000 and the Alice Evans Award for serving as a role model for women in the field in 1997. She won the 2003 Kenneth L. Vosti Teaching Award from the Infectious Diseases Division at Stanford. She is currently the Director of Medical Affairs for Cepheid, a high-technology molecular diagnostics company in Sunnyvale, California, where she writes the On-Demand Newsletter, works on clinical trials, new test development, and publications involving Cepheid products. At Cepheid, Dr. Baron serves as an internal and external educator about the technology and its impact on patient care.



**Elizabeth (Beth) Cameron, Ph.D**

Vice President for global biological policy at the NTI; Former Director of Countering Biological Threats on the National Security Council at The White House.

Prior to her position at the White House, she was the Senior Advisor in the Office of the Assistant Secretary of Defense for Nuclear, Chemical and Biological Defense Programs and the Deputy Director of U.S. Department of State, Bureau of International Security and Nonproliferation. Beth Cameron received her Bachelor's Degree in Biology from the University of Virginia and her Ph.D. in Biology, Human Genetics and Molecular Biology from Johns Hopkins University.



**Ken Coleman, PhD, MBA**

Former Senior Fellow for the Chemical and Biological Weapons Nonproliferation Program (CBWNP) of the James Martin Center for Nonproliferation Studies at the Monterey Institute of International Studies (MIIS).

Dr. Coleman received his formal training in microbiology and molecular genetics at Trinity College Dublin (BA, MA, PhD), was a post-doctoral fellow at the Harvard Medical School, and was appointed Lecturer in Microbiology and Molecular Genetics at Harvard Medical School in 1984. His laboratory research centered around the molecular basis of infectious

disease, and the cloning and characterization of various virulence factors from pathogenic bacteria, including the cloning of the A fragment of diphtheria toxin.

From 1979 to 1988 he authored or co-authored numerous peer-reviewed scientific articles, research reports, and book chapters in the areas of molecular genetics and infectious disease. In 1987, Dr. Coleman left "bench" science to attend the Stanford Business School, receiving his MBA in 1989. Between 1989 and 1995, he founded or provided early-round financing for more than a dozen companies in Silicon Valley.

Dr. Coleman's philanthropic work centers around the prevention of bioterrorism. His unique experience in both business and science gives him a broad and deep perspective on the academic and industrial forces involved in the development, production, distribution, and deployment of pathogens and toxins. His work on Counterfeit Botox (co-authored with Dr. Ray Zilinskas) and Smallpox (co-authored with Dr. Kenneth Bernard) has received national attention in the scientific and popular press.

Dr. Coleman will discuss his recent article (co-authored with Drs Bernard and Trounce) “Hitting a Moving Target: A Visual Tool for Analyzing Terrorist Threats” published in Health Security in 2016. The article provides an overview of terrorist threats using a dynamic threat matrix that can help monitor the effectiveness of present and future investments in Biosecurity and will hopefully add intellectual rigor to some of the most difficult and daunting decisions pertaining to our nation’s safety and security.



**Rear Admiral Kenneth Bernard MD, USPHS (Ret)**

Former Special Assistant to the President Bush for Biodefense

Dr. Bernard was appointed by President Bush to be Special Assistant to the President for Biodefense on the Homeland Security Council (HSC) in November 2002. Dr. Bernard chaired the Whitehouse Biodefense Policy Coordinating committee and drafted Decision Directives for President Bush on both "Biodefense for the 21st Century" and Agricultural Bioterrorism, and he was the White House point person on Project Bioshield - a \$5.6 billion congressional bill that is speeding development and procurement of new countermeasures against biological, chemical and radiological terrorist threats.

In January 2001, Dr. Bernard was assigned by the U.S. Surgeon General to the office of Senator Bill Frist to work on international health issues of priority concern to both the Congress and the Department of Health and Human Services (HHS). After September 11, however, he was called back to HHS to create the position of Special Adviser for National Security, Intelligence and Defense for the Department of Health and Human Services. From August 1998 to January 2001, he served on President Clinton's National Security Council (NSC) staff as Special Adviser to the Assistant to the President for National Security Affairs. Prior to joining the NSC, Dr. Bernard served as the International Health Attaché and senior representative of the U.S. Secretary of Health at the U.S. Mission to the UN in Geneva, Switzerland (1994-1998). From 1984-1989, he held positions as the Associate Director for Medical and Scientific Affairs in the Office of International Health, HHS, and as International Health Policy Adviser to the Director of the U.S. Peace Corps. Dr. Bernard is a member of the Council on Foreign Relations.



### **Drew Endy, PhD**

Leader in the field of Synthetic Biology, faculty at the BioEngineering Department at Stanford

Drew Endy is one of the leaders in the field of synthetic biology. His work continues to shape and drive the development of the field, both in terms of the creation of BioBrick™ standard parts but also in terms of the human side of the field. The BioBricks Foundation was created by Endy and several close colleagues who are also scientific leaders in the synbio field.

Endy was a junior fellow for 3 years and later an Assistant Professor in the Department of Biological Engineering at MIT. In 2008, he moved to Palo Alto to become an assistant professor in the Department of Bioengineering at Stanford University. Silicon Valley's concentration of computer scientists and engineers, in addition to Stanford's broad focus on engineering as well as ethics and the humanities, are believed to be the main reason for his move according to press reports.

With Thomas Knight, Gerald Jay Sussman, and other researchers at MIT, Professor Endy is working on synthetic biology and the engineering of standardized biological components, devices, and parts, collectively known as BioBricks. Endy is one of several founders of the Registry of Standard Biological Parts, and invented an abstraction hierarchy for integrated genetic systems.

Endy is also known for his opposition to limited ownership and support of free access to genetic information. He has been one of the early promoters of open source biology, and helped start the Biobricks Foundation, a not-for-profit organization that will work to support open-source biology. He was also a co-founder of the now defunct Codon Devices, a biotechnology startup company that aimed to commercialize synthetic biology.

Professor Endy's research interests are the engineering of integrated biological systems and error detection and correction in reproducing machines.

He is a founding co-director of the NIST/Stanford Joint Initiative for Metrology in Biology. Esquire magazine recognized Drew as one of the 75 most influential people of the 21<sup>st</sup> century.



**Nima Farzan, MBA**

Former Chief Executive Officer & President of PaxVax.

Mr. Farzan joined PaxVax in September of 2011 and is currently Chief Executive Officer and President. Mr. Farzan joined PaxVax from Novartis AG where he spent over seven years in a number of positions of increasing responsibility including pharmaceutical marketing, sales and development in both global and US positions. Most recently, he had been the Vice President of Marketing for Novartis Vaccines USA where he was responsible for marketing, market access, pricing and key account sales and helped launch multiple new vaccines. Prior to Novartis, Mr. Farzan worked at DoubleTwist, Inc. a genomics company and was a consultant at The Boston Consulting Group. He has his MBA from Harvard Business

School and an undergraduate degree in Human Biology from Stanford University.



**David Fidler, JD, M.Phil, B.C.L**

Professor of Law at the Indiana University and author of “BioSecurity in the Global Age.”

Professor Fidler specializes in international law. He is one of the world's leading experts on international law and global health, biosecurity threats posed by biological weapons and bioterrorism, arms control and non-proliferation concerning weapons of mass destruction, the rule of law in counterinsurgency and stability operations.

In addition to his teaching and scholarly activities, Professor Fidler has served as an international legal consultant to the World Health Organization and the U.S. Centers for Disease Control and Prevention (on global health issues), the U.S. Department of Defense's Defense Science Board (on bioterrorism), the Scientists Working Group on Biological and Chemical Weapons of the Center for Arms Control and Non-Proliferation, U.S. Joint Forces Command (on rule of law issues in stability operations), and various initiatives undertaken by non-governmental organizations in the areas of global health and arms control.

Professor Fidler is an Associate Fellow with the Centre on Global Health Security at Royal Institute of International Affairs (Chatham House) and is a member of the Executive Committee of the American Society of International Law's Interest Group on International Law and Technology.

Selected Works:

- BioSecurity in the Global Age: Biological Weapons, Public Health, and the Rule of Law (Palo Alto: Stanford University Press, 2008)[co-author with Lawrence O. Gostin].
- SARS, Governance, and the Globalization of Disease (Basingstoke: Palgrave Macmillan, 2004)
- International Law and Public Health: Materials on and Analysis of Global Health Jurisprudence (Ardsley, NY: Transnational Publishers, 2000).
- International Law and Infectious Disease (Oxford: Clarendon Press, 1999).



**Milana Boukhman Trounce, MD MBA**

Clinical Professor and Director of BioSecurity and Pandemic Resilience, Department of Emergency Medicine, Stanford Medical School

Dr. Boukhman Trounce graduated from the University of California San Francisco School of Medicine and went on to completing her emergency medicine training and Fellowship in Disaster Medicine and Bioterrorism Response at Harvard. She worked with the Center for Integration of Medicine and

Technology, which is a consortium of Harvard teaching hospitals and MIT, where in conjunction with the US State Department she has lead BioSecurity related projects. She received her MBA from Stanford Business School. Prior to Stanford she was an Assistant Professor of Emergency Medicine at UCSF, where she was a Medical Director for Disaster Response. Over the past ten years she has educated over a thousand Stanford students by establishing and directing the BioSecurity class, which examines ways of building global societal resilience to pandemics and other biothreats. She directs BioSecurity program at Stanford which is focused on protecting our society from pandemics and other threats posed by infectious organisms. Stanford BioSecurity facilitates creation of interdisciplinary solutions by bringing together experts in medicine, biology, technology development, public health, disaster management, engineering, business, policy, and other relevant fields. She has taught an online Harvard course on medical response to biological terrorism, educating thousands of physicians globally. She has served as a spokeswoman for the American College of Emergency Physicians (ACEP) and is a founding Chair of BioSecurity at ACEP. She writes and speaks nationally and internationally on topics related to pandemic resilience and other threats posed by infectious organisms and consults to the US Government on these issues.



### **Christopher Darby**

President and CEO of In-Q-Tel, the independent strategic investment firm that identifies innovative technologies to support the missions of the Central Intelligence Agency and the broader Intelligence Community.

He joined In-Q-Tel in September 2006. Mr. Darby was previously Vice President and General Manager at Intel overseeing their Middleware Products Division. At Intel, Mr. Darby had responsibility for the Corporation's Infrastructure Software business including Open Source and Commercial Products. He joined Intel in August 2005 with the acquisition of Sarvega Inc. Mr. Darby had been the president & CEO of Sarvega, a venture backed supplier of XML Networking and Security products. Prior to Sarvega, Mr. Darby was the Chairman and CEO of @stake, the well-known internet security consulting firm ultimately acquired by Symantec (SYMC). While at @stake, he assembled the world's leading collection of security researchers and built a business that spanned North America and Europe. Before @stake, Mr. Darby served as President and CEO of Interpath Communications, a facilities-based ASP later acquired by US Internetworking (USIX). Mr. Darby also held several executive positions at Digital Equipment Corporation (now Hewlett-Packard) with responsibility for telecom industry initiatives, corporate strategy, and alliances. He began his career at Northern Telecom (now Nortel Networks) and Bell Northern Research. Mr. Darby is a graduate of the University of Western Ontario.



### **Hank Greely, JD**

Director, Center for Law and the Biosciences at the Stanford Law School; Professor (by courtesy) of Genetics, Stanford School of Medicine; Chair, Steering Committee of the Center for Biomedical Ethics.

Hank Greely specializes in the ethical, legal, and social implications of new biomedical technologies, particularly those related to neuroscience, genetics, or stem cell research. He frequently serves as an advisor on California, national, and international policy issues. He is chair of California's Human Stem Cell Research Advisory Committee, a member of the Advisory Council of the NIH's National Institute for General Medical Sciences. Professor Greely chairs the steering committee for the Stanford Center for Biomedical Ethics and directs both the law school's Center for Law and the Biosciences and the Stanford Interdisciplinary Group on Neuroscience and Society. In 2007 Professor Greely was elected a fellow of the American Association for the Advancement of Science.

Before joining the Stanford Law School faculty in 1985, Greely was a partner at Tuttle & Taylor, served as a staff assistant to the secretary of the U.S. Department of Energy, and as special assistant to the general counsel of the U.S. Department of Defense. He served as a law clerk to



Justice Potter Stewart of the U.S. Supreme Court and to Judge John Minor Wisdom of the Court of Appeals for the Fifth Circuit. Greely is also a professor (by courtesy) of genetics at Stanford School of Medicine.



### **Andrew Hessel**

Futurist and catalyst in biological technologies, helping industry, academics, and authorities better understand the changes ahead in life science.

He was a Distinguished Researcher with Autodesk Inc.'s Bio/Nano Programmable Matter group, based out of San Francisco. He is also the co-founder of the Pink Army Cooperative, the world's first cooperative biotechnology company,

which is aiming to make open source viral therapies for cancer.

Trained in microbiology and genetics, Andrew has continually worked at the forefront of genomics, first to read and comprehend bacterial, human, and other genomes and more recently to write them. He believes the technology that makes this possible, called synthetic biology, is revolutionary and that it will eventually surpass information technology (IT) as an economic engine and driver of societal change. He speaks widely on topics that include cells as living computers, life science as an emerging IT industry, and biological safety and security.

Andrew is an advocate of open genetic engineering, believing that the field will increasingly resemble the software industry and give rise to open source, single purpose (app), and 'freemium' applications, and that it will be spearheaded by younger programmer-entrepreneurs. He is active in the iGEM and DIYbio (do-it-yourself) communities and frequently works with students and young entrepreneurs to help them be successful. Since 2009, Andrew has also been the co-chair of Bioinformatics and Biotechnology at the Singularity University, located at the NASA Research Park in Mountain View, California. There, he educates graduate students and executive participants on the disruptive shifts underway in life science and helps them become actively engaged in these changes. In November, 2011, he was appointed a fellow at the University of Ottawa, Institute of Science, Society, and Policy, focusing on how next-generation technologies shape society's future.

Andrew has given dozens of invited talks related to synthetic biology, for groups that include Autodesk Inc., the FBI, the United Nations Biological Weapons Convention Implementation Support Unit, TEDx, Intel Inc., the New America Foundation, Alberta Innovates Technology Futures, the Oil Sands Leadership Initiative, and Statoil.



**Michael J. Hopmeier**

President, Unconventional Concepts, Inc, and advisor to the World Health Organization, US Surgeon General, DARPA, US Army Medical Research and Materiel Command and other organizations.

Mr. Hopmeier has been a technical advisor and operational consultant to governmental and international agencies and organizations, including the DARPA Defense Sciences Office, U.S. Army Medical Research and Materiel Command, United States Surgeon General, the Deputy Assistant to the Secretary of Defense for Chemical and Biological Defense, the World Health Organization and several foreign governments.

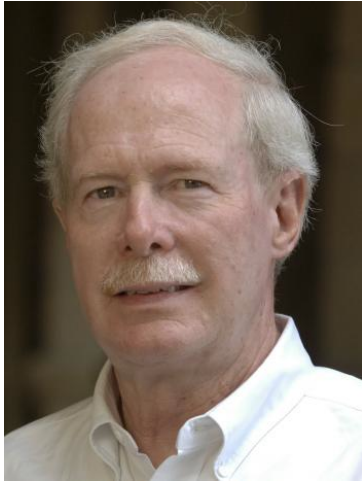
He was one of the primary developers of the Bioterrorism Preparedness Program at the CDC, served as the Science and Technology Advisor to the USAF Surgeon General, as well as the first S&T Advisor to the United States Marine Corps Chem/Bio Incident Response Force (CBIRF). He has been active in the development and deployment of numerous guidelines and procedures, including guidelines for policy development and operations related to counterterrorism and response, security and public health issues associated with mass gatherings, and preparedness and response programs supporting population response to disasters and critical incidents.

Mr. Hopmeier is an internationally recognized expert on countering suicide terrorism, counter- and anti- terrorism, disaster/crisis response, public health and national security programs, and emergency management and preparedness. He is a founding and current member of the Executive Board of the International Counter-Terrorism Academic Community and an Associate Researcher of the Institute for Counter-Terrorism. He has been a member and/or task force Chair for numerous senior advisory panels including the Defense Science Board and the National Academy of Sciences and chairs the Joint Staff External Red Team for Joint Concepts for the Chairman. He has authored numerous papers and presentations on topics ranging from biological model development and biotechnology research, to emergency response training and suicide bombing. He is also an expert on Federal Acquisition Programs.

In addition, Mr. Hopmeier has supported public health, security and counter terrorism training and operations throughout the world including Thailand, Australia, Canada, the Middle East, South West Asia, Turkey and numerous other countries and regions. He has supported and analyzed events such as the World Youth Day 2008 and the 2004 Summer Olympics.

Mr. Hopmeier is a founder of a number of different start-up companies and sits on the board of several high technology firms. He has been involved in numerous international programs as a manager or advisor, and has supported a number of efforts in the UK, Greece and Israel. His project areas include mass gathering and complex event response, training and preparedness, chemical/biological incident response, combat casualty care and medical support, crisis response and management, unconventional pathogen countermeasure programs, federal agency protective measures, counter-terrorism, terrorist cultural motivation and integrated federal/civilian disaster

response. Mr. Hopmeier holds bachelors and master's degrees in mechanical engineering from the University of Florida.



**Paul Jackson, PhD**

Microbiology and microbial forensics expert, former head of the Biosciences and Biotechnology Division at the Lawrence Livermore National Labs.

Paul Jackson received his Bachelor's of Science degree from the University of Washington and his Ph.D. from the University of Utah in molecular biology. For the past 18 years he has been studying bacterial pathogens, first working to develop DNA-based methods of detecting these microbes and their remnants in environmental and laboratory samples, then developing methods to differentiate among different strains of the same pathogenic species. His methods are currently applied for forensic analysis of samples and aid in identifying the source of disease outbreaks. He contributed to analysis of the *Bacillus anthracis* present in the 2001 Amerithrax letters and conducted detailed analyses of human tissue samples preserved from the 1979 Sverdlovsk anthrax outbreak, providing evidence that was inconsistent with claims of a natural anthrax outbreak.

His current work continues to focus on development of assays that rapidly detect specific signatures including antibiotic resistance in threat agents and other pathogens. More recent efforts are focused on exploiting genetic information about the pathogens that can be used to develop effective new antimicrobial compounds to combat these microbes. Paul spent 24 years as a Technical Staff Member at Los Alamos National Laboratory where he was heavily involved in development of the biological threat reduction efforts there. He was appointed a Laboratory Fellow at Los Alamos in recognition of his efforts. He moved to Lawrence Livermore National Laboratory in 2005 where he is was a Division Leader of the Biosciences and Biotechnology Division and heads the Host Pathogen Biology Group. In addition to his work at the National Laboratories, he served on the FBI's Scientific Working Group for Microbial Forensics, on NIH study sections and review panels, and on steering and oversight committees for other federal agencies.



**Robert Kadlec, MD MS**

Assistant Secretary of Health and Human Services (Preparedness and Response), US Department of Health and Human Services

Dr. Kadlec spent 26 years as a career officer and physician in the United States Air Force, serving in several senior positions in the White House, the U.S. Senate, and the Department of Defense. Most recently, Dr. Kadlec served as the Special Assistant to the President and Senior Director for Biodefense Policy on the Homeland Security Council. He also served as staff director for Senator Richard Burr’s subcommittee on bioterrorism and public health in the 109th Congress. In this capacity, he was instrumental in drafting the Pandemic and All-Hazard

Preparedness Bill that was signed into law. Dr. Kadlec also previously served at the White House from 2002 to 2005 as a 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.

Dr. Kadlec’s government experience includes both executive and legislative branches of the U.S. government and extensive participation in strategy and policy development promulgation. His past efforts cover the spectrum of medical and nonmedical biodefense issues and public health activities.

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



**Jeremy Konyndyk**

Senior Policy Fellow at the Center for Global Development.

Jeremy Konyndyk is a Senior Policy Fellow at the Center for Global Development. His research focuses on humanitarian response, USAID policy reform, and global outbreak preparedness.

He previously served in the Obama Administration from 2013-2017 as the director of USAID’s Office of US Foreign Disaster Assistance (OFDA), where he led the US

government’s response to international disasters. Konyndyk led a global team of nearly 600 humanitarian professionals, managed annual resources of more than \$1.4 billion, and oversaw OFDA’s responses to an average of 70 disasters in 50 countries every year. He led major US

government humanitarian responses to the Ebola outbreak in West Africa, the 2016 Ethiopia Drought, the complex emergency in Northern Nigeria, the Nepal earthquake, the Iraq crisis, Typhoon Haiyan in the Philippines, the conflict in South Sudan, and the ongoing war inside Syria, among other crises. He also led the Agency's preparations for the 2016 World Humanitarian Summit.

Konyndyk previously worked for Mercy Corps as director of Global Policy and Advocacy. From 2008-2013, he led the organization's high-level strategic outreach to governments, donors, the United Nations, and other partners. From 2003-2008, he served as the American Refugee Committee's country director in South Sudan, Uganda, and Guinea, designing and leading humanitarian responses in conflict and post-conflict settings. Konyndyk earlier worked with the US Department of State's Bureau of Population, Refugees, and Migration, and for an NGO in the Balkans.

He is currently a member of the World Health Organization's high level Independent Oversight and Advisory Committee, which oversees the agency's Health Emergencies Programme. Previously, he served on the independent Advisory Group to the WHO Director General that helped to design the agency's post-Ebola emergency response reforms.



**Akhila Kosaraju, MD**

CEO of Variant Bio

Dr. Kosaraju is a CEO of Variant Bio. Prior to that she was the Vice President for Global Development of SIGA Technologies, a company that specializes in small molecule drugs for emerging disease threats and biological warfare defense. She received her M.D. from Columbia University College of Physicians and Surgeons and is a Stanford grad receiving her B.A. in Human Biology. Dr. Kosaraju was a White House appointee in the Pentagon, serving as the Special Assistant to the Assistant Secretary of Defense for Health Affairs. In this capacity, she provided executive leadership in the management of a 42 billion-dollar Military Health System that included healthcare for military service members, bio-defense, and international humanitarian assistance. She received the Office of the Secretary of Defense Medal for Exceptional Public Service, the highest non-career civilian honor given within the Department of Defense. She is a Term Member of the Council on Foreign Relations, a member of the International Institute for Strategic Studies, the Boards of the Alliance for Biosecurity and the International Security and Biopolicy Institute, and served on the Materials Technical Advisory committee for the Department of Commerce.



**Colonel Randall J. Larsen, USAF (Ret).**

Senior Fellow at the Homeland Security Policy Institute at George Washington University, former CEO of the Weapons of Mass Destruction (WMD) Center, a non-for-profit organization he founded along with former Senators Bob Graham (D-FL) and Jim Talent (R-MO).

Col. Larsen previously served as the executive director of the Congressional Commission on the Prevention of Weapons of Mass Destruction Proliferation and Terrorism, the national security advisor at the Center for Biosecurity of the University of Pittsburgh Medical Center, the founding director of The Institute for Homeland Security, and as the chairman of the Department of Military Strategy and Operations at the National War College, where in 1999 he created the nation's first graduate course in homeland security.

He was one of the first witnesses to testify before the 9/11 Commission, and since 9/11 he has served as an expert witness to: Senate Armed Services, Senate Judiciary, Senate Appropriations, House Government Reform, House Homeland Security, and House Budget Committees. He served on the 2003 Defense Science Board Summer Study on Homeland Security, and is a member of the Council on Foreign Relations, the National Speakers Association, and a member of the Board of Advisors at Homeland Security Management Institute of the Department of Homeland Security National Transportation Security Center of Excellence at Long Island University.

He earned a Bachelor of Arts Degree in Criminology from Texas State University in 1974, and a Master of Arts Degree in National Security Studies from the Naval Postgraduate School in 1983. Colonel Larsen is the author of *Our Own Worst Enemy: Asking the Right Questions About Security to Protect You, Your Family, and America* (Warner Books, 2007), *AVOIDING THE ABYSS: Progress, Shortfalls, and the Way Ahead in Combating the WMD Threat* (Air War College, 2005), *What Corporate America Needs to Know About Bioterrorism* (National Legal Center, 2003), and *The Executive's Desk Book on Corporate Risks and Response for Homeland Security* (National Legal Center, 2003). His articles have been published in the *Washington Post*, *Wall Street Journal*, *USA Today*, *New York Post*, *Business Week*, and *Ripon Forum*. He is a frequent guest on radio and television including: CBS, NBC, ABC, CNN, BBC, Fox News Channel, *Larry King Live*, *Jim Lehrer News Hour*, *Oprah*, and *Dr. Oz*. Larsen was the screenwriter and co-producer of [www.fastervaccines.org](http://www.fastervaccines.org) and the principal author of <http://biosecurityblog.com>.

Larsen retired as an Air Force Colonel in July 2000 after serving in both the Army and Air Force for a combined total of 32 years of military service. His flying career began as a 19-year old Cobra pilot in the 101st Airborne Division. He flew 400 combat missions in Vietnam. He also served as military attaché at the US Embassy in Bangkok, the chief of legislative liaison at the US Transportation Command, and the commander of America's fleet of VIP aircraft at Andrews AFB MD. His decorations include the Legion of Merit, Distinguished Flying Cross, Bronze Star,

17 awards of the Air Medal (3 with “V” Device for Valor), and the South Vietnamese Cross of Gallantry.



**Wouter Latour, MD, MBA**

Chief Executive Officer and Director of Vaxart

Vaxart is a privately owned company developing oral recombinant vaccines based on its proprietary oral vaccine delivery platform. With modular creation using standard recombinant techniques, Vaxart can create new vaccines very quickly to protect against emerging pathogens such as avian influenza or biodefense threats.

Dr. Latour brings more than 20 years of industry experience to Vaxart, including roles as vice president and director, Global Strategy and Business Development at SmithKline Beecham Biologicals (now GSK Vaccines) and as a strategic advisor for Novartis Pharma, Novavax and Berna Biotech (now J&J/Crucell). Most recently, Dr. Latour served as CEO and director at Trinity Biosystems, Inc., a company focusing on oral delivery of biopharmaceuticals. Dr. Latour earned his MD from the University of Amsterdam and his MBA from Stanford University.



**Chuck Ludlam, JD (retired)**

Former Senior Counsel with Senator Joseph Lieberman, former Vice President for Government relations of the Biotechnology Industry Organization (BIO).

From 2001 to 2005 Chuck Ludlam was Senior Counsel with Senator Joseph I. Lieberman. In October of 2001 his office in the Senate Hart Building was located immediately above the mail room of Senator Daschle, where the anthrax letter was opened. Had the attacker not included a note identifying the white powder as anthrax and had it not been immediately identified as a pathogen, Chuck – and many others in the Hart Building – might well have died of late stage inhalation anthrax. Over the next four years, Chuck was the leader in formulating the US government response to the anthrax attack. He drafted four bills introduced by Senator Lieberman: S. 1764 (2001), S. 3148 (2002), S. 666 (2003) and S. 975 (2005)(BioShield II). The 29 titles of S. 975 represent the most comprehensive and aggressive strategy for biosecurity and MCM development ever proposed. President’s Bush’s proposed Project BioShield is based on the Lieberman bills. The four Lieberman bills led to or contributed to the enactment of Project BioShield (P.L. 108-276, July 21, 2004); Public Readiness and Emergency Preparedness Act of 2005 (PREP Act)(P.L. 109-148)(liability protections for developments of biodefense countermeasures); the Pandemic and All-Hazards Preparedness Act of 2007, including Section 401 establishing the Biomedical

Advanced Research and Development Authority (BARDA)(P.L. 109-417); and Section 1102 of the Food and Drug Administration Amendments Act of 2007 (P.L. 110-85)(establishing priority review to encourage treatments for tropical diseases).

Chuck was able to lead the response to the anthrax attack because from 1993 to 2000 he had served as the Vice President for Government Relations of the Biotechnology Industry Organization (BIO). He managed all public policy and advocacy for BIO, the trade association representing 925 biotechnology companies in 40 countries (essentially the world's biotechnology industry). He was an expert on how biotech and pharmaceutical companies formulate their research agendas, the investor funding for these companies, the need for patent protection, the regulatory structure in which they operate, the impact on reimbursement policies, and bioethics. In short, he was able to formulate incentives – all included in the Lieberman bills – to engage the biopharma companies to develop MCMs for bioterror and infectious/contagious pathogens. Indeed, because he'd observed the need while serving as a Peace Corps Volunteer (Nepal: 68-70), Chuck had already sought to develop incentives at BIO to encourage these companies to develop medical countermeasures for infectious and contagious diseases. When Chuck left BIO in 2000, he took an 85% pay cut to return to the Hill, where he had served for 17 years prior to his work at BIO.

During Chuck's tenure at BIO he secured enactment of patent reform law to restore patent term lost due to delays at the Patent and Trademark Office (Public Law 106-113). Through 2014 this law restored 1.5 million years of patent protection. He led the fight to block enactment of legislation criminalizing basic scientific research on embryonic stem cells (the human cloning legislation). He secured enactment of permanent Orphan Drug Tax Credit (Public Law 105-34) that is spurring annual orphan drug research expenditures of \$5 billion.

An oral history of Chuck Ludlam's career is posted with the Senate Historical Office (see [http://www.senate.gov/artandhistory/history/oral\\_history/Ludlam\\_chuck.htm](http://www.senate.gov/artandhistory/history/oral_history/Ludlam_chuck.htm)). This oral history gives a clear picture of the potential for accomplishments in a public policy career.

Chuck graduated from Stanford ('67) and the University of Michigan Law School ('72). He served as a Stanford in Government (SIG) intern in '65 and '67 and for the past 35 years has served as the principal alumni advisor and mentor for SIG. He was a key player in founding of the Stanford in Washington Program and Haas Center for Public Service. The headquarters for Stanford in Government (SIG) at Haas Center is named the "Chuck Ludlam Room." Chuck was one of 200 alumni awarded Stanford University Centennial Medallions (1991) to honor service to the University during centennial celebrations of the University's founding in 1891.





**Joel McCleary**

Chairman and Co-Founder of Q-Global.

Mr McCleary is a Chairman and Co-Founder of Q-Global. Q-Global protects leaders, corporations, and nations against chemical, biological, and radiological threats of assassination, intimidation, and mental and physical health alteration. With Dr. John Mekalanos, Chairman of the Department of Microbiology at Harvard Medical School, Mr. McCleary co-founded the biodefense pharmaceutical company Pharmathene, Inc. (NYSE: PIP).

Mr. McCleary served as a consultant to the DOD-DARPA on behalf of the University of Pittsburgh Medical Center (UPMC). In 2009, he completed the UPMC-DARPA study of CBR countermeasures strategy for the United States Government (USG). As a result of the aforementioned study, Merck & Co. Inc., General Electric Company, IBM Corp., Quintiles Transnational Corp., Battelle Memorial Institute, and UPMC have formed 21 Century Biodefense (21CB). 21CB is a consortium to bid on proposals from the USG (Department of Health and Human Services and DOD) on building flexible manufacturing and advanced development capability for multi-CBRN threats. Mr. McCleary is 21CB's lead strategist.

Alongside Mark Medish, former Special Assistant to President Bill Clinton and Senior Director for Russia and Eastern Europe to the National Security Council, Mr. McCleary writes on homeland security, defense, and biodefense policy. Their work has appeared in the International Herald Tribune and the Washington Times. With the late Dr. William C. Patrick, the last leader of the US' offensive biological weapons (BW) program and the US' leading authority on BW, Mr. McCleary recently completed an extensive study of the US' former strategic BW program.

In 1977, Mr. McCleary was elected Treasurer of the Democratic National Committee (DNC) and Executive Committee Member of the DNC. From 1978 to 1980, he served in the White House under President Jimmy Carter as Deputy Assistant to the President. In 1981, Mr. McCleary joined the political consulting firm the Sawyer-Miller Group, and in 1985 became its president. During his tenure at Sawyer-Miller, Mr. McCleary ran Presidential and Prime Ministerial campaigns in over fifteen countries.

In 2003, Mr. McCleary founded Raydiance Inc. with Barry Schuler, former CEO of AOL Inc., and Amb. Steve Green, former US Ambassador to the Republic of Singapore. Mr. McCleary was instrumental in ensuring a smooth transition of the femtosecond laser technology out of the Government laboratory, and remains an active member of Raydiance's board of directors.

Mr. McCleary obtained his B.A. from Harvard College in 1971.



**Jon C. Mirsalis, PhD**

Managing Director, Biosciences Division at SRI International

Dr. Jon C. Mirsalis is Managing Director of Translational Development in the Biosciences Division at SRI International in Menlo Park, CA, where he has management responsibility for all regulated medical product development activities. Dr. Mirsalis has extensive experience in the development of drugs for infectious disease, and he currently manages large programs for the National Institute of Allergy and Infectious Diseases (NIAID) for the development of promising therapeutics for the prevention and treatment of a

broad range of diseases including TB, malaria, HIV, influenza, hepatitis, MRSA, anthrax and Ebola. He has personally been involved in the development of over 50 therapeutics that have entered clinical trials and several have reached the market. He is the author of over 200 publications and abstracts. Dr. Mirsalis received his B.S. degree in zoology/molecular biology from Kent State University, his M.S. degree in genetics from North Carolina State University, and holds Ph.D. degrees in toxicology and genetics from North Carolina State University. He is currently the Chair of the Board of Directors of the California Biomedical Research Association, and serves on the Advisory Council for the Critical Path Institute's Predictive Safety Testing Consortium (PSTC). He has previously served on the Board of Scientific Councilors for the National Toxicology Program and the FDA's Over-the-Counter Product Review Committee. Dr. Mirsalis has been certified by the American Board of Toxicology since 1983.



**Tara O'Toole, MD, MPH**

Executive Vice President at In-Q-Tel, former Under Secretary of the Science and Technology Division of the Department of Homeland Security

Dr. O'Toole is an EVP at In-Q-Tel, which is a private, non-profit strategic investment firm that links the US Intelligence Community and venture-backed start-up firms on the leading edge of technological innovation.

Prior to her confirmation as Under Secretary (November 4, 2009), O'Toole founded, and served as chief executive officer and director of, the Center for Biosecurity at the University of Pittsburgh Medical Center. Concurrently, she was a Professor of Medicine and of Public Health at the University of Pittsburgh. She stepped down from her position as Under Secretary on September 23, 2013

From 2006 to 2007, she chaired the board of the Federation of American Scientists. In 2006, she was appointed to the board of the Google Foundation's International Networked System for

Total Early Disease Detection. From 2001 to 2003, she directed the Johns Hopkins Center for Civilian Biodefense Strategies. From 1993 to 1997, she served as the Assistant Secretary for Environment Safety and Health in the Department of Energy. From 1984 to 1988, she practiced general internal medicine in community health centers in Baltimore.

O'Toole is best known for her disaster response exercises. She was a principal author and producer of *Dark Winter* (2001) and *Atlantic Storm* (2005), both of which simulated a covert outbreak of smallpox in the United States. Her publications in the biodefense field include articles on the response to anthrax, smallpox, and plague biological attacks; containment of contagious disease epidemics; biodefense research and development strategies; and hospital preparedness. She is the founding editor of the journal *Biosecurity and Bioterrorism: Biodefense Strategy, Practice, and Science*. From 2003 to November 2009, Dr. O'Toole was the CEO and Director of the Center for Biosecurity at the University of Pittsburgh Medical Center (UPMC), and Professor of Medicine and of Public Health at the University of Pittsburgh. The Center for Biosecurity of UPMC is an independent organization dedicated to improving the country's resilience to major biological threats.

O'Toole holds a bachelor's degree from Vassar College, an MD from George Washington University, and a Master of Public Health degree from Johns Hopkins University.



**Condoleezza Rice, PhD**

American scientist, diplomat, professor. Former US Secretary of State.

Professor Rice served as the 66th United States Secretary of State in the administration of President George W. Bush.

She obtained her bachelor's degree from the University of Denver and her master's degree in political science from the University of Notre Dame. In 1981 she received a PhD from the School of International Studies at the University of Denver. She worked at the State Department under the Carter administration and pursued an academic fellowship at Stanford University, where she later served as provost from 1993 to 1999. Rice served on the National Security Council as the Soviet and Eastern Europe Affairs Advisor to President George H. W. Bush during the dissolution of the Soviet Union and German reunification from 1989 to 1991. On December 17, 2000, she left her position and joined the Bush administration as National Security Advisor. In Bush's second term, she became Secretary of State.

Following her confirmation as Secretary of State, Rice pioneered the policy of Transformational Diplomacy directed toward expanding the number of responsible democratic governments in the world and especially in the Greater Middle East. That policy faced challenges as Hamas captured a popular majority in Palestinian elections, and influential countries including Saudi Arabia and Egypt maintained authoritarian systems (with U.S. backing). While in the position, she chaired the Millennium Challenge Corporation's board of directors.

In March 2009, Rice returned to Stanford University as a political science professor and the Thomas and Barbara Stephenson Senior Fellow on Public Policy at the Hoover Institution. In September 2010, she became a faculty member of the Stanford Graduate School of Business and a director of its Global Center for Business and the Economy.<sup>[6]</sup> In January 2020, it was announced that Rice would succeed Thomas W. Gilligan as the next director of the Hoover Institution on September 1, 2020.



**Mark Smolinski, MD, MPH**

Director of Global Threats, Skoll Foundation.

Dr. Smolinski Led global efforts toward early detection and rapid response to emerging threats. His work has brought together governments, NGOs, academia, and private industry in partnerships across national borders in Southern Africa, the Middle East, Asia, Russia, and SE Asia.

In 2006, Dr. Smolinski joined the start-up team at Google.org as the director of the Predict and Prevent Initiative. Prior to Google, Mark served as Vice President for Biological Programs at the Nuclear Threat Initiative, a public charity directed by CNN founder Ted Turner and former U.S. Senator Sam Nunn. While at NTI, Mark led the development of a regional disease surveillance system linking Israel, Jordan, and the Palestinian Authority, demonstrating the power of health as a diplomatic tool even in areas of longstanding conflict.

In 2003, the Institute of Medicine of the National Academy of Sciences released a landmark report, the Emergence, Detection, and Response to Microbial Threats to Health for which Dr. Smolinski was the study director. He has also served as an advisor to the World Health Organization, Senior Advisor to the U.S. Surgeon General and Assistant Secretary of Health, and an Epidemic Intelligence Officer at the U.S. Centers for Disease Control and Prevention. Dr. Smolinski was a member of the investigation team that discovered hantavirus in 1993 in Southwestern United States.

A native of Michigan, Dr. Smolinski holds a B.S. from the University of Michigan in Ann Arbor where he also received his M.D. He received his M.P.H. from the University of Arizona. Mark is a trained Internist and board certified in Preventive Medicine and Public Health. WIRED magazine's 2008 Smart List of 15 people the next president should listen to included Mark, a.k.a., the threat detective.



**Megan J. Palmer, PhD**

Senior Scholar at the Center for International Security and Cooperation (CISAC), Stanford University.

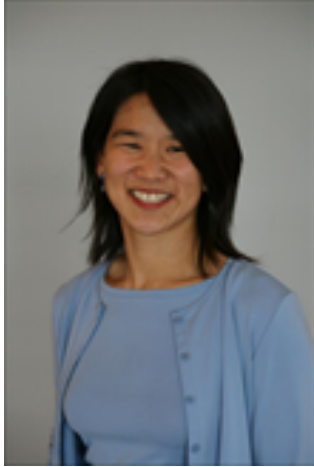
Dr. Palmer leads a research and practice program on risk governance in emerging technology development, with a focus on how security is conceived and managed as biotechnology becomes increasingly accessible. Her current projects focus on assessing strategies for governing dual use research, analyzing the international diffusion of safety

norms and practices, and the understanding the security implications of alternative technology design decisions.

Previously, Dr. Palmer spent 5 years directing the policy-related research program for the Synthetic Biology Engineering Research Center (Synberc), a multi-university research center in synthetic biology. Within Synberc, she led and contributed to projects in safety and security, property rights, and community organization and governance. She has also held positions as the William J. Perry Fellow in International Security at CISAC, a research scientist at the California Center for Quantitative Bioscience at the University of California Berkeley (where she was also an affiliate of Lawrence Berkeley National Labs), and a postdoctoral scholar in the Bioengineering Department at Stanford University (when she first became a CISAC affiliate).

Dr. Palmer has created and led many programs aimed at developing and promoting best practices and policies for the responsible development of biotechnology. She founded and serves as Executive Director of the Synthetic Biology Leadership Excellence Accelerator Program (LEAP), an international fellowship program in biotechnology leadership. She also leads programs in safety and responsible innovation for the international Genetically Engineered Machine (iGEM) competition, which last year involved over 5000 students in 300 teams from 42 countries. Dr. Palmer also advises a diversity of organizations on their approach to policy issues in biotechnology, including serving on the board of the synthetic biology program of the Joint Genomics Institute (JGI).

Dr. Palmer holds a Ph.D. in Biological Engineering from MIT and a B.Sc.E. in Engineering Chemistry from Queen's University, Canada.



**Erica Pan, MD, MPH, FAAP**

Deputy Health Officer and the Director of the Division of Communicable Disease Control & Prevention in the Alameda County Public Health Department.

Dr. Pan joined Alameda County Public Health Department in November 2011 after serving as the Director of the Public Health Emergency Preparedness & Response Section and Deputy Health Officer at the San Francisco Department of Public Health (SFDPH). Prior to this position, from 2004-2011 she was the Director of the Bioterrorism and Infectious Disease Emergencies Unit, in the Communicable Disease Control & Prevention Section at the San Francisco Department of Public Health (SFDPH).

Dr. Pan served as a participant in the National Association of County & City Health Officials (NACCHO), Center for Disease Control & Prevention (CDC), Clinical Utilization Plan for Anthrax Countermeasures in a Mass Event Setting Medical Countermeasures workshop in March 2014, as well as participating in the American Academy of Pediatrics (AAP)/ Center for Disease Control & Prevention (CDC) Pediatric Anthrax Guidance Writing Group. In June 2013, Dr. Pan presented at the Institute of Medicine workshop on *Strategies for Cost-Effective and Flexible Biodetection Systems that Ensure Timely and Accurate Information for Public Health Officials*, and has served on several focus groups for the Department of Homeland Security Biowatch Program. She also participated in the National Biodefense Science Board Anthrax Vaccine Working Group Medical Countermeasures for Children – Anthrax Vaccine Workshop in 2011, and served as a member of the National Biosurveillance Advisory Committee (Subcommittee of the CDC Director's Advisory Committee) from 2008-2010.

In the San Francisco Bay Area she has served as the co-chair of the Association of Bay Area Health Officials Public Health Preparedness Subcommittee from 2011-2013, and was a key representative for San Francisco Department of Public Health during the Department of Health and Human Services “Dark Zephyr” Anthrax Exercise in San Francisco in 2011. Dr. Pan also co-lead the San Francisco Bay Area Advanced Practice Center (APC), one of eight APCs funded by the National Association for City and County Health Officials and the Centers that served as a model and national resource for Infectious Disease Emergency Response from 2009-2012.

Dr. Pan completed the California Health Care Foundation Leadership Fellowship in 2014. She is also a Clinical Professor in the Department of Pediatrics, Division of Pediatric Infectious Diseases at the University of California, San Francisco (UCSF). She has maintained her clinical work in the past attending at UCSF for Pediatric Infectious Diseases and at San Francisco General Hospital in the General Pediatrics Clinic, and currently at UCSF Benioff Children’s Hospital Oakland in Infectious Diseases. Her previous training includes completion of a Pediatric residency, chief residency, and Pediatric Infectious Disease, and Traineeship in AIDS Prevention Studies Fellowships at the University of California, San Francisco. She is board certified in both Pediatric Infectious Diseases and Pediatrics. She received her MD and MPH degrees from Tufts University School of Medicine, and completed her undergraduate education at Stanford University.



**George Poste, PhD**

Chief Scientist, Complex Adaptive Systems Initiative (CASI), and Del E. Webb Professor of Health Innovation at Arizona State University (ASU).

Dr. Poste assumed the post at CASI in 2009. From 2003 to 2009 he directed and built the Biodesign Institute at ASU.

In addition to his academic post, he served on the Board of Directors of Monsanto, Exelixis, and Caris Life Sciences and the Scientific Advisory Board of Synthetic Genomics. From 1992 to 1999, he was Chief Science and Technology Officer and President, R&D, of SmithKline Beecham (SB). During his tenure at SB he was associated with the successful registration of 31 drug, vaccine,

and diagnostic products.

In 2004 he was named “R&D Scientist of the Year” by *R&D Magazine*; in 2006 he received the Einstein award from the Global Business Leadership Council; and in 2009 he received the Scrip Lifetime Achievement award voted by the leadership of the global pharmaceutical industry.

He has published more than 350 research papers and has edited 14 books on pharmaceutical technologies and oncology. He has received honorary degrees in science, law, and medicine for his research contributions, and he was honored in 1999 by HM Queen Elizabeth II as a Commander of the British Empire for his contributions to international security.

Dr. Poste is a Fellow of the UK Royal Society, the Royal College of Pathologists, and the UK Academy of Medicine. He is a Distinguished Fellow at the Hoover Institution, Stanford University; a member of the Council on Foreign Relations; and a member of the U.S. Institute of Medicine Forum on Microbial Threats. He serves on several U.S. government panels related to biosecurity and national competitiveness.



**Patrick J. Scannon, M.D., Ph.D.**

Founder and former CEO of Xoma.

XOMA is a biotechnology company focused on the discovery, development and manufacturing of monoclonal antibody-based therapeutics for unmet medical needs, including the BioSecurity market. XOMA’s monoclonal antibody technologies have contributed to the development of marketed biologics with a total of more than \$1 billion in annual sales and for which XOMA received substantial royalties. The company also has a strong track record of product discovery and development collaborations with pharmaceutical and biotechnology

companies and the U.S. government, and has licensed certain of its fundamental technologies to numerous pharma and biotech companies.

In 2007, Dr. Scannon was invited to join the newly formed National Biodefense Science Board, reporting to the Secretary of the Department of Health and Human Services. He also serves on the Defense Sciences Research Council for the Defense Advanced Research Projects Agency (DARPA) and on the Threat Reduction Advisory Committee for the Department of Defense. From 1979 until 1981, Dr. Scannon was a clinical research scientist at the Letterman Army Institute of Research in San Francisco. A Board-certified internist, Dr. Scannon holds a Ph.D. in organic chemistry from the University of California, Berkeley and an M.D. from the Medical College of Georgia.



**Alexei Wagner, MD MBA**

Assistant Director of Adult Emergency Medicine at Stanford (clinical), Clinical Associate Professor of Emergency Medicine at Stanford Medical School, Lecturer at the Design School at Stanford, BioDesign Faculty Fellow.

In addition to his clinical and administrative duties at Stanford, Dr. Wagner works on projects leveraging mobile health technology to address global health problems and works with both start-ups and large corporations to design successful user experience and evidence-based health content.