Army Medical Research and Development Infrastructure Planning - A Workshop

Committee

Joan Bienvenue

Co-Chair

Dr. Joan Bienvenue, (co-chair) is the director of the Applied Research Institute at the University of Virginia. She received a B.S. in chemistry from Rivier University, an M.S. in forensic science at the University of New Haven, a Ph.D. in chemistry from the University of Virginia, and an M.B.A. from the University of Mary Washington. She was a National Institute of Justice Research Fellow while at UVA, where her work focused on the development of microfluidic systems. This work was summarized in over fifteen peer-reviewed papers and book chapters and presented at many conferences; she is an inventor on five U.S. patents. In addition to this academic work, she is creator and conference chair for the annual Commonwealth Conference on National Defense and Intelligence, now entering its sixth year, and co-creator and inaugural chair of the Gordon Research Conference on Forensic Analysis of Human DNA. After completion of her graduate studies, Dr. Bienvenue was an ORISE Postdoctoral Research Fellow at the FBI. Following this appointment, she joined the Armed Forces DNA Identification Laboratory (AFDIL), as the Validation and Quality Control Supervisor where she managed a team that provided quality control and oversaw the evaluation, validation, and implementation of new technology for DNA casework analysis in support of remains identification. She joined Lockheed Martin in 2008 and most recently served as Chief Scientist and Program Manager, in support of the development of rapid microfluidic DNA analysis systems. In June of 2013, she returned to the UVA as director of the Applied Research Institute (ARI) and was promoted to Senior Executive Director in 2017. ARI serves the university and the defense and intelligence communities as a conduit to facilitate collaboration and innovation between the academia and government. ARI leverages UVA’s human and capital assets to support research, education, and training, with a focus on homeland security, national intelligence, and defense missions. Dr. Bienvenue is a Fellow of the American Academy of Forensic Sciences.

John D. Clements

Co-Chair

Dr. John D. Clements, (co-chair) is Emeritus Professor of Microbiology and Immunology at Tulane University School of Medicine. After receiving his doctorate in 1979 from the University of Texas Health Science Center at Dallas, Dr. Clements completed a National Research Council Associateship at Walter Reed Army Institute of Research in Washington, DC. In 1980, Dr. Clements was appointed as Assistant Professor in the Departments of Microbiology and Medicine at the University of Rochester School of Medicine in Rochester, NY. In 1982, Dr. Clements joined the faculty at Tulane University. Dr. Clements served as Professor and Chair of the Department of Microbiology and Immunology from 1999 - 2018. Dr. Clements served as Vice Dean for Research from 2006 to 2009 and as Director of the Tulane Center for Infectious Diseases from 2009 - 2014. Dr. Clements' research programs focused on development of vaccines against infectious diseases. His research was funded from a variety of Public Health Service, Department of Defense, and philanthropic sources. Research in Dr. Clements's laboratory resulted in more than 100 peer reviewed publications and book chapters and thirteen issued patents. Dr. Clements has served on numerous scientific panels and Editorial Boards and was an Editor for Infection and Immunity from 1999 - 2005. In 2002, Dr. Clements chaired the committee to review all Military Infectious Disease Research Programs for the Department of Defense. Dr. Clements trained as a UN Weapons Inspector (UNMOVIC) and in 2003 and again in 2004, Dr. Clements served as a member of the Iraq Survey Group in Baghdad as a Subject Matter Expert in weapons of mass destruction and dual use equipment and programs for the Department of Defense. Dr. Clements was formerly a member of the Armed Forces Epidemiology Board (AFEB) and subsequently the Defense Health Board and is currently a member of the Public Health Subcommittee of the Defense Health Board – a federal advisory committee. In 2009, Dr. Clements was a member of the National Academy of Sciences committee on biosafety and personnel reliability in laboratories that conduct research of biological select agents and toxins. From 2010-2012, he served as a member of the National Vaccine Advisory Committee (NVAC) H1N1 Vaccine Safety Risk Assessment Working Group (VSRAWG). In 2011, Dr. Clements became a member of the National Academy of Sciences committee on developing a framework for an international faculty development project on education about research in the life sciences with dual use potential. He subsequently chaired two international workshops in support of this committee, including the Education Institute for Responsible Research on Infectious Diseases, Aqaba, Jordon (2012) and the Educational Institute of Responsible Science, Kuala Lumpur, Malaysia (2013). In 2013, Dr. Clements also chaired a National Academies of Sciences international workshop on Science Needs for Microbial Forensics: Developing an Initial International Roadmap in Zagreb, Croatia. In 2017, Dr. Clements served as a member of the National Academy of Sciences committee on Strategies for Effective Biologic Detection Systems. Dr. Clements is a veteran of the US Marine Corps. He served on active duty from 1966-1972 and in the US Marine Corps Reserves from 1972-1991. He was Honorably Discharged at the rank of LTCOL from the US Marine Corps Reserves in 1991.

Ruzena K. Bajcsy

Member

Dr. Ruzena K. Bajcsy is the NEC Distinguished Professor of Electrical Engineering and Computer Sciences at the University of California, Berkeley. She was the founding director of the Center for Information Technology Research in the Interest of Society (CITRIS) in 2001, a multi-campus organization comprising four campuses: UC Berkeley, UC Davis, UC Santa Cruz, and UC Merced. As part of her activities in CITRIS, and together with the University of California Center for the Humanities, she played a founding role in establishing a program of Digital Humanities. Before joining UC Berkeley, she headed the Computer and Information Science and Engineering Directorate at the National Science Foundation (1999–2001). From 1972 to 2001 she was a professor in the Computer and Information Science Department at the University of Pennsylvania, where she established in 1978 the General Robotics, Automation, Sensing, and Perception (GRASP) Lab. As director of the GRASP lab she fostered interdisciplinary research activities and attracted faculty from electrical and mechanical engineering as well as psychology/cognitive science and of course computer science. Throughout her 28 years at University of Pennsylvania, she worked on robotics research, including computer vision, tactile perception, and in general the problem of system identification. She also worked on medical imaging, and developed with her students a digital anatomy atlas coupled with elastic matching algorithms that made it possible to automatically identify anatomic structures of the brain, first in X-ray tomography, later with MRI and positron image tomography. Use of this technology is now standard in medical practice. Dr. Bajcsy is a member of the National Academy of Engineering (1997) and National Academy of Medicine (1995) as well as a fellow of the Association for Computing Machinery (ACM) and the American Association for Artificial Intelligence (AAAI). In 2001 she received the ACM/AAAI Allen Newell Award, and in November 2002 she was named one of the 50 most important women in Discover Magazine. She is the recipient of the Benjamin Franklin Medal for Computer and Cognitive Sciences (2009) and the IEEE Robotics and Automation Award (2013) for her contributions in the field of robotics and automation. Her current research is in the use of robotic technology, namely measuring and extracting noninvasively kinematic and dynamic parameters of individual in order to assess their physical movement capabilities or limitations. If there are limitations, her students have designed assistive devices that can compensate for the lack of kinematic agility and /or physical strength.

Robert A. Barish

Member

Dr. Robert A. Barish, a distinguished physician and academic leader, is vice chancellor for health affairs of the University of Illinois at Chicago. Dr. Barish oversees the University of Illinois Hospital & Health Sciences System (UI Health), which provides comprehensive care, education, and research to train healthcare leaders and foster healthy communities in Illinois and beyond. A part of the University of Illinois at Chicago (UIC), UI Health is a clinical enterprise that includes a 465-bed tertiary care hospital, 21 outpatient clinics, and 11 federally qualified Mile Square Health Center locations. With campuses in Chicago, Peoria, Quad Cities, Rockford, Springfield, and Urbana, the health system includes the academic and research activities of the seven UIC health science colleges: Applied Health Sciences, Dentistry, Medicine, Nursing, Pharmacy; the School of Public Health; and the Jane Addams College of Social Work. UI Health is dedicated to the pursuit of health equity. He served as chancellor of the LSU Health Sciences Center at Shreveport from 2009 to 2015, where he provided leadership for the schools of medicine, allied health, and graduate programs; a major academic medical center; and two affiliated hospitals. Dr. Barish spent 24 years at the University of Maryland School of Medicine. He served as chief of emergency medicine from 1985 to 1996 and built a nationally recognized program. He was named associate dean for clinical affairs in 1998 and vice dean for clinical affairs in 2005. That same year, following the devastation of Hurricane Katrina on the Gulf Coast, Barish helped lead a medical regiment dispatched by the state of Maryland to deliver emergency care to more than 6,000 hurricane victims in Jefferson Parish. In addition to his medical duties at Maryland, Barish earned an M.B.A. from Loyola College in 1995. From 1996 to 1998, he served as the chief executive officer of UniversityCARE, a University of Maryland physician-hospital network of family-oriented health centers located in neighborhoods throughout the Baltimore metropolitan area. A former lieutenant colonel and flight surgeon in the Maryland Air National Guard, Barish was among a select group invited to become a NASA astronaut candidate in the early 1990s.

Clarion E. Johnson

Member

Dr. Clarion E. Johnson is the former global medical director of the Medicine and Occupational Health Department for ExxonMobil Corporation. The department delivers services to more than 88,000 ExxonMobil and affiliate employees worldwide. In addition to traditional work-related health services, the department delivers travel medicine to the many ExxonMobil employees who are engaged in exploration and production in a number of challenging environments in Africa, the CIS, China, and Southeast Asia. Dr. Johnson is co-chair of the Planning Committee for the Forum on Public-Private Partnerships for Global Health and Safety at the National Academies of Sciences, Engineering, and Medicine. He has been a long time member of the Milbank Memorial Fund Board of Directors and has published numerous articles in various fields. Dr. Johnson is the 2012 recipient of the Society of Petroleum Engineers' Health, Safety, Security, Environment, and Social Responsibility Award. Dr. Johnson is board-certified in internal medicine, cardiology, and occupational medicine. He did his undergraduate work at Sarah Lawrence College and studied medicine at the Yale University School of Medicine.

Kent E. Kester

Member

Dr. Kent Kester is currently Vice President and Head, Translational Science and Biomarkers at Sanofi Pasteur. In this capacity, he leads a team of over 200 research and clinical professionals in the US and France focused on the translational development of new vaccines. During a 24-year career in the US Army, he worked extensively in clinical vaccine development and led multiple research platforms at the Walter Reed Army Institute of Research, the U.S. Department of Defense's largest and most diverse biomedical research laboratory with a major emphasis on emerging infectious diseases, an institution he later led as its Commander/Director. His final military assignment was as the Associate Dean for Clinical Research in the School of Medicine at the Uniformed Services University of the Health Sciences (USUHS). During his military service, Dr. Kester was appointed as the lead policy advisor to the US Army Surgeon General in both Infectious Diseases and in Medical Research & Development. In these capacities, he worked extensively in the interagency environment and developed a variety of Army and DoD medical policies related to infectious diseases, both clinical and research aspects. Dr. Kester holds an undergraduate degree from Bucknell University and an M.D. from Jefferson Medical College, completing his internship and residency in internal medicine at the University of Maryland and a research fellowship in infectious diseases at the Walter Reed Army Medical Center. Currently a member of the US Government Presidential Advisory Council on Combating Antibiotic-Resistant Bacteria (PACCARB) and the Department of Veterans Affairs Health Services Research & Development Service Merit Review Board, he previously chaired the Steering Committee of the NIAID/USUHS Infectious Disease Clinical Research Program, and has served as a member of the FDA Vaccines & Related Biologics Products Advisory Committee (VRBPAC), the NIAID Advisory Council, and the CDC Office of Infectious Diseases Board of Scientific Counselors. He is the Vice Chair of the National Academy of Medicine Forum on Microbial Threats. Board-certified in both internal medicine and infectious diseases, Dr. Kester holds faculty appointments at USUHS and the University of Maryland; and is a fellow of the American College of Physicians, the Royal College of Physicians of Edinburgh, the Infectious Disease Society of America, and the American Society of Tropical Medicine and Hygiene. He is a member of the clinical faculty at the University of Maryland Shock Trauma Center in Baltimore.

Ann B. Salamone

Member

Ms. Ann Beal Salamone, Chairman of the Board and co-founder of Rochal Industries LLC, has been a polymer scientist for more than 40 years developing products for flexible circuit boards, integrated chips, personal care and healthcare. She is one of the principal inventors of Rochal's products for skin and wound treatment and is responsible for the development and maintenance of customers. Her products contribute to positive patient outcomes of millions of patients annually. Ann holds 26 U.S. patents and patent applications and is a past Chairman of the American Chemical Society, Division of Polymer Chemistry. In 2009, she was selected as an Inaugural Fellow of the American Chemical Society, in 2011 received a nationally recognized LEAD Award from the Healthcare Businesswomen's Association. She is the recipient of the 2019 Society of Biomaterials Technology Innovation and Development Award. She is Chairman of BioMed SA and a member of the National Academy of Engineering. Additionally, she served as President or Vice President of the Enterprise Development Corporation (EDC), a South Florida science and technology incubator. During her tenure, EDC's clients increased aggregate revenues by more than $98 million, raised more than $74 million in outside funding, created 5,013 jobs, produced annual salaries of $109.5 million, and provided $5.6 million in annual sales tax revenues. During this time, Ann was a Crystal Slipper Awardee, Executive Woman of the Year, 2002, in recognition of accomplishments at EDC and contributions to K-12 science education nationally.

Martin-José J. Sepulveda

Member

Dr. Martín-Jose Sepúlveda, M.D., FACP, FAAP, FACOEM is an IBM Fellow, elected member of the National Academy of Science, Engineering and Medicine, the Connecticut Academy of Science and Engineering, and the Florida Academy of Science and Technology. He is the CEO and principal of CLARALUZ LLC, a health, data, technology and analytics consulting firm. He is a senior executive advisor to four health technology start-up companies and to IBM Watson Health. He is also the retired IBM Vice President of Health Systems and Policy Research, IBM Research Division. Prior to this post, he served as IBM Vice President of Integrated Health Services and led health policy and strategy, health benefits innovation and purchasing, occupational health and well- being services for IBM globally. He is currently an active board member in the National Academy of Medicine's Board on Children, Youth and Families, the Board of Overseers at the UPENN School of Nursing, the Board of Advisors of the College of Public Health University of Iowa, and the Council for Health Research for Development.

Philip C. Spinella

Member

Dr. Philip C. Spinella is the Director of the Pediatric Critical Care Translational Research Program at St Louis Children’s Hospital and a Professor of Pediatrics at Washington University School of Medicine. He is internationally recognized as an expert in transfusion medicine and the resuscitation of hemorrhagic shock. Dr. Spinella served 15 years in the US Army and separated as a Lieutenant Colonel in 2007. He is a veteran of the Iraq War, where he received a Bronze Star and the Combat Medic Badge for providing care under fire. In collaboration with investigators at the US Army Institute of Surgical Research, his groundbreaking work in the area of the treatment of hemorrhagic shock received the US Army's Best Invention Award in 2008 for his role in the development of the concept of “damage control resuscitation”. Dr. Spinella is a well-established clinical trialist, who has been funded by the US Department of Defense and the National Institutes of Health. He has published over 200 manuscripts and 16 chapters, and is the editor for a textbook on the topic of trauma resuscitation. Dr. Spinella has also participated in, organized research symposia for, or provided external review of research programs for the FDA, NIH, DoD, Homeland Security, and the Department of Health and Human Services. He has also participated on a committee for the National Academy of Sciences to develop recommendations for a national trauma system in the US. Dr. Spinella co-founded the THOR Network and has been its Co-Director since 2011. The THOR Network over the past 10 years as a public charity has raised over 2 million dollars under Dr. Spinella’s leadership. These funds have been used to educate, train, and perform research in the discipline of trauma resuscitation around the world. The THOR network has hosted training and educational programs in over 12 countries in 4 continents. The THOR Network has also performed ground breaking research related to whole blood and platelet transfusion for traumatic bleeding.

Mary Ann Spott

Member

Dr. Mary Ann Spott joined the Joint Trauma System in 2006 to lead the establishment of the DoD's first and only trauma system and trauma patient registry. Dr. Spott was responsible for developing the strategic vision for trauma operations across the DoD and was instrumental in building the trauma system from the ground up. As the Deputy Director, Dr. Spott manages all aspects of the JTS and DoD Trauma Registry and its integrated clinical registries and databases. The U.S. Secretary of Defense awarded Distinguished Civilian Award (DCS) to Dr. Spott in December 2016 for her outstanding work at the JTS. The DCS Award is the highest recognition the DoD can award an employee, and it is presented to a small number of civilian employees whose careers reflect exceptional devotion to duty and significant contributions of broad scope of policy, scientific, technical or administrative fields that increase effectiveness and efficiency. As deputy director, Dr. Spott is the principal Health Informatics Officer. Dr. Spott was awarded the first ever AHIMA e-HIM award for her contributions to the development and implementation of an outcomes and performance improvement software application that is now used in many trauma centers across the United States. Her current responsibilities include coordinating the JTS components across the continuum of care which include prevention, pre-hospital, education, leadership and communication, quality assurance/performance improvement, research and information systems, including the DoD Trauma Registry. She also participates as a subject matter expert for the NATO trauma registry project. Prior to her leadership at the JTS, she was the Associate Director for Management Information Systems and Trauma Registry at Pennsylvania Trauma Systems Foundation and worked at the State Health Data Center, Division of Health Statistics and Research and Pennsylvania Cancer Registry. Dr. Spott received her Bachelor's Degree in Biology from the University of Scranton and a Master's in Business Administration at Pennsylvania State University where she completed her Master of Science in Information Systems. She also received a Master's Degree in Public Administration from Pennsylvania State University as well as a certificate in Economic Development. She received her Bachelor's Degree in Health Record Administration from York College. Dr. Spott graduated from the Harvard's John F. Kennedy School of Business Senior Executives Fellows Program in March 2010. In 2015, she earned her doctoral degree in Leadership Studies from Our Lady of the Lake University in San Antonio, Texas.