#### Veterans' Advisory Board on Dose Reconstruction

#### Chair: James A. Zimble, M.D. VADM, USN (Ret.)

Dr. Zimble was selected as the fourth President of the Uniformed Services University of the Health Sciences in 1991, following his retirement as a Vice Admiral and the 30th Surgeon General of the U.S. Navy. After thirteen years of dedicated service to the university he retired with the title of President Emeritus. Upon his retirement, he was awarded the Department of Defense Civilian Distinguished Service Medal by the Secretary of Defense, and the USUHS University Medal. As the 30th Surgeon General of the Navy, he was the principal advisor to the Department of the Navy, responsible for developing and establishing overall Naval health care policies and priorities, contingency and wartime planning, and program development for a four billion dollar health care system affecting more than 2.8 million Navy and Marine Corps active duty and retired beneficiaries, and their families. Dr. Zimble was cited as Health Leader of the Year by the Commissioned Officers Association of the Public Health service and was presented the American Medical Association's Nathan Davis Award as Outstanding Member of the Federal Executive Branch in Career Public Service. In 2007, with the establishment of the Franklin and Marshall Society of Distinguished Alumni, he was inducted as one of the society's inaugural members. Dr. Zimble has received numerous honors, and in 2005 he was honored by the awarding of the Uniformed Services University's honorary Doctor of Military Medicine degree and the naming of the university library as The James A. Zimble Learning Resource Center. Dr. Zimble currently serves as a member of the Executive Board of the Friends of USUHS, as a Director on the Board of the National Association of Uniformed Services.

#### Harold L. Beck

Mr. Beck is an expert in radiation dose reconstruction. A physicist for the U.S. Department of Energy/Atomic Energy Commission for over 36 years, he retired in 1999 as the Director of the Environmental Science Division of the DOE Environmental Measurements Laboratory (EML) in New York City. He is presently a private consultant. During his tenure at EML, he also served as Director of the EML Instrumentation Division and as Acting Deputy Director of the Laboratory. Mr. Beck has authored over 100 publications in the areas of radiation physics, radiation protection, dose reconstruction, environmental radiation, radiation dosimetry and instrumentation. His efforts in the development of the scientific approach to reconstructing fallout doses to the U.S. population from above-ground nuclear weapons testing in Nevada earned him the DOE Meritorious Service award in 1988, the second highest award in the department. Mr. Beck served as Scientific Vice President for Radiation Measurements and Dosimetry of the National Council on Radiation Protection and Measurements (NCRP) from 1996-2003, and in 2004 was elected to lifetime honorary membership in NCRP. In 2004, he was appointed as a member of the National Academy of Sciences, National Research Council (NAS/NRC) Board on Radiation Effects Research (BRER). He has served as an

expert member or chair on a number of recent NCRP and NAS/NRC Scientific Studies related to radiation dosimetry.

## Paul Kingsley Blake, Ph.D., CHP CAPT, MSC, USN (Ret.)

Dr. Blake is the Program Manager for the Nuclear Test Personnel Review (NTPR) Program at the Defense Threat Reduction Agency (DTRA). A retired Navy Captain of the Medical Service Corps, he was the Officer in Charge, Naval Dosimetry Center, and a faculty member of the Radiology Department of the Uniformed Services University of the Health Sciences, Bethesda, MD. Dr. Blake was the Navy/DoD representative on President Clinton's interagency taskforce on occupational hazards and illness of the Department of Energy workforce. This taskforce resulted in Public Law (PL 106-398 & EO 13179) the Energy Employees Occupational Illness Compensation Program Act of 2000. Dr. Blake also led the effort to implement a new thermoluminescent dosimeter, DT-702/PD, for monitoring 50,000 naval personnel, two national labs, and two commercial shipyards associated with naval nuclear activities.

### John Dunning Boice, Jr., Sc.D. CAPT, USPHS (Ret.)

Dr. Boice is the Scientific Director of the International Epidemiology Institute, Rockville, MD, and Professor of Medicine at Vanderbilt University School of Medicine. He serves on the Main Commission of the International Commission on Radiological Protection and as a U.S. advisor to the United Nations Scientific Committee on the Effects of Atomic Radiation. During the past 30 years, Dr. Boice has conducted a wide range of studies in the field of radiation epidemiology. This discipline has provided the fundamental basis for the current understanding of radiation health effects, such as an elevated risk of cancer in exposed populations. Long-term epidemiological studies on the Japanese survivors of the atomic bomb, on patients who received medical radiation treatments, on workers engaged in radiation-related activities, and on other exposed populations have provided data upon which estimates have been made of the risk of cancer and other diseases as a function of radiation dose. Epidemiologic studies also have been conducted on atomic veterans in several countries, including the United States, to learn whether adverse health effects are associated with their prior radiation exposure. A leading cancer epidemiologist, Dr. Boice will provide insights into the results of epidemiologic studies on atomic veterans. Dr. Boice has received numerous honors, and is the 2007 recipient of the Distinguished Scientific Achievement Award from the Health Physics Society.

### Patricia Ann Fleming, Ph.D.

Dr. Fleming is Vice President and Dean of the Faculty and Professor in Philosophy at Saint Mary's College, Notre Dame, Indiana. She received her master's and doctorate from Washington University in St. Louis, Missouri. While there, she served as the assistant editor of the Philosophy of Science Journal. She has also served as an editor for the international journal ESEP (Ethics in Science and Environmental Politics) and as a consultant to the Organization for Economic Co-operation and Development (OECD)/Nuclear Energy Agency (NEA) in Paris, France. She is currently a Board Member of the Swedish-based international group VALDOC (Values on Decisions of Complexity). Her areas of specialization are philosophy of science, epistemology, and applied ethics. She has published and lectured internationally on the ethical and epistemological issues associated with the disposal of high-level nuclear waste, including the use of expert elicitation methodology in site characterization, waste management and indigenous populations, informed consent in stakeholder populations, and circularity in regulatory policy. She has taught courses in applied ethics, particularly ethics and public policy, medical ethics, environmental ethics, and the philosophy of science. Her familiarity with ethical concerns regarding the health effects from radiation exposure led to her appointment on the National Academy of Science Committee to Assess the Scientific Information for the Radiation Exposure Screening and Education Program.

### Kenneth L. Groves CDR, MSC, USN (Ret.)

Mr. Groves is an expert in radiation health and nuclear weapons effects. He served for over 26 years as an enlisted man and commissioned officer in the Navy before retiring as a Commander. He is the President of S 2-Sevorg Services, LLC, a small service company (Veteran-Owned Small Business) specializing in Environmental, Safety and Health (ES&H) program reviews and also Emergency Response and Operations assessments, and Accident/Incident Investigations. Mr. Groves is also retired from the University of California where he worked both at Los Alamos National Laboratory (LANL) and the Office of the President where he was the Deputy Director for ES&H before retiring in 2002. While working at LANL, Mr. Groves held a number of senior ES&H positions including Deputy Group Leader for Health Physics, which included responsibility for conducting radiation dose reconstructions. While in the Navy, he held a number of senior positions including: Director, Navy Radiological Controls Program Office, with responsibilities for the Navy-wide Nuclear Weapons Radiological Controls Program; and Director, Radiological Affairs Support Office and Director of Training at the Naval Nuclear Power Unit/Naval Energy and Environmental Support Office, responsible for shipboard radiation surveys for all sources including nuclear weapons. Mr. Groves has a BA in Chemistry from the University of New Mexico and an MS in Biophysics/Health Physics from Texas A&M University.

#### John Lathrop, Ph.D.

Dr. Lathrop is an expert in decision analysis, societal decision analysis, risk assessment/management, incident management and counterterrorism strategy. He is currently a principal investigator in counterterrorism strategy at Lawrence Livermore National Laboratory. In his 30 years of consulting and analysis, he has been asked to provide opinions on a wide variety of risk-related issues. For example, he was on the California Scientific Review Panel on EMF Risk, testified before the Alaska Oil Spill Commission regarding the Exxon Valdez, and wrote risk assessment expert testimony depositions in the successful defense of California against a suit by a major oil company. He has authored/co-authored papers on the role of risk assessment in the political process, evaluating technological risk, and using a decision analytic perspective to determine acceptable risk.

### David E. McCurdy, Ph.D.

Dr. McCurdy is an expert in quality management relevant to radiation biology and radiological health. He is a widely published technical consultant to government agencies, national laboratories, universities and the nuclear power industry in the areas of safety assessment oversight, quality assurance, radiochemical and radiometrological procedure development, environmental radiation monitoring, radiological site release/remediation programs and radioanalytical data verification and validation. A major criticism of the Nuclear Test Personnel Review (NTPR) program in a report issued by the National Research Council in 2003 was the lack of well-documented procedures and quality control. This criticism relates to both the dose reconstruction procedures that are used and the mechanisms of communications with veterans. Dr. McCurdy will provide insight into quality assurance aspects of procedures used for dosimetry and dose reconstruction for veterans.

## Thomas J. Pamperin, MBA LTC, USAR (Ret.)

Mr. Pamperin is Deputy Director of the Compensation and Pension (C&P) Service of the Department of Veterans Affairs. Mr. Pamperin was promoted to the Senior Executive Service in March 2007. He is responsible for policy and regulatory development, budget formulation, procedural guidance and training programs for field adjudication staff delivering VA benefits to America's veterans. Mr. Pamperin deals extensively with the Department of Defense and other federal agencies. He is the VA representative on the Department of Defense Disability Advisory Council. Mr. Pamperin joined the VA in 1974. He subsequently performed all of the claims processing and supervisory positions associated with delivery of C&P benefits in the Milwaukee, Des Moines, and Wichita Regional Offices. Mr. Pamperin came to central office in 1994. Prior to his current position he has served as an Assistant Director of the Service in the following areas, procedures, field oversight, reengineering and policy. Mr. Pamperin graduated from the University of Wisconsin at Madison with Bachelor and Masters Degrees in Business. He is a graduate from the United States Army Command and General Staff College and the Federal Executive Institute Leadership in a Democratic Society Program. He served as an infantry platoon leader in Vietnam with the 101st Airborne Division and retired from the Army Reserve as a lieutenant colonel in 1994.

#### Curt W. Reimann, Ph.D.

Dr. Reimann is an expert in quality management. He earned a Ph.D. in chemistry from the University of Michigan and served in a variety of research and management positions at the National Institute of Standards and Technology (NIST). He served as first Director (1987–1995) of the Malcolm Baldrige National Quality Award, led by NIST. The award, created by Public Law 100-107, promotes quality awareness, recognizes excellent U.S. organizations, and publicizes successful quality strategies. A major criticism of the NTPR program in a report issued by the National Research Council in 2003 was the lack of well-documented procedures and quality control. This criticism relates to both the dose reconstruction procedures that are used and the mechanisms of communications with veterans. Dr. Reimann brings to the Board knowledge of quality management for complex, interactive systems such as the dose reconstruction and claims adjudication program for veterans. Dr. Reimann currently holds the Mayberry Chair of Excellence at Tennessee Technological University, College of Business.

### R.J. Ritter Former NCO, USN

A native of New Orleans, La., Mr. Ritter is a Korea Veteran who served honorably, as a non-commissioned officer in the U.S. Navy & U.S. Coast Guard, and was actively involved in the testing of nuclear weapons in the Pacific during the mid 1950's. After obtaining his Marine Engineering licenses, he held several Management positions with three major corporations involved in the manufacturing and leasing of air and gas compression equipment to the international Offshore Oil & Gas exploration and production industries. During this period of time, and as an active member of the National Association of Energy Engineers, and the Society of Naval Architects & Marine Engineers, he received his Energy Audit & Management Certification, was a founding member of the International Thermal Energy Storage Advisory Council (San Diego, Ca.), and contributed to the development of the current "Best Practice," methods of Industrial and Commercial electrical energy utilization, conservation and demand-side load management. After official retirement in 2003, he continues to be active as a consultant in these areas, on a part time basis, and is also the current Managing Director and National Commander of the National Association of Atomic Veterans, Inc. As a member of the VBDR, Mr. Ritter represents the issues, concerns and views of the U.S. Atomic Veterans' community.

# Kristin Swenson, Ph.D., ABR-D, T Lt Col, USAF (Ret.)

Dr. Swenson, certified in diagnostic radiological physics and therapeutic radiological physics by the American Board of Radiology, and a retired Air Force Lieutenant Colonel, is an expert on radiation health matters. Dr. Swenson is currently a medical physicist for RadAmerica, Inc., where she performs physics calculations for patients and verification of documentation for conventional and 3D treatment. In the Air Force, she served as an

Assistant Professor at the Uniformed Services University of the Health Sciences, Preventive Medicine and Biometrics Department, Environmental and Occupational Health Division where she provided instruction and research for the Public Health and Health Physics Masters' programs. Dr. Swenson also served tours as the Chief, Radiation Protection Division of the Office of the Surgeon General of the Air Force, and as the Chief Medical Physicist at the David Grant Medical Center at Travis Air Force Base, CA.

# George Edwin "Ed" Taylor COL, USA (Ret.)

Mr. Taylor, a retired army Colonel and Distinguished Military Graduate of Clemson University, is a member of the National Association of Atomic Veterans (NAAV). Trained as a nuclear weapons employment officer, he participated in nuclear weapons testing exercises-including exposure to a 47 kiloton nuclear explosion less than one mile from "ground zero". A thirty-year career army officer, he gained extensive combat experience at several organizational levels-from company or troop to division and higherboth in command and operations. Mr. Taylor served in Korea late in the Korean War, completed two combat tours in Vietnam and served for seven years in West Germany and Berlin during the Cold War, earning numerous decorations and awards for valor, including the Silver Star with 2 Oak Leaf Clusters (OLC) (Nation's third highest award for valor-3 awards), and the Purple Heart and the Combat Infantry Badge (CIB). He also earned a MBA in human relations management from The George Washington University. With his active duty and more than twenty years involvement and leadership of veterans' organizations, his experience and continued interest on military history (visiting battlefields and interviewing heroes) greatly enhances the Board.

# Elaine Vaughan, Ph.D.

Dr. Vaughan is an expert in risk analysis and communication. She is an Research Professor in the Department of Psychology and Social Behavior, with joint appointments in the Department of Environmental Science and Policy and the Department of Policy, Planning and Design at the University of California, Irvine, CA. Dr. Vaughan has published extensively in the areas of science and public policy, quantitative risk assessment and policy, risk communication and psychological response to risk, to include her book: *Some Factors Influencing the Nonexpert's Perception and Evaluation of Environmental Risks*. Dr. Vaughan has served on several panels, including as a selected review panel member for the Department of Veterans Affairs National Centers for the Study of War-Related Illnesses, and as an appointed committee member for the National Academy of Sciences (Institute of Medicine) Committee on Strategies to Protect the Health of Deployed U.S. Forces. She received her Ph.D. in psychology from Stanford University.

# Paul G. Voillequé, CHP

Mr. Voillequé, a certified health physicist, is an expert on historical dose reconstruction. His work on dose reconstruction projects includes source term development for radionuclide releases from the Fernald, Rocky Flats, and Savannah River Site facilities. He was co-author of an assessment of doses and risks from inhalation exposures to 239Pu. He led a project to develop methods for estimating radiation doses to on-site military personnel, construction workers, and nearby residents from short-lived gaseous radionuclides and radioactive particles during the early years of Hanford operations. He chaired the State of Tennessee's Oak Ridge Health Agreement Steering Panel, which guided dose reconstruction studies dealing with historic releases at Oak Ridge. He assists the Fred Hutchinson Cancer Research Center and the National Cancer Institute with reconstruction of radiation doses to persons in the Russian Federation, Ukraine, and Belarus who were exposed following the Chernobyl accident.

### Gary H. Zeman, Sc.D., CHP CDR, MSC, USN (Ret.)

Dr. Zeman, a certified health physicist, is an expert on radiation health matters. Dr. Zeman served a 20-year career as a Radiation Health Officer in the U.S. Navy Medical Service Corps, and retired from the U.S. Navy with the rank of Commander. He currently holds the position of Radiological Safety Officer at Argonne National Laboratory, and previously held the position of Radiological Control Manager at Lawrence Berkeley National Laboratory. He has also worked at AT&T Bell Laboratories and Lucent Technologies as Manager of Radiation Protection and Product Safety. In the Navy, Dr. Zeman's assignments included Radiation Safety Officer for the National Naval Medical Center, and research scientist and research programs manager at the Armed Forces Radiobiology Research Institute of the Defense Nuclear Agency. While serving at the Armed Forces Radiobiology Research Institute, Dr. Zeman was active in research on the biological effects of ionizing radiation, and supported the activities of NATO Research Study Group 5 on the potential effects of nuclear weapons in battlefield situations. He has authored a number of publications on ionizing radiation effects and measurements.