

## Biographies

### Meeting of the Research Advisory Committee on Veterans' Gulf War Illnesses June 25 & 26, 2018

**J. Wesson Ashford, M.D., Ph.D.** Dr. Wesson Ashford is the Director of the War Related Illness and Injury Study Center (WRIISC), California site, which he formed in 2007 at the VA Palo Alto Health Care System, and a Clinical Professor (affiliated) at Stanford University, Department of Psychiatry and Behavioral Sciences. Dr. Ashford received his undergraduate degree from University of California, Berkeley and his medical degree, psychiatry training, and Ph.D. in neuroscience from the University of California, Los Angeles. He has served on the faculty of UCLA, Southern Illinois University, University of California, Davis, and the University of Kentucky, where he was Vice-Chair for research from 1992–2003. His long-term interests include brain function, aging, causes of mortality, genetics, memory mechanisms, and Alzheimer's disease. As director of the CA WRIISC site, Dr. Ashford has led studies of the illnesses and injuries afflicting deployed Veterans including studies of Gulf War Veterans, chronic pain, advanced brain imaging to better diagnose traumatic brain injury (TBI), and computerized cognitive testing to precisely address mental changes that result from a variety of medical conditions. He has also been a leader in the development of therapies and management approaches for neuropsychiatric illnesses, including dementia, post-traumatic stress disorder (PTSD), TBI, and chronic pain. Dr. Ashford is also a strong advocate of helping individuals achieve better personal health. Dr. Ashford has published more than 140 peer reviewed articles that address a wide range of topics, including Alzheimer's disease, TBI, PTSD, epilepsy, and alcohol effects.

**Karen Block, Ph.D.** Dr. Karen Block is a nationally and internationally recognized expert in the field of molecular mechanisms driving human disease with focus on the role of oxidative stress in carcinogenesis, cancer-drug resistance, and diabetes-induced organ damage. Academically, Dr. Block was an Associate Professor of Medicine who served as an Executive member of the Cancer Therapy and Research Center and Associate Director of Shared Resources at the University of Texas Health Science Center at San Antonio and was a health research scientist with the VA since 2005. Her career is balanced with solid independent National Institutes of Health and VA funding achievements, publication of scientific manuscripts in high impact factor journals, authorship of expert review articles and book chapters, participation in and chairing of grant reviews and University programs as well as steering committees, and performing site visits in addition to training clinician- and non-clinician-scientists. She joined the Office of Research and Development in Washington D.C. in 2016.

**Peter Bayley, Ph.D.** Dr. Peter Bayley is a principal investigator at the War Related Illness and Injury Study Center (WRIISC) at the VA Palo Alto Health Care System and a Clinical Associate Professor (Affiliated) of Psychiatry and Behavioral Sciences at Stanford University. Dr. Bayley received his Ph.D. degree and postdoctoral training in neuroscience from the University of California, San Diego and his undergraduate degree from Oxford Brookes University, U.K. Dr. Bayley is currently principal Investigator on a clinical trial evaluating yoga for treating chronic pain in Gulf War illness, and another clinical trial evaluating breathing-based meditation (Sudarshan Kriya Yoga: SKY) for treating post-traumatic stress disorder (PTSD) in veterans. Dr. Bayley has published more than 40 peer reviewed articles on a broad range of topics including memory, Alzheimer's disease, behavioral pharmacology, and PTSD.

**Howard L. Fields, M.D., Ph.D.** Dr. Howard Fields received his M.D. and Ph.D. in Neuroscience at Stanford in 1965–66. He then spent three years as a research neurologist at Walter Reed Army Institute of Research. Following clinical training in neurology at Harvard, he joined the faculty of the University of California, San Francisco, where he is currently Professor of Neurology and Physiology Emeritus. He has made major contributions to understanding and treating pain and addiction. His group was the first to demonstrate the clinical effectiveness of opioids for neuropathic pain and of topical lidocaine for post-herpetic neuralgia. He discovered and elucidated a pain modulating neural circuit that is required for opioids to produce analgesia. He also discovered that placebo analgesia is blocked by an opioid antagonist. He has discovered nerve cells in the ventral striatum that selectively encode the magnitude of a reward. Dr. Fields has combined human and animal research and has published several human

functional imaging studies on expectation and impulsivity, which are major risk factors for pain and substance abuse. He has over 300 scientific publications and has received numerous research awards. His honors include a Merit Award from National Institutes of Health, the Kerr Award of the American Pain Society, the Cotzias Award of the American Academy of Neurology, and the R.D. Adams Lectureship of the American Neurological Association. In 1997, he was elected to membership in the Institute of Medicine and in 2010 to the American Academy of Arts and Sciences.

**Karunesh Ganguly, M.D., Ph.D.** Dr. Karunesh Ganguly is a clinical neurologist and a research scientist at the University of California, San Francisco and the San Francisco VA Medical Center. He graduated from Stanford University and then completed his M.D./Ph.D. degrees at the University of California, San Diego. He subsequently completed his internal medicine and neurology residency at the University of California, San Francisco. Concurrent with his residency, he conducted research into the development of 'Brain-Machine Interfaces' in the Department of Electrical Engineering & Computer Sciences at the University of California, Berkeley. His clinical expertise is on the neurological rehabilitation of patients with stroke and brain injury. Dr. Ganguly is also the Director of the Neural Engineering & Plasticity Laboratory. The laboratory's basic and translational research program focuses on the development of neural interfaces for patients with disability. Such implantable technology can eventually help disabled patients to directly control assistive devices. His research is funded by grants from the National Institutes of Health (NIH), the Department of Veterans Affairs, and the Burroughs Wellcome Fund. Dr. Ganguly was awarded the Presidential Early Career Award for Scientists and Engineers (PECASE Award) by President Obama in 2014, and he was selected for the 2015 New Innovator Award by the NIH Office of the Director.

**Jeff A. Gracianette, SP4.** Jeff Gracianette, Specialist 4, United States Army, 1988–1995, is a Gulf War Desert Shield/Desert Storm Veteran who served as a Water Treatment Specialist (Military Occupational Skill 77W10). He was awarded two Army Commendation Medals, five Army Achievement Medals, plus seven Service Medals. His tours of duty included Fort Bragg, North Carolina, as well as Germany and Korea. He was deployed overseas to the Persian Gulf and Somalia. Mr. Gracianette provided humanitarian service for Hurricane Andrew. He is currently a 100% disabled Veteran and study participant at the War Related Illness and Injury Study Center (WRIISC) in Palo Alto, California.

**Drew Helmer, M.D., M.S.** Dr. Drew Helmer is an expert in post-deployment health, the impact of combat deployment on the health and well-being of military service members. He obtained his medical degree at Columbia University College of Physicians and Surgeons and his Masters of Science in Health Policy and Management at the Columbia University School of Public Health. Trained as a general internist, from 2001–2007, Dr. Helmer was the medical director at the War Related Illness and Injury Study Center (WRIISC—pronounced “risk”) and a VA Health Services Research and Development Career Development Awardee while at VA New Jersey Health Care System. From 2007–2011, Dr. Helmer worked at the Michael E. DeBakey VA Medical Center in Houston, Texas, where he was the lead clinician for Post-Deployment Health in Houston and for the South Central Veterans Integrated Service Network, Associate Director of Research for PrimeCare, and Assistant Director of the “Neurorehabilitation: Neurons to Networks” VA Rehabilitation Research and Development Traumatic Brain Injury Research Center of Excellence. He has been the Director of the WRIISC at the VA New Jersey Health Care System and Associate Professor of Medicine at Rutgers, The State University of New Jersey, New Jersey Medical School since December 2011. In addition to caring for Veterans and educating providers about post-deployment health, Dr. Helmer studies healthcare utilization and outcomes important to deployed Veterans including chronic pain, exposure concerns, depression and suicidal ideation, mild traumatic brain injury, and sexual health concerns. He has published more than 40 peer-reviewed articles and a book for a lay audience on these topics.

**Stephen Hunt, M.D.** Dr. Stephen Hunt is the National Director of the Veterans Health Administration Post-Deployment Integrated Care Initiative, providing leadership in support of integrated post-combat care clinics in VA medical centers nationally. For over three decades he has provided care for and conducted clinical research on combat veterans from World War II, Korean War, Vietnam War, Gulf War (Desert Shield/Desert Storm), and the Iraq and Afghanistan Operation Enduring Freedom (OEF), Iraqi Freedom (OIF), and New Dawn (OND) conflicts. His Gulf War Veterans Clinic at VA Puget Sound, established in 1994, was designated as the best practices approach to clinical care for Desert Shield/Desert Storm Veterans and was featured frequently in presentations to groups such as the Institute of Medicine, RAND Corporation, Research Advisory Committee, and various Congressional groups and committees. This clinic was later adapted and renamed the Deployment Health Clinic, to provide care and support for Veterans returning from the Iraq/Afghanistan conflicts. Designated as best practices approach to post-deployment care, this model was rolled out in 2008 as the VA Post-Deployment Integrated Care Initiative. Within 18 months, 84% of VA facilities had integrated care platforms for Veterans returning from Iraq and Afghanistan. Dr. Hunt is the Registry Physician at VA Puget Sound, providing evaluations and care for Veterans with exposures to Agent Orange, ionizing radiation, and other toxic environmental agents related to military service. He is involved in clinical care, research, education, and outreach related to health concerns of combat veterans locally, state-wide, and at the national level. Dr. Hunt is a Clinical Associate Professor of Medicine at the University of Washington School of Medicine in the Occupational and Environmental Medicine Program.

**Peter M. O'Rourke, Acting Secretary of Veterans Affairs.** Peter O'Rourke became the Acting Secretary of the Department of Veterans Affairs on 29 May 2018. Prior to becoming Acting Secretary, he was VA's Chief of Staff from February 2018 to May 2018, when he helped finalize VA's electronic health record modernization contract and worked with the White House, Congress, and Veterans service organizations to pass the landmark VA MISSION Act. Before serving as Chief of Staff, Mr. O'Rourke successfully stood up the VA's Office of Accountability and Whistleblower Protection in May of 2017, serving as the Executive Director for the first office of its kind in the federal government. Peter O'Rourke has served as both an enlisted member of the Navy and as an officer in the Air Force. He's held positions as a senior policy advisor, congressional staffer, and executive director for a non-profit that supports federal government efficiency. He's a graduate of the University of Tennessee and the U.S. Air Force Institute of Technology.

**Lawrence Steinman, M.D.** Dr. Lawrence Steinman received his BA in physics from Dartmouth College, graduating Magna Cum Laude in 1968, and graduated from Harvard Medical School in 1973. He did an internship and residency in neurology at Stanford University and from 1974 to 1977 and was a post-doctoral fellow in the Department of Chemical Immunology at the Weizmann Institute of Science in Israel, receiving an NIH post-doctoral Fellowship. Dr. Steinman is Board Certified in Neurology and Psychiatry, is Senior Attending Physician at Stanford's Hospitals, the Zimmerman Professor of Pediatrics and Neurology, and from 2002 to 2011 he served as Chairman of the Interdepartmental Immunology Program. He received teaching awards during this time, particularly for his course on the Brain and the Immune System. He served in 2014–2015 on the Institute of Medicine–National Academy of Science panel on Considerations for Designing an Epidemiologic Study for Multiple Sclerosis (MS) and Other Neurologic Disorders in Pre and Post 9/11 Gulf War Veterans. Dr. Steinman received numerous honors: From 1988 to 2002 he twice received the Senator Jacob Javits Neuroscience Investigator Award from the National Institute of Neurological Diseases and Stroke. In 1994, he won the Friedrich Sasse Prize from the Free University of Berlin. In 2004, he won the John Dystel Prize from the American Academy of Neurology and the National Multiple Sclerosis Society. In 2008, he received an Honorary Doctorate from Hasselt University. In 2009, he was elected to the Institute of Medicine, now called the National Academy of Medicine. In 2011, Dr. Steinman won the Charcot Prize for Lifetime Achievement in MS research from the International Federation of MS Societies. In 2015, he received the Cerami Award in Translational Medicine. In 2017, he was elected a Fellow of the American Association for Advancement of Science. In 2015, he became the first neuroimmunologist elected to the National Academy of Sciences. Dr. Steinman's research focuses on what provokes relapses and remission in multiple sclerosis, the nature

of the molecules that serve as a brake on the brain inflammation, and the quest for a tolerizing vaccine for autoimmune diseases like type 1 diabetes and neuromyelitis optica. He has developed two antigen-specific therapies, using DNA vaccines, for MS and type 1 diabetes. He was senior author on the seminal 1992 *Nature* article that reported the key role of a particular integrin in brain inflammation. This research led to the development of the drug Tysabri, which is used to treat patients with MS and Crohn's disease. Dr. Steinman holds patents in the areas of immunology and for therapies of Huntington Disease, type 1 diabetes, and MS. He cofounded Neurocrine Biosciences, Bayhill Therapeutics now named Tolerion, Nuon Therapeutics, Transparency Life Sciences, and Atreca.

**Michael Wilson, M.D.** Dr. Michael Wilson is an Assistant Professor of Neurology at the University of California, San Francisco (UCSF) and holds the Debbie and Andy Rachleff Distinguished Professorship in Neurology there. Dr. Wilson obtained his medical degree from UCSF and completed a neurology residency at Massachusetts General Hospital (MGH) and Brigham and Women's Hospitals. He then pursued a clinical and research fellowship in neuro-infectious diseases at MGH and Boston University's National Emerging Infectious Diseases Laboratories before completing a postdoctoral fellowship in metagenomics in the UCSF Department of Biochemistry and Biophysics with Dr. Joseph DeRisi. His clinical work and research focuses on patients with infectious and autoimmune syndromes of the central nervous system, and his lab develops genomic technologies to identify novel and unusual causes of autoimmune and infectious meningoencephalitis and to look for triggers and autoantigens in multiple sclerosis.