BIOGRAPHIES

Meeting of the Research Advisory Committee on Veterans' Gulf War Illnesses RAC-GWVI August 4, 2021

RAC-GWVI LEADERSHIP

Lawrence Steinman, M.D. Dr. Lawrence Steinman, RAC-GWVI Chair, 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.

Karen Block, Ph.D. Dr. Block, Director of Gulf War Research, VA Office of Research and Development and RAC-GWVI Designated Federal Officer (DFO), 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 performance of 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.

RAC-GWVI MEETING PRESENTERS

Wes Ashford, M.D., Ph.D. Dr. Ashford is the Director of the WRIISC at the VA Palo Alto Health Care System, a Clinical Professor (affiliated) in the Department of Psychiatry and Behavioral Sciences, Stanford University, a Senior Research Scientist at the Stanford/VA Aging Clinical Research Center and Alzheimer's Center, and a staff psychiatrist at the VAPAHCS. Dr. Ashford is an authority on Alzheimer's disease, mild cognitive impairment (MCI), traumatic brain injury (TBI), and experienced in the recognition, diagnosis, and treatment of these and numerous other neuropsychiatric disorders. He has contributed major innovations to the fields of neuropsychological testing, brain imaging, and dementia treatment, with more than 100 scientific publications on Alzheimer's disease, MCI, genetic factors in Alzheimer's disease, and testing methodologies. Dr. Ashford is a Scientific Board Member of the Northern California Alzheimer's Association and Chair of the Memory Screening Advisory Board for the Alzheimer's Foundation of America. Dr. Ashford's training includes a BA from UC-Berkeley; an MD from the David Geffen School of Medicine at UCLA; and a PhD in Neuroscience from UCLA, where he set up the Alzheimer's PET Scan Study. He is a prolific scientific writer and speaker as well as a frequent presenter at international conferences.

Gary Miller, Ph.D. Gary Miller is Vice Dean of Research Strategy and Innovation and directs the Exposomics Laboratory and Core at Columbia Public Health. Dr. Miller is a leader in the exposome field, which strives to provide a systematic and comprehensive analysis of the non-genetic contributors to health and disease. He was the founding director of the HERCULES Exposome Research Center at Emory University, the first exposome-based research center in the U.S. He authored the first book on the topic, The Exposome: A Primer published by Elsevier. His research focuses on environmental drivers of neurodegeneration. His laboratory uses a variety of methods including transgenic mouse production, immunohistochemistry, neurotransmitter transport assays, high-resolution metabolomics, electrochemistry, and behavioral assays. His work is conducted in several experimental models from cultured neurons and C. elegans to mice and human studies. Dr. Miller proposes that adding the exposome to precision prevention would be a monumental advance. Dr. Miller's own research explores how the total of all exposures throughout an individual's life can impact their resulting health, with a specific focus on neurotoxicology and Parkinson's disease. He has worked with engineers, biochemists, system biologists, and clinicians to develop animal models in mice and C. elegans worms to understand the impact of multiple low-level chemical exposures on brain circuitry.

Mark W. Miller, Ph.D. is a Senior Psychologist Clinician Investigator in the Behavioral Sciences Division of the National Center for PTSD and Co-Chair of the IRB at VA Boston Healthcare System. He is a Professor of Psychiatry in the Boston University School of Medicine and a Lecturer in the Harvard University School of Medicine. His research is focused on the genetics, neurobiology, and assessment of PTSD and he has published over 150 papers on these and related topics. His work has been funded continuously for the past 20 years by the National Institutes of Health and/or the US Department of Veterans Affairs. Dr. Miller is an Associate Editor for the American Psychological Association's flagship publication the *Journal of Abnormal Psychology* and he has a private forensic practice focused on PTSD-related matters in civil and criminal courts.

Michael Snyder, Ph.D. Michael Snyder is the Stanford Ascherman Professor and Chair of Genetics and the Director of the Center of Genomics and Personalized Medicine. Dr. Snyder received his Ph.D. training at the California Institute of Technology and carried out postdoctoral training at Stanford University. He is a leader in the field of functional genomics and proteomics, and one of the major participants of the ENCODE project. His laboratory study was the first to perform a large-scale functional genomics project in any organism, and has launched many technologies in genomics and proteomics. These including the development of proteome chips, high resolution tiling arrays for the entire human genome, methods for global mapping of transcription factor binding sites (ChIP-chip now replaced by ChIP-seq), paired end sequencing for mapping of structural variation in eukaryotes, de novo genome sequencing of genomes using high throughput technologies and RNA-Seq. These technologies have been

used for characterizing genomes, proteomes and regulatory networks. Seminal findings from the Snyder laboratory include the discovery that much more of the human genome is transcribed and contains regulatory information than was previously appreciated, and a high diversity of transcription factor binding occurs both between and within species. He has also combined different state-of—the-art "omics" technologies to perform the first longitudinal detailed integrative personal omics profile (iPOP) of person and used this to assess disease risk and monitor disease states for personalized medicine. He is a cofounder of several biotechnology companies, including Protometrix (now part of Life Technologies), Affomix (now part of Illumina), Excelix, and Personalis, and he presently serves on the board of a number of companies.

VA SENIOR LEADERSHIP

(Note: Executive biography taken from VA Office of Public and Intergovernmental Affairs website)

Dr. Carolyn Clancy, Acting Deputy Secretary of Veterans Affairs. Dr. Carolyn Clancy has served as Acting Deputy Secretary of Veterans Affairs since January 20, 2021. Previously she served as the Assistant Under Secretary for Health for Discovery, Education and Affiliate Networks. She has also served as the Veterans Health Administration (VHA) Executive in Charge. Dr. Clancy also served as the Deputy Under Secretary for Health for Organizational Excellence overseeing VHA's performance, quality, safety, risk management, systems engineering, auditing, oversight, ethics and accreditation programs, as well as ten years as the Director, Agency for Healthcare Research and Quality. In 2015, Dr. Clancy was selected as the Outstanding Federal Executive of the Year by Disabled American Veterans. Dr. Clancy, a general internist and health services researcher, is a graduate of Boston College and the University of Massachusetts Medical School. She holds an academic appointment at George Washington University School of Medicine and serves as Senior Associate Editor, Health Services Research. Dr. Clancy has contributed to eight academic textbooks and authored, co-authored and provided invited commentary in more than 225 scholarly journal articles. She served as member of the National Quality Forum, Board of Directors, as the Chair of the AQA Alliance and served on the Board of Governors, Patient-Centered Outcomes Research Institute. An elected member of the National Academy of Medicine, Dr. Clancy was most recently presented with the 2014 Quality Champion Award, National Committee for Ouality Assurance and was also named as Honorary Fellow, American Academy of Nursing.

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