

**Invitation for Public Comment on the List of Candidates
For the Environmental Protection Agency's
Clean Air Scientific Advisory Committee**

April 9, 2019

The U.S. Environmental Protection Agency (EPA) Science Advisory Board (SAB) Staff Office announced in a Federal Register Notice on February 28, 2019, (84 FR 6783-6784) that it was inviting nominations of experts to be considered for the Administrator's appointment to the Clean Air Scientific Advisory Committee (CASAC). The CASAC provides independent advice, information and recommendations to the EPA Administrator on the scientific and technical aspects of air quality criteria and National Ambient Air Quality Standards (NAAQS). The SAB Staff Office sought nominations of experts to serve on the CASAC with expertise in ecology.

The SAB Staff Office received nominations for the attached 9 candidates based on their expertise and willingness to serve. We hereby invite public comments on the attached List of Candidates under consideration for appointment to the CASAC. Comments should be submitted to Mr. Aaron Yeow, Designated Federal Officer, at yeow.aaron@epa.gov no later than **April 30, 2019**. E-mail is the preferred mode of receipt. Please be advised that public comments are subject to release under the Freedom of Information Act.

Chartered CASAC Membership (Feb 2019)

Fuentes, José D.

Pennsylvania State University

Dr. José D Fuentes is a Professor of Atmospheric science at the Pennsylvania State University. His expertise is in Micrometeorology, Boundary Layer Meteorology, Biometeorology, Atmospheric Turbulence, and Atmospheric Chemistry. He is a member of several professional societies such as the American Meteorological Society, American Geophysical Union, and the American Association for the Advancement of Science. He serves as a member of advisory committees to several Federal Government agencies such as Advisory Committee, Directorate of Geosciences, National Science Foundation Member, Advisory Committee, Office of Polar Programs, National Science Foundation, Observing Facilities Assessment Panel, National Center for Atmospheric Research, Research Associateship Programs Review Panel, National Research Council, the National Academies of Science, Engineering, and Medicine. He is the chair of the Committee on Equal Opportunities in Science and Engineering, National Science Foundation. His current research interests are in Emissions, turbulent transport, and chemistry of plant-emitted hydrocarbons, influences of chemical processing of reactive gases in plant canopies on regional budgets of oxidants and aerosols, formation of oxidants such as ozone and hydroxyl radical and secondary organic aerosols from the reactions of plant-emitted hydrocarbons, influences of atmospheric boundary layer thermodynamics on the chemistry and transport of gaseous and particulate pollutants, influences of atmospheric warming on halogen chemistry in the Arctic boundary layer, and carbon cycling in forested landscapes and coastal ecosystems. To complete his research, Professor Fuentes has received funding from, National Science Foundation, National Oceanic and Atmospheric Administration, NASA, and Department of Energy. Currently, he has no funding from the Environmental Protection Agency. Professor Fuentes presently serves professional societies in many capacities such as Member, leadership Nominating Committee, American Meteorological Society, Editor of Eos, American Geophysical Union, Guest Editor, Global Biogeochemical Cycles, American Geophysical Union, and Associate Editor, Agricultural and Forest Meteorology.

Howarth, Robert W.

Cornell University

Dr. Robert W. Howarth is the David R. Atkinson Professor of Ecology and Environmental Biology at Cornell University and an Adjunct Senior Scientist at the Ecosystems Center of the Marine Biological Laboratory in Woods Hole, MA. He holds a B.A. in Biology from Amherst College and a Ph.D. jointly from Massachusetts Institute of Technology and the Woods Hole Oceanographic Institution. Dr. Howarth's research focuses on the sources and effects of nutrient pollution in coastal marine ecosystems, the interactions of biogeochemical cycles from ecosystem to regional to global scales, and the environmental effects of energy systems (including biofuels and fossil fuels, with an emphasis on water quality and on greenhouse gas emissions). He is Editor-in-Chief of Limnology and Oceanography. He also is the Founding Editor of the journal Biogeochemistry and was Editor-in-Chief of the journal from 1983 to 2004. Dr. Howarth has served on 11 committees and panels of the National Academy of Sciences, including serving as chair for two of these: the Committee on Causes and Consequences of Coastal Marine Eutrophication from 1998-2000, and the Working group on Scientific Studies in Pristine Areas in 1995. He also served on the Panel on Fluxes of Trace Gases from Terrestrial Ecosystems of the Committee on Global Change (1989-1990) and the Panel on Ecological Effects, Committee on Fate and Effects of Oil in the Sea (1981-1984) of the Academy of Sciences. Dr. Howarth co-chaired the International SCOPE Nitrogen Project from 1992 to 2002, directed the North American Nitrogen Center of the International Nitrogen Initiative from 2003-2006, and was chair of the International SCOPE Biofuels Project on environmental effects of biofuels from 2007 to 2012. From 1989-1990, he was the lead consultant for the Attorney General of Alaska on the Exxon Valdez oil spill. Dr. Howarth also served as an expert witness in two federal court trials on pollution from oil and gas drilling. From 2000 to 2002, he directed the Oceans Program at Environmental Defense. Dr. Howarth was the co-lead author of the chapter on responses to nutrient pollution for the Millennium Ecosystem Assessment in 2005 and served as a consultant to the Pew Oceans Commission on nutrient pollution from 2002-2003. From 2006-2008, Dr. Howarth served as a member of the EPA's Science Advisory Board Panel on Hypoxia in the Northern Gulf of Mexico. From 2007 to 2008 he served as President of the Coastal & Estuarine Research Federation. From 2008-2010, Dr. Howarth served on the Board of Directors of the Council of Scientific Society Presidents (CSSP), an umbrella group representing 1.5 million scientists. He co-chaired the CSSP Committee on Energy & Environment in 2009 and 2010. Dr. Howarth also represented the State of New York on the Science and Technical Advisory Committee of the Chesapeake Bay Program from 2005 to 2013. He has authored one textbook (Begon, Howarth and Townsend, 2014, Essentials of Ecology), edited 7 books, and authored more than 200 papers. Over the past several years, Dr. Howarth's laboratory has been funded by grants from the National Science Foundation, the National Oceanic and Atmospheric Administration Coastal Ocean Program, Woods Hole Sea Grant, U.S. Department of Agriculture, Hudson River Foundation, Park Foundation, Packard Foundation, the Wallace Global Fund, and the University of Stockholm.

Jackson, Bill

Retired from United States Forest Service

After 35 years, Mr. Bill Jackson recently retired from the National Forest System of the USDA Forest Service. Beginning in 1992, he served as a program manager for Air Resource Management. Mr. Jackson provided technical advice to land managers and State Air Regulatory Agencies on how air pollution from new and existing sources was affecting forest resources. He relied on peer-reviewed literature, relevant reports, data collected from my field studies, and interpreting modeling results to report on potential impacts from sulfur and nitrogen emissions to scenic visibility, forest soils, and aquatic and terrestrial biota. In addition, Mr. Jackson was an expert within the National Forest System on ground-level ozone impacts to sensitive forest vegetation. His Master's thesis (completed in 2015) included estimating aquatic critical loads for sulfur deposition for National Forests in southern Appalachia. Funding for Forest Service projects came from within the Agency and it allowed for cooperative studies with Forest Service researchers and private consultants. The recent work focused on estimating critical loads of acidity, identifying where in southern Appalachia critical loads are exceeded, identifying what field data resource managers should collect to assess if a catchment has a sufficient amounts of nutrient base cations, and recommend methods for land manager to mitigate lands with base cation depletion. Mr. Jackson participating with EPA and other researchers on how to use recently published critical loads for acidity, including several climate scenarios, for abundant forest tree species that occur in the continental United States. Finally, he continues to participate with the Critical Loads of Atmospheric Deposition Science Committee within the National Atmospheric Deposition Program.

Kendall, Ronald J.

Texas Tech University

Dr. Ronald J. Kendall is Head of the Wildlife Toxicology Laboratory and Professor of Environmental Toxicology in the Department of Environmental Toxicology at Texas Tech University. He is founding Director of The Institute of Environmental and Human Health (TIEHH), a joint venture between Texas Tech University and Texas Tech University Health Sciences Center at Lubbock, Texas. He was also the founding Department Chair of the Department of Environmental Toxicology at Texas Tech. He received his B.S. degree from the University of South Carolina, his M.S. degree from Clemson University, and his Ph.D. from Virginia Polytechnic Institute and State University. He received a United States Environmental Protection Agency (USEPA) post-doctoral traineeship at the Massachusetts Institute of Technology. Dr. Kendall's current research through the Wildlife Toxicology Laboratory at Texas Tech University is dedicated to understanding the decline of wildlife species and evaluating a solution(s). His research has been sponsored the past several years by the Rolling Plains Quail Research Foundation, Park Cities Quail Coalition, and Texas A&M AgriLife Extension Service. Dr. Kendall served on USEPA's FIFRA Science Advisory Panel from June 1995 to December 2002, and was appointed Chairman January 1999 to December 2002. He also served as a member of the Endocrine Disruptor Screening and Testing Advisory Committee, USEPA. He is the previous president of the Society of Environmental Toxicology and Chemistry (SETAC) and has served as an Editor of the scientific journal Environmental Toxicology and Chemistry since 1986. He is a SETAC Fellow. He has received numerous awards, addressed the United Nations Committee on Sustainable Development, and has consulted with many foreign countries on environmental issues. Dr. Kendall was awarded a Fulbright Fellowship in 1991. He has also published extensively, including over 200 publications and technical articles in wildlife toxicology. He is the recipient of a 2013 Texas Environmental Excellence Award given through the Texas Commission on Environmental Quality and Governor Rick Perry.

Landis, Wayne

Western Washington University

Dr. Wayne Landis is Professor and Director, Institute of Environmental Toxicology Huxley College of the Environment, Western Washington University. He holds a B.A. in Biology from Wake Forest University, (1974), an M.A. in Biology from Indiana University (1978), and a Ph.D. in Zoology from Indiana University (1979). Dr. Landis' areas of expertise and research activities include: environmental toxicology, the effects of toxicants on populations, and ecological risk assessment at large spatial and temporal scales. His research contributions also include: co-development of the Community Conditioning Hypothesis, the use of multivariate analysis in microcosm data analysis, creation of the Action at a Distance Hypothesis for landscape toxicology, the application of complex systems theory to risk assessment, and development of the Relative Risk Model and its Bayesian network derivative for multiple stressor and regional-scale risk assessment. He has also developed specialized methods for calculating risk due to invasive species and emergent diseases. Dr. Landis has authored over 150 peer-reviewed publications and government technical reports, participated in over 400 scientific presentations, edited four books, and wrote the textbook, Introduction to Environmental Toxicology, now in its sixth edition. He has consulted for industry; nongovernmental organizations as well as federal (U.S. and Canada), state, provincial, and local governments. Dr. Landis' research has been supported by grants and contracts from federal agencies (U.S. Air Force, Environmental Protection Agency, U.S. Forest Service), industry (DuPont, Amoco, BP and Teckcominco Ltd.), with additional grant support from state, provincial and local governments, industry, NGOs and foundations. Dr. Landis has served on the American Society of Testing and Materials (ASTM) Committee on Publications overseeing a variety of environmentally related symposia proceedings. He currently serves on the editorial boards of the journal Risk Analysis and is Deputy Editor for Integrated Environmental Assessment and Management. He is a former ecological risk area editor for Risk Analysis. Dr. Landis is a member of the Society of Environmental Toxicology and Chemistry (SETAC) and served on the SETAC Board of Directors from 2000-2003. In 2007 he was named a Fellow of the Society for Risk Analysis and in 2016 a Fellow for the Society for Environmental Toxicology and Chemistry. He has completed his second term on the Science Panel of the Puget Sound Partnership, a state of Washington agency charged with the restoration of Puget Sound. More recently he served on the NASEM panel that resulted in a keystone document on the future of synthetic biology and specifically the use of gene drives "Gene Drives on the Horizon: Advancing Science, Navigating Uncertainty, and Aligning Research with Public Values." He has a broad range of experience with stressors across a range of media, especially in an ecological risk assessment context. He is now beginning a term as a member of the Science Advisory Board Chemical Assessment Advisory Committee.

Lombardozi, Danica

National Center for Atmospheric Research

Dr. Danica Lombardozi is a Project Scientist in the Terrestrial Sciences Section of the Climate and Global Dynamics (CGD) Laboratory at the National Center for Atmospheric Research (NCAR). She received her PhD from Cornell University in Ecology and Evolutionary Biology and her BA from Colorado College in Environmental Science. Dr. Lombardozi is a global change ecologist and her work uses a combination of ecological observations and global-scale models to investigate how terrestrial ecosystems are changing in response to human activities, with a major focus on how ground-level ozone impacts terrestrial ecosystems from leaf to global scales. She is co-founder of Boulder's Ozone Gardens and the Ozone Pollution Education Network. She leads the citizen science data collection at ozone bioindicator gardens throughout the network. Dr. Lombardozi is a member of the Ecological Society of America and the American Geophysical Union and has received funding from the National Science Foundation and the US Department of Agriculture for her work.

Peltier, Richard

University of Massachusetts

Dr. Richard Peltier is an Associate Professor in the Department of Environmental Health Sciences at the University of Massachusetts Amherst. He is an expert in air quality assessment and human exposure science and has substantial focus in chemical speciation of aerosol components, source apportionment, and attribution of specific sources to specific health outcomes. He has extensive experience in conducting research projects in remote locations where traditional research approaches are particularly difficult. As an empiricist, his laboratory is centered on high quality data analysis, uncertainty in sparse datasets, and reducing exposure misclassification, and has resulted in nearly 50 publications to date. Effective science communication to engage the public is also of significant interest, and he is involved in production of effective dissemination tools of scientific findings through mass media. Dr. Peltier completed a BS in Biology of the University of Massachusetts, a MPH in Environmental Health Science at Columbia University, and a PhD in Atmospheric Chemistry from the Georgia Institute of Technology. He conducted postgraduate training at the Institute of Environmental Medicine at New York University's Langone School of Medicine. A former Rosenblith awardee from the Health Effects Institute, Dr. Peltier has prior or current funding from the NIH, the Institute for Advanced Sustainability Studies (Germany), World Resources Institute Ross Center for Sustainable Cities, Worldwide Universities Network, Climate and Health Research Network, and the Commonwealth of Massachusetts Department of Energy Resources. Dr. Peltier is a recipient of a US-UK Fulbright award, and is the Deputy Editor in Chief of the Journal of Exposure Science and Environmental Epidemiology.

Singleton, Bernard

Dillard University

Dr. Bernard Singleton is a native of New Orleans. He is an Associate Professor of Biology at Dillard University. He is also a Dillard Alumnus. He earned his DVM, a MS in Microbiology, and a second B.S. in Animal and Poultry Sciences at Tuskegee University. He received his first undergraduate degree at Dillard University. He was commissioned as an Officer in the United States Army and then went on active duty. Dr. Singleton's research in Environmental/Microbiological/Toxicological Health Sciences has contributed to the knowledge, expansion, and the quality of life in his community. Dr. Singleton's research work with his students has definitely encouraged additional research and has gained national attention. His most recent work includes the 2010 B.P. Oil Spill and 2015 Santa Barbara, California Pipeline Oil Spill -Environmental Air Toxicology, and the 2016 Louisiana Multi-Parish Flooding-air quality. He established a record of leadership by sending his students to Graduate, Medical, and professional schools. He established and Directs DU-REU Program -Research in Environmental Health Sciences. He is Assist. Director/Coordinator of the DU-LS-LAMP Research Mentoring Program. He has been a member of the American Society for Microbiology, American Association for the Advancement of Science, American Veterinary Medical Association. All of his research mentees have presented and won awards at local, regional, and national conferences for the last fourteen years. His students have done Graduate and professional studies, along with internships at some of the top Universities, e.g. Stanford University, Boston School of Medical, Tulane University, Georgia State University, University of Colorado at Boulder. He founded the 24 year old Turner/Singleton Scholarship Foundation in which he gives students funding to assist with the high cost of college education. Dr. Singleton has won the mentor of the year and outstanding mentor for research for the last twelve years at Dillard. He has been awarded the University Exemplary Teachers award. He received the National Role Model Award in 2015. Dr. Singleton (PI) has been awarded Federal and State Grants equaling over \$648,000.00. He has been in a collaborative relationships with the University of Colorado Boulder for the last twelve years and recently with the LSU-Louisiana Cancer Research Center. He and his students published in the Environmental Research Journal (16 students involved), the International Journal of Evolution Equations, DU-Journal Research.

von Stackelberg, Katherine

Harvard University

Dr. Katherine von Stackelberg is a Research Scientist at the Harvard Center for Climate, Health and the Global Environment and an affiliate at the Harvard Center for Risk Analysis. She is also co-leader of the Biogeochemistry of Global Contaminants Group at Harvard University and a Principal at NEK Associates LTD. She has served as Leader of the Research Translation Core of a Superfund Research Program grant from 2008 - 2014. Dr. von Stackelberg has 30 years of experience designing and implementing human health and ecological risk assessments, focused on integrated, risk-based modeling approaches to support sustainable environmental decision making. She has published on the use of uncertainty analysis in decision making, bioaccumulation modeling, and use of decision analytic approaches to integrate ecosystem services and risk assessment for more effective decision making. Dr. von Stackelberg is the Area Editor for Ecological Risk Assessment for the journal Risk Analysis and serves on the editorial boards of Human and Ecological Risk Assessment and Risk Analysis, and is a frequent peer reviewer for several additional journals. Dr. von Stackelberg served on the Board of Scientific Counselors at the U.S. EPA for six years and was Chair for the last three. She led the effort to explore the use of decision analytic tools and methods to support environmental decision making within the U.S. EPA Office of Research and Development. She is a member of the Scientific Advisors on Risk Assessment for the European Commission in Brussels, and served on several technical committees of the Interstate Technology and Regulatory Council (ITRC), including complex sites, contaminated sediments, and risk assessment. Dr. von Stackelberg served as Treasurer for the Society for Risk Analysis, and currently serves as Treasurer on the Board of Directors for the Society for Environmental Toxicology and Chemistry (SETAC). She has served on several U.S. EPA funding and grant program peer review panels. She was an invited participant to a recent SETAC Pellston workshop on ecosystem services, and a National Institute for Mathematical and Biological Sciences (NIMBios) workshop on population modeling in ecological risk assessment. Dr. von Stackelberg received an A.B. cum laude from Harvard College, and a Sc.M. and Sc.D. from the Harvard School of Public Health in Environmental Science and Risk Management. During the past two years her research has been funded by: U.S. EPA Science to Achieve Results (STAR) grants (completed Dec. 31, 2018) and the Department of Defense Strategic Environmental Research and Development Program (SERDP) and Environmental Security Technology Certification Program (ESTCP).