

**Invitation for Public Comment on the List of Candidates  
For the Environmental Protection Agency's Science Advisory Board  
Drinking Water Committee  
June 13, 2013**

The U.S. Environmental Protection Agency (EPA) Science Advisory Board (SAB) Staff Office announced in a *Federal Register* Notice on April 12, 2013 (78 FR 21946-21948) that it was inviting nominations of experts to be considered for the Administrator's appointment to the SAB Drinking Water Committee. The SAB Drinking Water Committee provides advice to the EPA Administrator, through the chartered SAB, on the technical aspects of EPA's national drinking water standards program. For the Drinking Water Committee, the SAB Staff office sought nominations of drinking water experts within the disciplines of epidemiology, infectious disease, microbiology, and public health.

The SAB Staff Office identified 11 candidates based on their expertise and willingness to serve. We hereby invite public comments on the attached List of Candidates for consideration by the SAB Staff Office. Comments should be submitted to Mr. Thomas Carpenter, Designated Federal officer no later than July 12, 2013 at [carpenter.thomas@epa.gov](mailto:carpenter.thomas@epa.gov). E-mail is the preferred mode of receipt. Please be advised that public comments are subject to release under the Freedom of Information Act.

## List of Candidates for the EPA's Science Advisory Board Drinking Water Committee

**Barbaree, James M.**

**Auburn University**

Dr. Barbaree has B.S., M.S., and Ph.D. degrees in Zoology, Microbiology (University of Southern Mississippi), and Bacteriology (University of Georgia) respectively. He was a Captain in the U.S. Army Medical Service Corps and spent two years as Assistant Professor at the University of West Florida before transferring his Army commission to the U.S. Public Health Service Commissioned Corps (USPHS) and joining the Centers for Disease Control and Prevention (CDC) in Atlanta, Georgia. There, he initially worked on the proficiency testing of clinical laboratories and the preservation of biologic reagents before working on outbreak investigations. From 1982 to 1991, he was in charge of an epidemic investigations laboratory for bacterial respiratory diseases. His work encompassed research on Legionella and Bordetella and laboratory support for Legionnaires' Disease, Whooping Cough, and Tularemia outbreak investigations. He gained an international reputation for his work on Legionella and was promoted to Captain. After his retirement from the military and the CDC he joined the faculty as an Associate Professor at Auburn University. After earning tenure, he was promoted to Full Professor, and appointed as Associate Director of the Auburn University Detection and Food Safety Center, a multi-disciplinary research group that was designated as one of five pinnacles of excellence in research at Auburn University. The main course that he teaches at AU is Clinical Microbiology. In 1992, he co-chaired an international scientific meeting on Legionella and Legionnaires' Disease. He served as Chair of the Biological Sciences Department (2001-2008), and was awarded the Scharnagel Professorship for Biological Sciences. His honors include receiving the annual CDC Mackel Award twice for best CDC laboratory-epidemiologic investigation, being awarded the USPHS Commendation Medal and Outstanding Service Award, designated as Distinguished Professor by the Auburn University Mortar Board, and receipt of the P.R. Edwards Award (Outstanding Services and Accomplishments in Microbiology), J.C. Feeley Award (Outstanding Service and Accomplishments in Environmental Microbiology and Occupational Health), and Ivan Roth Award (outstanding Contributions and Notable and Significant Service to the Branch) by the Southeastern Branch of the American Society for Microbiology. He is on the editorial board of a microbiology journal publisher, and has approximately one-hundred publications and is a co-author on six patents. His current research programs focus on the development of biosensors (microchips) for the detection of bacterial pathogens in water and food, risk assessment for the transmission of bacterial diseases in cabins of airplanes and rapid detection of Salmonella and Legionella. He serves as a consultant and expert witness in the litigation of civil suits involving bacterial diseases, especially Legionnaires' Disease. Currently, Dr. Barbaree serves on the AU Intercollegiate Activities Committee, has served on the University Budget Committee twice, chaired one international and three domestic scientific meetings, and is the Assoc. Director for the AU Detection and Food Safety Center. Nationally, he has served on approximately four EPA Drinking Water review panels, one NIH review panel, one NSF site review panel for a food safety center, and reviewed proposals for other organizations. He was president of the Southeastern Branch for the American Society for Microbiology twice, and has served on a national standards committee for measuring small amounts of water. He has graduated three Ph.D. students and approximately ten M.S. students.

## **Casteel, Michael J**

### **Spyglass Technologies, Inc.**

Dr. Mike Casteel is the Water Quality Program Manager for Spyglass Technologies, Inc. Mike's professional expertise involves the recovery, detection and control of microbes in water and food. His academic degrees include a B.S. in environmental health and chemistry from Old Dominion University, a M.S. in public health and a Ph.D. in environmental health sciences with a supporting area of study in infectious disease epidemiology from University of North Carolina at Chapel Hill. Dr. Casteel's training includes a postdoctoral research position at UNC and as a guest researcher at the Centers for Disease Control and Prevention. He was employed as a research microbiologist with the San Francisco Public Utilities Commission (SFPUC). His task at the SFPUC was to design and equip biosafety level 2 laboratories and to develop and implement methods for the recovery and molecular detection of pathogens and other microbes in drinking water. His work at the SFPUC also included evaluation of assays for the detection of acutely toxic waterborne chemicals and training SFPUC personnel to perform various analytical procedures. Dr. Casteel has also provides technical consulting, project management, and professional workforce training in water and food safety microbiology for commercial agricultural endeavors in the Americas, Europe, North Africa, and Asia. Dr. Casteel has published papers in the peer reviewed scientific literature and has co-authored textbook chapters on foodborne viruses. He has delivered numerous presentations at scientific conferences in the United States and abroad, and is a member of the American Society for Microbiology and the American Society for Virology. In 2003, he was selected for a fixed-term appointment to the faculty of the Graduate School at the University of North Carolina, Chapel Hill and was a Lecturer in Public Health Microbiology at the University of California, Berkeley.

## **Dempsey, Sue**

### **NE Dept. of Health & Human Services**

Susan Dempsey is a Risk Assessor/Toxicologist with the State of Nebraska Department of Health and Human Services (DHHS). She has served in this role for the past 20 years. As the only State Risk Assessor/Toxicologist, Ms. Dempsey has provided toxicology, risk assessment, and risk communication expertise for federal, state, and city/county agencies. These agencies include the U.S. EPA; the University of Nebraska; the DHHS Drinking Water, Indoor Air, and the Environmental Health Programs; the Superfund, Resource Conservation and Recovery Act (RCRA), Underground Storage Tank, Surface Water and Voluntary Cleanup Programs at the Department of Environmental Quality; as well as local city/county health departments. Ms. Dempsey has authored over 20 human health and ecological risk assessments for the State of Nebraska and the U.S. Environmental Protection Agency, working on such diverse projects as former metal smelters, military sites, pesticide manufacturing sites, and solvent spills. She also reviews risk assessments for the State that are prepared by environmental contractors and the Army Corps of Engineers and calculates removal and remedial levels for contaminants in drinking water, surface water, soil and air. For the past two decades, her work has expanded to include regulation writing and review, implementation of regulations and oversight for the decontamination of former methamphetamine laboratories, issuing fish consumption advisories, and representing the agency at public meetings and in communication with the media to address a broad array of environmental health concerns. Ms. Dempsey was an original co-chair and currently co-chairs the quarterly State Risk Assessors Teleconference. This group has expanded to over 250 members and works to address current risk assessment and toxicology issues for State Risk Assessors, Toxicologists, and Program Managers. In this role she locates speakers, drafts the agenda, and with her co-chair, facilitates/moderates the

discussions and Q&A sessions. Ms. Dempsey received her B.S. in Biological Sciences in and her M.S. in Environmental Sciences (Toxicology emphasis), both from the University of Nebraska. She is currently a member of the Nebraska Environmental Health Association and the Society of Risk Analysis. She holds certificates in methamphetamine decontamination and in hazardous waste operations and emergency response. She has training in radiological emergency response; groundwater sampling and monitoring; site characterization; radiation, human health, and ecological risk assessment; and risk communication.

### **Mena, Kristina D.**

#### **University of Texas Health Science Center at Houston**

Dr. Kristina D. Mena is Associate Professor and Program Head of Environmental and Occupational Health Sciences in the Division of Epidemiology, Human Genetics, and Environmental Sciences at the University of Texas – Houston, School of Public Health (UT-Houston SPH). She earned a BA in Biology at Franklin College (Indiana), a MSPH at the University of South Florida, a PhD in environmental microbiology and epidemiology at The University of Arizona, and completed a Post-Doctoral Fellowship in the Food Animal Health and Management Center at Kansas State University. As Program Head, Dr. Mena oversees all environmental faculty at each of the six campuses of UT-Houston SPH, which is part of the largest medical center in the world. A trained water microbiologist, Dr. Mena is located at the El Paso Regional Campus of UT-Houston SPH where she addresses Hispanic health disparities through epidemiological studies and human health risk assessment. Internationally, she is among a relatively small group of researchers with an expertise in microbial and chemical risk assessment, which evaluates both acute and chronic health outcomes associated with water. Her research has been funded by the National Institutes of Health (NIH), the National Aeronautics and Space Administration (NASA), the Paso del Norte Health Foundation, (the former) American Water Works Association Research Foundation (AwwaRF), and other agencies. Dr. Mena translates laboratory and field data to human health impact, and communicates such findings in ways meaningful among diverse audiences, including those facing health disparities. Her research has identified risk factors associated with infectious disease transmission for a range of populations – from those living in rural, socially marginalized communities to the flight crew at the International Space Station. Her studies incorporate clinical and environmental sampling, as well as survey administration in order to comprehensively characterize human health risk so that mitigation strategies can be developed and implemented. Dr. Mena currently serves as co-Director of the Community Engagement and Dissemination Core of the NIH-funded Hispanic Health Disparities Research Center (HHDRC) with the University of Texas at El Paso (UTEP). In addition, she has been named to serve as co-Director of the newly proposed Community Engagement Core for the renewal application of the NIH-funded Research Centers in Minority Institutions (RCMI) Border Biomedical Research Center.

### **Pinney, Susan**

#### **University of Cincinnati**

Dr. Susan M. Pinney is a Professor in the Department of Environmental Health in the College of Medicine, University of Cincinnati. She holds a B.S. in Nursing from the University of Pennsylvania, an M.S. in Nursing from the University of Michigan, and a Ph.D. in Epidemiology from the University of Cincinnati. Prior to earning a Ph.D. in Epidemiology in 1990, Dr. Pinney earned an M.S. in Nursing in 1972 and practiced nursing until 1981. She has conducted research in the area of environmental epidemiology for the last 25 years. Dr. Pinney's initial studies were in

occupational settings, where job history, work zone location and industrial hygiene monitoring data often provide the information needed to do retrospective exposure information. Over the last 20 years, she has applied the methods used in occupational exposure estimation to persons exposed in a community setting. Dr. Pinney has measured biomarkers of exposure in multiple studies, as tool to estimate internal exposure. She has conducted studies incorporating exposure biomarkers of radiation, uranium, cotinine, phenols, phthalates, phytoestrogens, organochlorides, and most recently, the perfluoroalkyl chemicals (PFCs) including perfluorooctanoate (PFOA), and has developed methods for incorporating environmental biomarker measurements into models for estimating exposure. Dr. Pinney is the environmental epidemiologist for the Cincinnati puberty study of the National Cancer Institute (NCI)/National Institute of Environmental Health Sciences (NIEHS) funded Breast Cancer and Director of the Breast Cancer Registry of Greater Cincinnati. In studies conducted by Dr. Pinney, measurements of PFCs in serum of 353 girls in the Cincinnati cohort and 351 girls in the San Francisco Bay area have been associated with alterations in the timing of pubertal events (unpublished data). She also has been funded by NIEHS to sample environmental biomarkers in persons living in towns upriver from Cincinnati, and for whom the Ohio River is a source of drinking water, processed through various water treatment systems. Since 1990 Dr. Pinney has been the chief epidemiologist for the Fernald Community Cohort (FCC), responsible for questionnaire design and data collection, database design, and creation of a biospecimen repository for almost 10,000 cohort members living close to a uranium refinery. She has led work on uranium and radiation exposure characterization within this cohort, and in 2011 was funded by the U.S. Environmental Protection Agency to conduct an exposure assessment study of PFCs using stored serum of FCC cohort members. Dr. Pinney currently is the Deputy Director of the NIEHS funded Center for Environmental Genetics at the University of Cincinnati. From 1996-2001, she served as a member of the Citizens Advisory Committee on Public Health Service Activities and Research at Department of Energy Sites: Fernald Health Effects Sub-Committee, sponsored by the Centers for Disease Control and Prevention (CDC), Department of Health and Human Services. Prior to that, she served as a member of the Hanford Medical Monitoring Work Group of the Agency for Toxic Substances and Disease Registry (1996-1997). Currently, Dr. Pinney is a permanent member of the Environmental Health Sciences (NIEHS) committee for reviewing applications for center grants and training grants.

### **Schwab, Kellogg J.**

#### **John Hopkins University**

Dr. Kellogg Schwab is a Professor in the Department of Environmental Health Sciences at the Johns Hopkins University Bloomberg School of Public Health and Director of the JHU Global Water Program (GWP). The GWP program integrates Hopkins researchers from public health, engineering, chemistry, materials science, medicine, behavior, policy, and economic disciplines to address the critical nexus of water, food, and energy. The goal of this program is to achieve sustainable, scalable solutions for disparate water needs both internationally and domestically. Schwab's research laboratory focuses on environmental microbiology and engineering with an emphasis on the fate and transport of chemicals, emerging contaminants and pathogenic microorganisms in water, food, and the environment. Dr. Schwab has developed and integrated mobile technology and health applications (mHealth) into research studies in the U.S., Africa, Asia, and South America. Applying advanced molecular diagnostic tools, he has developed and participated in multiple research projects designed to evaluate the public health impacts of improving water access and potable water quality, the effectiveness of point-of-use water treatment,

environmental impacts on the Chesapeake Bay, and the health effects of inadequate management of human and animal waste. Recent international work has focused on evidence-based assessments of household and community level water treatment systems designed to provide potable water to individuals in low-income countries. Dr. Schwab's recent research has been funded by Defense Advanced Research Projects Agency, the Bill and Melinda Gates Foundation, Rockefeller Foundation, McGill University, 3ie, Applied Physics Laboratory, Cascade Design Inc. and The Osprey Foundation. Dr. Schwab obtained both a Masters of Science of Public Health and a Ph.D. from the University of North Carolina at Chapel Hill School of Public Health. He then did a postdoctoral fellowship in the Department of Molecular Virology at Baylor College of Medicine in Houston Texas prior to joining Hopkins in 1999.

#### **Smith, Charlotte D.**

##### **Charlotte Smith & Associates, Inc.**

Charlotte Smith holds a B.S. in Microbiology from the University of Michigan, an M.A. in Community Health from the City University of New York, and a Ph.D. in Environmental Health Sciences from the University of California at Berkeley. Dr. Smith is currently a member of the faculty at UC Berkeley where she teaches Introduction to Environmental Health Sciences and Drinking Water and Health. Her research interests focus on the microbial ecology of waterborne pathogens. She is the faculty sponsor for Global Health and Poverty, a student-run course that prepares undergraduates for a field work in Honduras. Dr. Smith has over 25 years experience solving drinking water quality problems: Before establishing Charlotte Smith & Associates, Inc. in 1994, Dr. Smith was employed by the New York City DEP-Drinking Water Quality Division, and then General Waterworks Corporation (the American subsidiary of Suez Environment), which at that time owned and operated 35 water utilities in 15 states. She was Director of Water Quality for GWC responsible for regulatory compliance for all 35 water companies. Dr. Smith was a member of a committee of the National Academy of Sciences that assessed the risk of post-treatment (distribution system) water contamination. She has several water industry awards including the "2001 Golden Spigot Award" and over 50 publications and presentations.

#### **Smith, Sharon L.**

##### **Minnesota Department of Health**

Ms. Sharon Smith is the West Central Region Supervisor for the Non-community Unit of Drinking Water Protection at the Minnesota Department of Health. In this position she provides supervision and technical direction to staff that administers and enforces the federal Safe Drinking Water Act for 1,800 public water systems. For the past decade her work has focused primarily on drinking water quality. Previously she served as the sole environmental health professional for a county public health agency providing regulation and education in many areas. Since 2011, Ms. Smith has served as the Technical Advisor in Water Pollution Control/ Water Quality for the National Environmental Health Association. In 2012, she represented the association on the Environmental Protection Agency's Arsenic Small Systems Working Group. She holds a B.S. in Microbiology from Iowa State University and has been a Registered Environmental Health Specialist/Registered Sanitarian since 1988.

## **Stewart, Jill R.**

### **University of North Carolina, Chapel Hill**

Dr. Jill Stewart is an Assistant Professor in the Department of Environmental Sciences and Engineering in the Gillings School of Global Public Health at the University of North Carolina. She is also Deputy Director of the UNC Galapagos Science Center and is Chair of Division Q, Environmental and General Applied Microbiology, of the American Society for Microbiology. Dr. Stewart is developing novel techniques to detect and track pathogens in water. She is also interested in evaluating the manner in which nonpoint source pollution and human activities affect water quality. Current research projects include evaluation of water quality associated with (1) land application of waste products and (2) urbanization on a watershed-scale. Research support for Dr. Stewart includes grants awarded by National Science Foundation (Ecology of Infectious Disease Program), Environmental Protection Agency (Advanced Monitoring Program) and National Oceanic and Atmospheric Administration (Oceans and Human Health Initiative). Overall, this research is leading to a greater understanding of how environmental conditions can affect human health, and how humans themselves influence this process. Dr. Stewart received her Bachelor's degree, with high honors, in Environmental Sciences with a minor in Chemistry from the University of Virginia. Her M.S. and Ph.D. degrees in Environmental Sciences and Engineering were awarded by University of North Carolina. Prior to her faculty appointment at UNC, Dr. Stewart served as a Principal Investigator at a NOAA Center for Oceans and Human Health in Charleston, SC. During that time, she held adjunct faculty positions at the Medical University of South Carolina Department of Marine Biomedicine and Environmental Sciences, the University of South Carolina Department of Environmental Health Sciences, and the College of Charleston Programs in Marine Sciences and Environmental Studies.

## **Stout, Janet E.**

### **Special Pathogens Laboratory and University of Pittsburgh**

Dr. Janet E. Stout is Director of Special Pathogens Laboratory and Associate Research Professor in the Department of Civil and Environmental Engineering at the University of Pittsburgh Swanson School of Engineering. She is a leading authority on Legionella, the bacteria that causes Legionnaires' disease and is the author of the Legionella chapters for Hospital Epidemiology and Infection Control (4th edition), Up-To-Date, and the Manual of Clinical Microbiology, Centers for Disease Control Biosafety in Microbiological and Biomedical Laboratories; and has published 125 articles in peer-reviewed scientific and medical journals, 13 book chapters on Legionella, and 90 abstracts. Dr. Stout is credited as the first to demonstrate the link between widespread colonization of a hospital water distribution system and hospital-acquired Legionnaires' disease. This discovery, published in The New England Journal of Medicine (1982) and Lancet (1983), shifted the focus of epidemiology and water treatment from cooling towers to drinking water as the primary source for Legionnaires' disease. Since then, Dr. Stout has continued advancing research in Legionella detection and control. A clinical and environmental microbiologist, her seminal research includes developing the Legionella culture media and methodology that is now the standard today, and discovering the most effective antibiotic to treat Legionnaires' disease. Dr. Stout assisted in developing the first U.S. guideline for Legionella prevention. She advanced the concept of premise water system disinfection for controlling Legionella, evaluated major disinfection technologies used today, and continues to explore new technologies. An invited speaker to both national and international science and medical conferences, including the International Legionella Symposium,

International Conference on Legionella, and the European Working Group for Legionella Infections, and the American Society for Microbiology, Dr. Stout has delivered more than 130 presentations. In addition, Dr. Stout has served on the editorial board of Infection Control and Hospital Epidemiology, and the editorial review boards of International Journal of Environmental Health, Journal of Clinical Microbiology, and Water Research. Dr. Stout serves on the American Society of Heating, Refrigerating, and Air-Conditioning Engineers (ASHRAE) Legionella guideline and standards committees and the Cooling Technology Institute Legionella standards committee. Her contributions have been recognized with the Distinguished Research Award for Legionnaires' Disease from the national American Legion, Water Technologist of the Year from the Association of Water Technologies, the Leadership Award from Urban Innovation 21, and Distinguished Alumni Award Clarion University from Clarion University. Dr. Stout received her bachelor's of science degree in Biology, graduating cum laude, from Clarion University in 1979, and her M.S. and Ph.D. in Infectious Disease Microbiology from the University of Pittsburgh Graduate School of Public Health in 1981 and 1992, respectively. Prior to her appointment at the School of Engineering, Dr. Stout held the position of Research Assistant Professor of Medicine in the Department of Medicine, Division of Infectious Diseases, at the University of Pittsburgh School of Medicine. Dr. Stout's research has been supported by the U.S. Environmental Protection Agency, Veteran's Healthcare Agency Merit Review program, and ASHRAE. Dr. Stout's current research on microbial genomics is supported by Alfred P. Sloan Foundation.

## **Wolfe, Roy**

### **Metropolitan Water District of Southern California**

Dr. Roy Wolfe is Manager of Business Technology at the Metropolitan Water District of Southern California. He previously held positions as Associate Director of Water Quality and Water Quality Laboratory Manager at the same organization. He is currently Chair of the Water Research Foundation, and was the previous Chair of the Foundation's Unsolicited Proposal Review Committee, and the Public Council on Drinking Water Research. Dr. Wolfe has served on numerous committees including the National Academy of Sciences' National Research Council, the Governor's Panel on MTBE in water, and the California Urban Water Agencies Water Quality Committee. He was previously a panelist on Water Reuse/Water Management at the Singapore International Water Week Conference and was a keynote speaker at the Water Services Association of Australia in Canberra, Australia. Dr. Wolfe has published more than 70 scientific articles in the areas of potable water microbiology, chemistry, and treatment. Specific research topics have included pathogen disinfection, nitrification, algal taste and odor production, inorganic contaminant occurrence, biofilms and regrowth, molecular methods for pathogen detection, and efficacy of advanced water treatment technologies. He has been the recipient of two Papers of the Year awards from the Journal of the American Water Works Association and has served as reviewer for the Journal. His works have been published in Environmental Science and Technology, Applied and Environmental Microbiology, Journal of the American Water Works Association, Journal of Eukaryotic Microbiology, Water Research, and Advances in Applied Microbiology. Dr. Wolfe received a B.S. degree in Zoology from San Diego State University in 1980, and a Ph.D. in Environmental Analysis from the University of California Irvine in 1985, where he was a lecturer in Microbial Ecology in the early 1990's. His Ph.D. thesis was entitled "Factors Affecting the Inactivation of Naturally Occurring Bacterial Populations by Inorganic Chloramines."