

**Invitation for Comments on the “Short List” Candidates for the
SAB Particulate Matter (PM) Research Centers Program Review Panel
EPA Science Advisory Board (SAB) Staff Office**

The EPA Science Advisory Board (SAB) Staff Office is forming the **SAB Particulate Matter (PM) Research Centers Program Review Panel**. Nominations for experts to serve on this panel were requested in the *Federal Register* (73 FR 5838) on January 31, 2008. The SAB PM Research Centers Program Review Panel will be charged with providing advice, information and recommendations to the EPA Administrator on the structure and strategic direction for the Agency’s university-based PM research centers program managed by EPA’s Office of Research and Development (ORD) as ORD contemplates funding a third round of air pollution research centers into the future. Information on the SAB, the Panel, and the nomination process appear in the above-referenced *Federal Register* notice, which can be accessed via the SAB Web site at URL: <http://www.epa.gov/fedrgstr/EPA-SAB/2008/January/Day-31/sab1774.htm>. Per this *Federal Register* notice, the SAB Staff Office requested nominees for this Panel who are nationally- and internationally-recognized, non-EPA scientists with extensive research program management expertise and experience related to airborne pollution and the application of research results in reducing air pollution in protection human health and the environment. In addition, the experts should have had direct research experience related to PM.

The SAB Staff Office has identified 18 candidates who have the relevant expertise to serve on the SAB PM Research Centers Review Panel. Brief biographical sketches (“bio-sketches”) on these candidates are provided in the attachment below. *We hereby invite comments from members of the public for relevant information or other documentation that the SAB Staff Office should consider in the selection of this Panel.*

The SAB Staff Office Director makes the final decision about who serves on this *ad hoc* Panel, based on all relevant information. This includes a review of the member’s confidential financial disclosure form (EPA Form 3110-48) and an evaluation of a lack of impartiality. For the EPA SAB Staff Office, a balanced subcommittee or review panel includes candidates who possess the necessary domains of knowledge, the relevant scientific perspectives (which, among other factors, can be influenced by work history and affiliation), and the collective breadth of experience to adequately address the charge. In establishing the final SAB PM Research Centers Program Review Panel, the SAB Staff Office will consider public comments on the “Short List” of candidates, information provided by the candidates themselves, and background information independently gathered by the SAB Staff Office. Specific criteria to be used for Panel membership include: (a) scientific and/or technical expertise, knowledge, and experience (primary factors); (b) availability and willingness to serve; (c) absence of financial conflicts of interest; (d) absence of an appearance of a lack of impartiality; and (e) skills working in committees, subcommittees and advisory panels; and, for the Panel as a whole, (f) diversity of, and balance among, scientific expertise, viewpoints, *etc.*

Please e-mail your comments no later than **May 2, 2008** to Mr. Fred Butterfield, Designated Federal Officer (DFO) for this Panel, at: butterfield.fred@epa.gov.

Attachment

Attachment: SAB PM Research Centers Program Review Panel "Short List" Candidate Biosketches

SAB Particulate Matter Research Centers Program Review Panel "Short List" Candidates

Allen, David T.

University of Texas

Dr. David Allen is the Gertz Professor of Chemical Engineering and the Director of the Center for Energy and Environmental Resources at the University of Texas at Austin. His research interests lie in environmental reaction engineering, particularly issues related to air quality and pollution prevention. He is the author of four books and over 125 papers in these areas. The quality of his research has been recognized by the National Science Foundation (through the Presidential Young Investigator Award), the AT&T Foundation (through an Industrial Ecology Fellowship) and the American Institute of Chemical Engineers (through the Cecil Award for contributions to environmental engineering). Dr. Allen was a lead investigator in one of the largest and most successful air quality studies ever undertaken: the Texas Air Quality Study. His current research is focused on using the results from that study to provide a sound scientific basis for air quality management in Texas. In addition, Dr. Allen is actively involved in developing Green Engineering educational materials for the chemical engineering curriculum. His most recent effort is a textbook on design of chemical processes and products, jointly developed with the U.S. EPA. Dr. Allen received his B.S. degree in Chemical Engineering, with distinction, from Cornell University in 1979. His M.S. and Ph.D. degrees in Chemical Engineering were awarded by the California Institute of Technology in 1981 and 1983. He has held visiting faculty appointments at the California Institute of Technology, the University of California, Santa Barbara, and the Department of Energy. Dr. Allen has received recent grant or contract funding from Federal, state and local governments, including EPA.

Buser, Michael

USDA Southern Plains Area Cropping Systems Research Laboratory

Dr. Michael D. Buser currently serves as a Category I Scientist for the USDA, Agricultural Research Service, Southern Plains Area's Cropping Systems Research Laboratories, Cotton Production and Processing Research Unit in Lubbock, TX. He also serves as the Lead Scientist of CRIS Project # 6208-41530-001-00, "Air Quality Issues Related to Agricultural Operations and Processes." Dr. Buser is rapidly emerging as one of the foremost experts on agricultural particulate matter. Since the establishment of the air quality project in Lubbock, TX in 2005, Dr. Buser has constructed one of the top air quality laboratories and mobile sampling units in the country for particulate matter. The research program developed by Dr. Buser has been described by some as the top particulate matter program within ARS. Within this program, he coordinates, participates, and evaluates research focused on: evaluating and developing tools and methods for determining particulate matter emissions from agricultural sources; determining the particulate matter emissions emitted from various agricultural sources; designing, and developing, and evaluating methods of reducing particulate matter emissions from agricultural sources. Dr. Buser's research has resulted in over 60 publications. In addition, his work has been discussed in over 50 newspaper and trade magazine articles. Dr. Buser is active in many professional associations. He currently serves as chairman for the American Society of Agricultural and Biological Engineer's Environmental Air Quality committee, vice-chairman for the Environmental Coordinating Committee, and past chairman for the Cotton Engineering committee. Further, Dr. Buser serves in an advisory role for many agricultural industries. Education: Texas A&M University, College Station, TX (Graduated in 2004), Ph.D. in Biological and Agricultural Engineering (Emphasis: Air Pollution Engineering); Oklahoma State University Stillwater, OK (Graduated in 1997), M.S. in Biosystems Engineering (Emphasis: Instrumentation and Controls); Oklahoma State University, Stillwater, OK (Graduated in 1995), N.S. Biosystems Engineering (Emphasis: Environmental and Natural Resources); Rogers State College, Claremore, OK (Graduated in 1990), Associate of Applied Science in Animal Science. Professional Experience: U.S. Department of Agriculture (1998 – Present), Category I Scientist – Discipline: Engineering; Oklahoma State University Biosystems Engineering Department (1997-1998), Research Engineer. Dr. Buser has received recent grant or contract funding from the Southeastern Cotton Ginners' Association, the Missouri Department of Natural Resources, Magnum Blue Ribbon Feeds, Inc., the University of California at Five Points, the Texas Cotton Ginners Association, the Texas Cotton Ginners Trust, the National Cotton Ginners Association, and CNA Insurance.

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Croes, Bart

California Air Resources Board

Mr. Bart Croes is currently Chief, Research Division, California Air Resources Board and director of the State's health, exposure, atmospheric processes, emission control, and economics research programs for air pollution. This includes responsibility for setting California ambient air quality standards. An atmospheric scientist with a background in air quality simulation modeling and a P.E. in Chemical Engineering (California), his former responsibilities include California's air-quality measurement network design, data management and data analysis programs, and evaluation of the environmental fate of non-oxygenated and ethanol alternatives to MTBE in gasoline (1998-2000). Mr. Croes was the program manager for the 1997 Southern California Ozone Study (SCOS97-NARSTO), the SCOS97-NARSTO Aerosol Program and Radiation Study, California's Particulate Matter Research Program, the California Acid Deposition Monitoring Program, atmospheric chemistry and modeling research, and California Clean Air Act ozone transport research (1992-1998). Mr. Croes holds advanced degrees with an M.S. (Chemical Engineering) from the University of California at Santa Barbara, 1983, and a B.S. (Chemical Engineering) from the California Institute of Technology, 1979. He is Public Sector Co-Chair for the NARSTO Executive Assembly and former member of the National Research Council Committee on Research Priorities for Airborne Particulate Matter (1998-2004). Mr. Croes has been a peer reviewer for the National Research Council, the U.S. EPA, and numerous journals, and received the Editors' Citation for Excellence in Refereeing from the Journal of Geophysical Research (1997). He has published peer-reviewed articles on air quality simulation modeling, emission inventory evaluation, reactivity-based VOC controls, acid deposition, the weekend effect for ozone and PM, PM data analysis and trends, and diesel particle traps. Mr. Croes does not receive any grant or contract funding.

Fowler, Bruce

U.S. Centers for Disease Control and Prevention (ATSDR/CDC)

Bruce A. Fowler Ph.D., Fellow A.T.S. received a B.S. degree in Fisheries (Marine Biology) from the University of Washington in 1968 and a Ph.D. in Pathology from the University of Oregon Medical School in 1972. He was a staff scientist at the National Institute of Environmental Health Sciences from 1972 until 1987 when he became Director of the University of Maryland System-wide Program in Toxicology and Professor of Pathology at the University of Maryland School of Medicine. In 2001, he became Professor and Director of the Laboratory of Cellular and Molecular Toxicology in the Department of Epidemiology at the University of Maryland School of Medicine. In 2002, he began an IPA assignment as a Senior Research Advisor to the Agency for Toxic Substances and Diseases Registry (ATSDR) in the Division of Toxicology. Dr. Fowler, who is an internationally recognized expert on the toxicology of metals has served on a number of State, National and International Committees in his areas of expertise. These include the Maryland Governor's Council on Toxic Substances (Chair), National Academy of Sciences/National Research Council Committees on Toxicology, Toxicology Information Committee, Committee on Women in Science and Engineering, Measuring Lead in Critical Populations (Chair), Biological Markers of Urinary Toxicology, Committee on the Evaluation of Augmenting Potable Water Supplies with Reclaimed Water, and the Subcommittee on Arsenic in Drinking Water of the Committee on Toxicology. He has also served as a temporary advisor to the World Health Organization (WHO) and the International Agency for Research Against Cancer (IARC). Dr. Fowler has been honored as a Fellow of the Japanese Society for the Promotion of Science (1990), a Fulbright Scholar and Swedish Medical Research Council Visiting Professor at the Karolinska Institute, Stockholm, Sweden (1994-1995) and elected as a Fellow of the Academy of Toxicological Sciences (2000). He currently serves as Chairman of the Scientific Committee on the Toxicology of Metals under the International Commission on Occupational Health (ICOH), as a consultant to the USEPA Science Advisory Board and a member of the Fulbright Scholarship review committee for Scandinavia (1999-, Chair, 2000-2001). He is a member of the AAAS Recruitment and Screening Committee for the Court-Appointed Scientific Experts (CASE) Demonstration Project 2000-Present. Dr. Fowler is the author of over 195 research papers and book chapters dealing with molecular mechanisms of metal toxicity and biomarkers for early detection of metal-induced cell injury. He has been the editor or co-editor of 4 books or monographs on metal toxicology and mechanisms of chemical-induced cell injury. His current research is focused on the toxicology of chemical mixtures involving metals, particularly in relation to semiconductors, lead, cadmium, arsenic mixtures and the role(s) of lead-binding proteins in mediating the toxicity of this ubiquitous metal to the kidney and brain. He serves on the editorial boards of a number of scientific journals in toxicology and environmental health. Dr. Fowler does not receive any grant or contract funding.

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Gordon, Terry

NYU School of Medicine

Dr. Gordon holds the rank of Professor of Environmental Medicine at the NYU School of Medicine. He has a Ph.D. degree in toxicology from MIT, and was appointed to the faculty of the Department of Environmental Medicine in 1989. Dr. Gordon currently is the Director of Pulmonary Toxicology; this research core integrates studies primarily in respiratory toxicology, including respiratory immunotoxicology. Dr. Gordon has served as an ad hoc member of grant review panels and/or site visit teams for NIEHS, NIAID, NCCR, DOD, Bureau of Mines, and the U.S. EPA. He currently serves as Chair of the ACGIH Threshold Limit Value committee, a volunteer organization that publishes occupational exposure levels that are used as workplace safety guidelines throughout the world. Dr. Gordon is an active member of the Society of Toxicology (SOT), and has served on the Program Committee (2002-2005), the Placement Service (1998-2001), and as President of its Inhalation Specialty Section during 2002-2003. He has served as a consultant/author to the U.S. EPA on issues of pulmonary toxicology related to the development of various documents, including the Criteria Document on Particulate Matter. Dr. Gordon's broad research interest is in inhalation toxicology. The major focus of his research lab is the identification and understanding of the role of genetic host factors in the pathogenesis of the adverse pulmonary effects produced by inhaled environmental and occupational agents. Because inter-individual responses to inhaled particles and gases varies so greatly in both human subjects and test animals, Dr. Gordon has hypothesized that genetic susceptibility factors play a major role in environmental and occupational lung disease. In collaboration with a number of investigators in the department, his laboratory uses classic murine genetics models, computational genomics, and DNA microarrays to identify genes involved in the acute response as well as in the development of tolerance to repeated exposure to inhaled toxicants. Dr. Gordon also plays a major role in the PM research program at NYU and was among the first researchers to use concentrator technology to study the adverse cardiopulmonary effects of ambient PM. He has also led a large collaborative effort amongst the original 5 PM Centers to evaluate the in vitro and in vivo toxicity of size-segregated PM collected in the U.S. and Europe. Dr. Gordon has received recent grant or contract funding from NIEHS, DOE, CDC/NIOSH and EPA.

Greenbaum, Daniel

Health Effects Institute

Dan Greenbaum joined the Health Effects Institute (HEI) as its President and Chief Executive Officer on March 1, 1994. In that role, Greenbaum leads HEI's efforts, supported jointly by U.S. EPA and industry, with additional funding from U.S. DOE, Federal Highway Administration, U.S. AID, the Asian Development Bank, and foundations, to provide public and private decision makers with high quality, impartial, relevant and credible science about the health effects of air pollution to inform air quality decisions in the developed and developing world. Greenbaum has focused HEI's efforts on providing timely and critical research and reanalysis on particulate matter (PM), air toxics, diesel exhaust and alternative technologies and fuels. Greenbaum currently serves on the U.S. National Research Council Committee on Valuing the Impacts of Ozone Air Pollution on Mortality. He has been a member of the NRC Board of Environmental Studies and Toxicology and vice chair of its Committee for Air Quality Management in the United States. Greenbaum also chaired the EPA Blue Ribbon Panel on Oxygenates in Gasoline which issued the report Achieving Clean Air and Clean Water and EPA's Clean Diesel Independent Review Panel, which reviewed technology progress in implementing the 2007 Highway Diesel Rule. He is also a member of the Board of Directors of the Environmental Law Institute. Mr. Greenbaum has received recent grant or contract funding from EPA, the motor vehicle industry, and the Hewlett Foundation.

Kinney, Patrick

Columbia University

Dr. Patrick Kinney is an Associate Professor of Public Health at the Department of Environmental Health Sciences at Columbia's Mailman School of Public Health. He holds a Sc.D. in Environmental Health Sciences/Air Pollution Control and Physiology from the Harvard School of Public Health (1986), where his thesis work involved analyzing the acute effects of ozone and fine particles on lung function in children enrolled in the Harvard Six Cities Study. Dr. Kinney teaches and carries out research in air pollution epidemiology, with a strong interest in transportation-related pollutants and asthma. His recent research has focused on characterizing levels and determinants of indoor, outdoor, and personal exposures to air pollution in the underprivileged neighborhoods of New York City, including studies of indoor allergens, diesel vehicle emissions, volatile organic compounds (VOCs), polycyclic aromatic hydrocarbons (PAHs), and other air toxins. Dr. Kinney has carried out numerous studies examining the human health effects of air pollution, including studies of the effects of ozone and/or particulate matter on lung health and on daily mortality in large cities. His recent work has included assessments of potential health effects of climate change, and he has established a new research program at Columbia to develop, test, and apply an integrated modeling system for assessing human health impacts of climate change, focusing on heat stress and air quality impacts. Dr. Kinney has been a contributing author of the epidemiology sections of EPA's ozone and particulate matter air quality criteria documents. In addition, he is a member of the National Academy of Science panels on Health Benefits Analysis and on Asthma and Indoor Air Pollution. Dr. Kinney has received recent grant or contract funding from NIEHS, NOAA and EPA.

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Kleeberger, Steven

National Institutes of Health

Dr. Steven Kleeberger received his A.B. degree in zoology from Miami University, his M.A. in ecology from Northern Michigan University, and a Ph.D. in ecology from Kent State University in 1982. He did his postdoctoral research at Johns Hopkins University where he became a full Professor in 2000. He was recruited to the National Institute of Environmental Health Sciences (NIEHS) as Chief of the Laboratory of Respiratory Biology in 2001. He also directs the Environmental Genetics research group at NIEHS, and is the PI for the Director's Challenge Program Mechanisms of susceptibility to oxidative stress-induced disease. Dr. Kleeberger has served as a consultant to the World Health Organization (WHO) and U.S. Environmental Protection Agency (U.S. EPA) regarding susceptible sub-populations and airborne pollutants. He has authored over 100 peer-reviewed manuscripts and two dozen book chapters. He is a reviewer for over 20 journals, and he has held a number of editorial positions. He has given over 80 invited lectures in the United States, Europe, Asia, and South America. He has been president of the Inhalation Specialty Section of the Society of Toxicology, and has also served or currently serves on multiple study sections (NIH, VA) and international advisory committees on genetic susceptibility. The overall goal of his research program has been to identify genes that determine susceptibility to environmental lung disease. His lab has developed a number of models of genetic predisposition to inhaled agents including acid-coated particles nitrogen dioxide, ozone, as well as a murine model of genetic susceptibility to hyperoxia. The work has led to the identification of significant susceptibility quantitative trait loci (QTLs), and functional characterization of candidate genes for susceptibility to lung injury induced by environmental pollutants. His laboratory is also focused on gene-environment interaction and the pathogenesis of disease in human populations. His lab is participating in genetic analysis of asthma pathogenesis and susceptibility to coal workers pneumoconiosis. His lab is also directing investigation of the role of innate immunity genes in determination of susceptibility to RSV infection and chronic lung disease in infants, and ARDS in acute lung injury patients. Dr. Kleeberger does not receive any grant or contract funding.

Kleinman, Michael T.

University of California, Irvine

Michael T. Kleinman is a Professor of Community and Environmental Medicine at the University of California, Irvine. He is an inhalation toxicologist and has been studying the health effects of exposures to environmental contaminants found in ambient air for more than 30 years. He holds a MS in Chemistry (Biochemistry) from the Polytechnic Institute of Brooklyn and a Ph.D. in Environmental Health Sciences from New York University. He is a Professor and Co-Director of the Air Pollution Health Effects Laboratory in the Department of Community and Environmental Medicine at University of California, Irvine. Prior to joining the faculty at U.C.I. in 1982, he directed the Aerosol Exposure and Analytical Laboratory at Rancho Los Amigos Hospital in Downey, CA. He has published more than 95 articles in peer-reviewed journals dealing with environmental contaminants and their effects on cardiopulmonary and immunological systems. He has directed more than 50 controlled exposure studies of human volunteers and laboratory animals to ozone and other photochemical oxidants, carbon monoxide, ambient particulate matter and laboratory-generated aerosols containing chemically or biologically reactive metals such as lead, cadmium, iron and manganese. He recently served on two National Academy committees to examine issues in protecting deployed U.S. Forces from the effects of chemical and biological weapons. Dr. Kleinman's current studies focus on neurological and cardiopulmonary effects of inhaled particles, including nanomaterials and ultrafine, fine and coarse ambient particles in humans and laboratory animals. His current studies have demonstrated that inhalation of combustion-generated particles can promote airway allergies and accelerate the development of cardiovascular disease and that these effects may be associated with organic and elemental carbon components of the ultrafine fraction of the ambient aerosol. His studies have also demonstrated that inhalation of ambient particles is associated with persistent inflammation in the brain and that particles associated with manganese can alter dopamine and serotonin levels in the brain and can cause changes in nerve structure during brain development. Dr. Kleinman has previously served on the U.S. EPA Science Advisory Board' Clean Air Scientific Advisory Committee (CASAC) Ozone panel and currently serves as the Chair of the California Air Quality Advisory Committee. Dr. Kleinman has received recent grant or contract funding from EPA, NIEHS, HUD, and California EPA.

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Lambert, George

Robert Wood Johnson Medical School-UMDNJ

Dr. George Lambert is an Associate Professor of Pediatrics and Director of the National Institutes of Health (NIH)/U.S.EPA Center for Childhood Neurotoxicology and Exposure Assessment, and Director of the Pediatric Clinical Research Center at the Robert Wood Johnson Medical School/University of Medicine and Dentistry of New Jersey. He holds a M.D. degree from the University of Illinois and has had post graduate training in: Clinical Research in Neonatology, has been a Pediatric Intern and Resident at the Johns Hopkins Hospital, Baltimore, MD. He was also a Pharmacology Fellow at Children's Hospital of Philadelphia, PA, and a research associate in molecular pharmacology at the NIH. Dr. Lambert is certified by the American Board of Pediatrics, 1979 & 1980; Neonatal/Perinatal Medicine, 1980 and as an Instructor, Neonatal Resuscitation, 1989), UMDNJ-Robert Wood Johnson Medical School and an Adjunct Associate Professor of Pharmacy in the School Pharmacy of Rutgers, The State University of New Jersey. He is also a member of the Cancer Institute of New Jersey, and Director of the Center for Child and Reproductive Environmental Health, Director, NIH/USEPA Center for Childhood Neurotoxicology and Exposure Assessment, and the Director, Pediatric Clinical Research Center, UMDNJ- Robert Wood Johnson Medical School. Dr. Lambert has served as a consulting expert to a number of professional and governmental organizations including: the Neuropharmacology Division of the Federal Drug Administration (FDA), the U.S. Congress, Toxic Substances Control Act Interagency Testing Committee, Department of Energy, Oakridge National Laboratory, Division of Chemical Assessment, Office of Orphan Products Development, FDA; National Institute of Child Health and Human Development's (NICHD) National Neonatal Collaborative Project, and the National Academy of Sciences. He was a Member, Committee on Drugs, American Academy of Pediatrics, (National Committee), Chairman - Human Health Effects Committee of the Joint (U.S. and Canadian) Commission on the Great Lakes and a consultant to the World Health Organization. Dr. Lambert's research has focused on the effects of environmental chemicals on human organ maturation, reproductive function, growth and development, and neuro-behavioral function. Dr. Lambert has received recent grant or contract funding from EPA (via a no-cost extension for Children's Center, a group just funded under an autism grant from the U.S. Army).

Lippmann, Morton

New York University School of Medicine

Dr. Lippmann is a Professor of Environmental Medicine at the New York University (NYU) School of Medicine. He holds a Ph.D. (NYU, 1967) in Environmental Health Science, an S.M. (Harvard University, 1955) in Industrial Hygiene, and a B.Ch.E. (The Cooper Union, 1954) in Chemical Engineering. At NYU, he directs a research program on Human Exposure and Health Effects, and the EPA-supported Particulate Matter Health Effects Research Center. He has been the recipient of numerous awards for his research and contributions in aerosol science and pulmonary physiology, human exposure assessment and dosimetry, chemical transformations in the atmosphere, population studies of exposure-response relationships in occupational and community cohorts, and factors affecting the toxicity of airborne fibers. Much of this research has been focused on specific chemical agents, notably ozone, sulfuric acid, and asbestos. Dr. Lippmann is a past President of the International Society of Exposure Analysis (1994-1995), past Chairman of: the American Conference of Governmental Industrial Hygienists (1982-1983); the EPA Science Advisory Board's Executive Committee (2000-2001); EPA's Advisory Committee on Indoor Air Quality and Total Human Exposure (1987-1993); and EPA's Clean Air Scientific Advisory Committee (1983-1987). He has also chaired and been a member of numerous National Research Council committees, including committees on the airliner cabin environment and the health of passengers and crew, synthetic vitreous fibers, measurement and control of respirable dust in mines, indoor pollutants, toxicity data elements, and in-vivo toxicity testing of complex mixtures. His publications include over 290 research and review papers in the scientific literature and two reference texts on environmental health science. Dr. Lippmann has received recent grant or contract funding from HEI.

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Miller, Frederick J.

Independent Consultant

Fred J. Miller, Ph.D. is currently an independent consultant in dosimetry and inhalation toxicology. From February, 1991 until April, 2005 he was employed in various capacities at the CIIT Centers for Health Research (CIIT) and its predecessor organization, the Chemical Industry Institute of Toxicology, serving most recently as Vice President for Research. Dr. Miller received a B.A. and M.S. in Statistics from the University of Wyoming. In 1968, he began a career as a commissioned officer in the U.S. Public Health Service (PHS). As a mathematical statistician involved with the design and analysis of studies on the effects of air pollutants on animals, Dr. Miller became interested in the use of such studies for assessing human health risks. He was assigned to the U.S. Environmental Protection Agency (EPA) when it was created in 1970. In 1971, he received an EPA long-term training award, which led to his doctoral research on the transport and removal of ozone in the lungs of animals and man. He received a Ph.D. in Statistics from North Carolina State University in 1977. Dr. Miller is interested in developing and implementing research strategies and projects that permit increased utilization of animal toxicological results to evaluate the likelihood of human risk from exposure to inhaled chemicals. His primary research interests include pulmonary toxicology, respiratory tract dosimetry of gases and particles, lung physiology and anatomy, extrapolation modeling, and risk assessment. He is internationally recognized for his research on the dosimetry of reactive gases. Dr. Miller is active in professional societies and consulting on environmental health issues. The author or co-author of more than 150 publications, Dr. Miller received a number of Scientific and Technical Achievement awards from EPA and is the recipient of the PHS' Outstanding Service Medal. Dr. Miller does not currently have any research grants; he is presently consulting with a law firm (FoxKiser) on nasal dosimetry and health issues from drug abusers snorting a drug intended to be given orally (FoxKiser is representing King Pharmaceuticals in this matter).

Parnell, Calvin

Texas A&M University

Calvin B. Parnell, Jr., P.E., is Regents Professor and Director, Center for Agricultural Air Quality Engineering and Science (CAAQES), Department of Biological and Agricultural Engineering (BAEN), Texas A&M University. Education: Ph.D., Environmental Systems Eng., Clemson University, 1970; M.S., Ag. Engineering, Clemson University 1965; B.S., Ag. Engineering, New Mexico State University, 1964; Professional License: Registered Professional Engineer, Texas. From 1964 to 1975, Dr. Parnell served in various positions, including Experience: Graduate Research Assistant, Ag. Engineer; Research Engineer, USDA, ARS, SE Cotton Gin Lab., Clemson, SC; LT and CPT, U.S. Army Corps of Engineers, CERL, Cincinnati, OH/Champaign, IL; Research Engineer, USDA, ARS, Lubbock, TX; Extension Ag. Engineer (Cotton Ginning), TAEX, College Station, Texas. Dr. Parnell's honors and awards include: (1) appointment to the Task Force on Air Quality by the Secretary of Agriculture, 1996, 1998, 2000; (2) selection to the National Academies Committee on "Air Emissions from Animal Feeding Operations", 2002; (3) receipt of the G. B. Gunlogson Countryside Engineering Award, 1999; (4) election to grade of Fellow in ASAE, 1995; and (5) appointment by the Governor of Texas to the Texas Air Control Board, 1989-1993. His professional memberships and organizations include: the American Society of Agricultural Engineers (ASAE); the American Society for Engineering Education (ASEE); the Texas Society of Professional Engineers; Sigma Xi; Alpha Epsilon; the Air and Waste Management Association (A&WMA); and the National Society of Professional Engineers (NSPE). Dr. Parnell's research interests in air quality are in the following areas: (1) accurate measurements of PM10 and PM2.5 from agricultural sources (e.g., cotton gins, grain elevators, feed and oil mills, cattle feed yards, dairies, field operations, agricultural burning and poultry and swine CAFOs); (2) dispersion modeling from low-level point sources (LLPS) and ground-level area sources (GLAS) for prediction of downwind concentrations near the source used for permitting and inventory purposes; (3) development of accurate emission factors for LLPS and GLAS for permitting, modeling and emissions inventories; (4) abatement strategies for reducing emissions; and sound science descriptors of odor intensity measurements ("odor units"). Dr. Parnell's sources of recent contract or grant funding include: the Cotton Foundation; Cotton Incorporated; John Deere; the California Almond Board, USDA's [Cooperative State Research, Education, and Extension Service \(CSREES\)](#); and the Texas Commission on Environmental Quality.

Scheff, Peter

University of Illinois at Chicago

Dr. Peter Scheff is Professor, Environmental and Occupational Health Sciences, University of Illinois at Chicago, IL. Education: Ph.D. Environmental and Occupational Health Sciences, University of Illinois at Chicago, School of Public Health, 1979-1983; M.S., Environmental Health Sciences, University of Illinois at the Medical Center, School of Public Health, 1983; B.A., Grinnell College, Grinnell, Iowa, Music, 1973. Dr. Scheff's areas of expertise include: air quality management, industrial hygiene, environmental modeling, and the health effects of environmental pollutants. He has served on the Board of Directors of the Lake Michigan Section of the Air and Waste Management Association. Dr. Scheff's sources of recent grantor contract funding include: the Illinois Environmental Protection Agency; U.S. EPA; the Illinois Department of Public Health, and NIOSH.

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Shaw, Bryan

Texas Commission on Environmental Quality

Bryan W. Shaw, Ph.D. is a full-time Commissioner who forms the Texas Commission on Environmental Quality. The three full-time commissioners are appointed by the governor to establish overall agency direction and policy, and to make final determinations on contested permitting and enforcement matters. They are appointed for six-year terms with the advice and consent of the Texas Senate. Until November 2007, he was Associate Professor, Biological & Agricultural Engineering Department, and Associate Director of the Center for Agricultural Air Quality Engineering & Science, Texas A&M University. He received his Bachelor of Science and Master of Science degrees in Agricultural Engineering from Texas A&M University and his Ph.D. in Agricultural Engineering from the University of Illinois at Urbana-Champaign. Dr. Shaw teaches and conducts air quality research on topics including evaluation of sampler performance, development of accurate emission factors for feed and grain handling, emissions from cattle feed yards, design of pollution abatement equipment, and fugitive dust emissions from field operations. Dr. Shaw currently serves on the U.S.-EPA Science Advisory Board: Environmental Engineering Task Committee, Integrated Nitrogen Committee, and Risk and Technology Review Committee. He has been appointed to serve a second term on the USDA Agricultural Air Quality Task Force advising the Secretary of Agriculture on air quality issues impacting agriculture. Dr. Shaw recently spent one year working with USDA-NRCS as Special Assistant to the Chief under an Interagency Personnel Agreement. In this role he provided national leadership in the development of policies and programs to address agricultural air quality concerns. Dr. Shaw's sources of recent grant or contract funding include: the Cotton Foundation; Cotton Incorporated; USDA's [Cooperative State Research, Education, and Extension Service \(CSREES\)](#); and USDA's National research Initiative (NRI).

Thurston, George

New York University

Dr. Thurston is Professor at the New York University School of Medicine's Department of Environmental Medicine. He conducts epidemiological research into the human health effects of air pollution. He received his Bachelor of Science in Environmental Engineering from Brown University, and his Masters and Doctorate in Environmental Health Sciences from Harvard University's School of Public Health. Dr. Thurston has published widely in the scientific literature on the assessment of exposures to ambient air pollution and their human health consequences. He has served as the Director of the NYU-NIEHS Community Outreach and Education Program (1995-2004), and as Deputy Director of NYU's EPA Particulate Matter (PM) Health Effects Center (2002-2005). In 1999, Dr. Thurston was honored by the local organization "Orange Environment" for his continuing efforts to promote the translation of environmental science information for the education of the public. As part of his community service outreach, he has appeared on numerous national and international TV shows, including on C-Span, CNN, C-NBC, and NBC to discuss air pollution-related issues such as asthma, the Kuwait War fires, and the World Trade Center disaster. Dr. Thurston has also testified before both the U.S. Senate and the U.S. House of Representatives on multiple occasions regarding the potential human health effects of air pollution in the U.S. In addition, Dr. Thurston has actively participated in multiple professional organizations, including serving as an Associate Editor of the International Society of Exposure Analysis' "Journal of Exposure Analysis and Environmental Epidemiology", and serving as a co-organizer and host of the International Society for Environmental Epidemiology's annual meeting held in New York City during August, 2004. Dr. Thurston's sources of recent grant or contract funding include the Health Effects Institute (HEI) and the California Air Resources Board (CARB).

Wyzga, Ronald

Electric Power Research Institute

Dr. Ronald Wyzga is Technical Executive in the Air Quality Health Effects program area of the Environment Sector. He received an AB degree in mathematics from Harvard College in 1964 and an M.S. degree in statistics from Florida State University in 1966. He also received a Sc.D. degree in biostatistics from Harvard University in 1971. Dr. Wyzga has authored an extensive list of publications on his research. His current research activities focus on understanding the relationship between health effects and air pollution, an area in which he has worked for over 30 years. Dr. Wyzga is particularly interested in the design, conduct, and interpretation of epidemiological studies that examine this relationship. He is also interested in health risk assessment methods. Dr. Wyzga has studied the relationship between health effects and air pollution since he joined EPRI in 1975. In addition, he has worked on methods to attach economic values to air pollution damage and effects. Dr. Wyzga has served on, and has chaired, several committees for the EPA Science Advisory Board and National Academy of Sciences. He has also served on advisory oversight committees for several research programs on the health effects of air pollution. In 1990, Dr. Wyzga was elected a Fellow of the American Statistical Association by his peers. Prior to joining EPRI, he worked at the Organization for Economic Cooperation and Development (OECD) in Paris, where he co-authored a book on economic evaluation of environmental damage. Dr. Wyzga is employed directly by EPRI and receives no income/support from grants or contracts.

Attachment: SAB PM Research Centers Program Review Panel "Short List" Candidate Biosketches

Zielinska, Barbara

Desert Research Institute

Dr. Barbara Zielinska currently holds the position as Research Professor and Director of the Organic Analytical Laboratory at the Division of Atmospheric Sciences of the Desert Research Institute (DRI) in Reno, Nevada. The DRI is an autonomous research division of the University and Community College System of Nevada (UCCSN). DRI was created in 1959 by a special act of the Nevada State Legislature. Under the act and subsequent actions of the University Board of Regents, DRI is charged with conducting basic and applied research in environmental science. Dr. Zielinska has been active in the air pollution field for more than 20 years and specializes in the analysis of organic compounds in ambient air and in emission sources. Her list of publications includes over 80 papers concerning the analysis of ambient and source samples for polycyclic organic hydrocarbons (PAH), nitro-PAH and other toxic air pollutants. Dr. Zielinska received her M.Sc. degree from the Lodz University of Technology, Poland, and her Ph.D. degree from the Polish Academy of Sciences, both in Chemistry. Dr. Zielinska's sources of recent grant or contract funding include the Health Effects Institute (HEI), the National Renewable Energy Laboratory (NREL), CRC, and the American Petroleum Institute (API).