

QEEN Workshop: Concurrent Session Bios

July 7, 2015

(Please note that speaker bios are listed by their first appearance on the agenda.)

106A

Bruce Lippy

Bruce Lippy has a PhD in policy from the University of Maryland, with coursework concentrated in regulatory economics and quantitative measures of management. He is a Certified Industrial Hygienist and Certified Safety Professional and was recently designated a Fellow of the American Industrial Hygiene Association. He serves on the AIHA's nanotechnology and ethics committees. He has participated in webinars on nanotechnology for the National Safety Council with Dr. Chuck Geraci from NIOSH and for NIEHS with Dr. Andrew Maynard of the University of Michigan. In 2011, he completed a guidance document with Kristen Kulinowski of Rice University on training workers about the risks of exposures to engineered nanomaterials. Also in 2011, Drs. Kulinowski and Lippy developed, with OSHA funding, an 8-hour awareness course on protecting nanotechnology workers. The course is available for free on the GoodNanoGuide where the modules have been downloaded over 35,000 times. Drs. Kulinowski and Lippy also wrote the nanotechnology chapter for the recently published third edition of the AIHA's, The Occupational Environment: Its Evaluation, Control, and Management. Dr. Lippy served on a review panel for the NIOSH Nanotechnology Strategic Plan FY 2013-2016. He heads the CPWR nanotechnology team and recently presented their industrial hygiene findings at the SENN2015 conference in Helsinki, Finland.

Stephan Froggett

Dr. Steve Froggett is the founder and owner of Froggett & Associates, LLC based in Seattle WA. His work focuses on enabling multi-disciplinary stakeholders to collaborate to generate sound and neutral, empirical data relevant to informing risk policy makers. In the first five years, Froggett and Associates contributed to multiple environmental assessments considering potential impacts from planting new crop seeds derived through genetic engineering. In close collaboration with the International Life Science Institute's Research Foundation, they framed and launched multiple research programs addressing health and safety data gaps related to engineered nanomaterials used in a broad range of durable consumer products and food packaging. The third focus area of the group is broadly on water quality; from development to

publishing globally applicable guidelines for sustainable, safe water reuse to investigating the impacts of environmental contaminants and multi-drug resistant bacterial infections.

Prior to forming Froggett & Associates, LLC, Dr. Froggett spent five years in South Asia and East Africa as an associate professor of physiology at multiple medical schools and as a program manager establishing a pediatric HIV research center. Subsequently, he returned from overseas implementation work to advise policy makers first as an American Association for the Advancement of Science (AAAS) diplomacy fellow, then as a science advisor on emerging technologies in crop protection and production, representing the U.S. Department of Agriculture at White House-level policy discussions and supporting trade negotiations.

Dhimiter Bello

Dhimiter Bello, Sc.D., MSc, is an Associate Professor in the Department of Work Environment at the University of Massachusetts, Lowell, USA, and a visiting scientist at the Harvard School of Public Health. His research focuses broadly on exposure biology, an interdisciplinary approach that investigates quantitative and temporal relationships between environmental exposures and disease in humans. Exposure biology integrates critical information on the biological mechanisms of environmental exposures from diverse disciplines that study the exposure-disease continuum, including exposure sciences, molecular biology, pharmacokinetics, and mechanistic toxicology. He is actively researching two classes of chemical agents - engineered nanomaterials and reacting chemicals, such as isocyanates and epoxies - especially in high-risk industries.

Bello's current research interests include: i) Nanotoxicology and NanoEHS; ii) Occupational skin and inhalation toxicology, particularly around reacting chemical systems, such as isocyanates and epoxies; iii) Quantitative exposure assessment for epidemiology and intervention research, primarily in high risk industries; iv) Developing methods, platforms, and tools suitable for comprehensive physicochemical and toxicological characterization of nanoparticle exposures from nano-enabled products and other emerging technologies; and v) Investigating the utility of more biologically relevant exposure and dose metrics for inhaled nanoparticles, including surface activity and oxidative stress.

He serves as associate editor for *Nanotoxicology* and the *Annals of Occupational Hygiene*. In addition, he serves in several national and international scientific committees, including ISO. He has published over 50 peer-reviewed articles and three book chapters.

Matthew Dahm

Lt. Dahm graduated with a Masters of Public Health in Environmental and Occupational Health

from Saint Louis University and currently is a Research Industrial Hygienist in the Industrywide Studies Branch at NIOSH. Since joining NIOSH in 2009, Lt. Dahm has focused primarily on the exposure assessment methods for carbon nanotubes and nanofibers. He is currently leading the NIOSH Industrywide Study field efforts to collect representative workplace exposures to these materials and is also the co-principal investigator for a recently initiated epidemiologic study examining workers exposed to carbon nanotubes within the US.

Gary Casuccio

Mr. Gary Casuccio is a Senior Scientist at RJ Lee Group, Inc., where he focuses on environmental particulate analysis, air quality, and nanomaterials characterization. Mr. Casuccio was involved a multi-phase study on unbound nanoparticles (UNP), conducted in collaboration with Lawrence Berkeley National Laboratory (LBNL), to evaluate worker exposure and potential environmental release of UNP. He has also developed techniques for characterization of particulate matter using CCSEM (Computer Controlled Scanning Electron Microscopy), was project leader for the development of sampling and analysis protocols for the Department of Energy Continuous Fiber Composite Program, and is an advisor to the U.S. Environmental Protection Agency (USEPA) on the analysis of particulate matter using SEM and CCSEM techniques. Mr. Casuccio has published in peer-reviewed literature and has testified in federal courts.

106B

Marina Vance

Dr. Marina Vance is a Research Scientist at Virginia Tech and the Associate Director of Virginia Tech's Center for Sustainable Nanotechnology (VTSuN). She received her PhD in Civil and Environmental Engineering from Virginia Tech in 2012. Her research interests encompass the environmental implications and applications of nanotechnology, especially dealing with people's exposure to air pollutants, nanomaterials, and other emerging contaminants.

104

Keana Scott

Keana Scott is a Physical Scientist in the Materials Measurement Science Division at the National Institute of Standards and Technology (NIST). Dr. Scott earned her BS in Engineering and Applied Sciences from the California Institute of Technology, PhD in Mechanical Engineering from the University of Pittsburgh, and MS in Biotechnology from the Johns Hopkins University. After developing automation engineering solutions for Celera Genomics during their collaboration with NIH on the Human Genome Project, Dr. Scott went on to lead a group of

scientists involved in computational chemistry and proteomics, while also contributing to informatics and genomics projects within both Celera and Applied Biosystems. Dr. Scott joined NIST in 2006 to work on multi-modal 3D imaging technique development and microanalysis of complex materials using electron and ion beams and served as a group leader of the Microanalysis Science Group from 2008 to 2012. Dr. Scott's current research efforts are on the 2D and 3D microanalysis of nanoscale features in macro-scale matrices and the development of characterization methods for assessing nanomaterial release from nanocomposite materials.

Jo Anne Shatkin

Jo Anne Shatkin, PhD is President of Vireo Advisors, LLC based in Boston, Massachusetts, USA. She develops state of the art analyses on behalf of public and private organizations to inform safer and more sustainable technology innovation. Dr. Shatkin is an environmental health scientist and recognized expert in environmental and emerging science policy, health risk assessment, and environmental aspects of nanotechnology.

Since 2005, Dr. Shatkin has provided leadership on the responsible development of nanotechnology. She served as an expert to several international committees on nanotechnology safety. Her book, *Nanotechnology Health and Environmental Risks Second Edition* (CRC Press 2012) describes the use of life cycle thinking in risk analysis for nanomaterials. Dr. Shatkin serves on the boards of the Center for Environmental Policy at American University and the University of Maine Forest Bioproducts Research Institute, and served as Councilor of the Society for Risk Analysis, where she also organized cooperative efforts with the OECD Working Party on Manufactured Nanomaterials. She is leading efforts to develop EHS standards for nanocellulose, a bio-based nanomaterial through TAPPI. Dr. Shatkin received an Individually Designed PhD in Environmental Health Science and Policy and MA in Risk Management and Technology Assessment from Clark University, Worcester, Massachusetts. Her Bachelor of Science degree is from Worcester Polytechnic University in Molecular Biology and Biotechnology.

Gediminas Mainelis

Dr. Gediminas "Gedi" Mainelis is Professor of Environmental Sciences at Rutgers, the State University of New Jersey. He has undergraduate degree in Physics from Vilnius University, Lithuania, and PhD in Environmental Health from the University of Cincinnati, Ohio. Dr. Mainelis's research focuses on various aspects of health-related aerosols and exposure assessment. Over the past years, Dr. Mainelis's group has been actively investigating consumer exposures to nanoparticles due to use of nanotechnology-enabled consumer products. His research has been presented in more than 60 peer-reviewed publications and numerous conference abstracts and proceedings. Dr. Mainelis is a recipient of CDC/NIOSH Career Award,

Twinning Fellowship from the National Academy of Sciences, and Research Excellence Award from the School of Environmental and Biological Sciences of Rutgers University. He has served twice as Chair of the Health-Related Aerosols Working Group of the American Association for Aerosol Research.

Li-Piin Sung

Li-Piin Sung is a research physicist in the Polymeric Materials Group (PMG) of the Materials and Structural Systems Division (MSSD) of the Engineering Laboratory (EL) at the National Institute of Standards and Technology (NIST). Dr. Sung joined the Polymeric Materials Group as a contractor in October 1999, and was converted as a full-time Research Physicist in November 2001. She is responsible for leading, planning, and implementing research on optical properties and microstructure characterization (including filler dispersion) of polymer coatings and composites. Dr. Sung's main interests are in understanding the interactions between fillers and polymeric matrix, and in investigating the impact of filler dispersion on optical, mechanical, and short-term and long-term performance properties. Since 2008, she has been the Director and project leader of NIST/Industry Polymer Surface and Interfaces (PSI) consortium. In this capability, she has taken the leadership and initiative in developing test methods for characterizing scratch resistance using scattering measurement science to articulated industry needs. Dr. Sung's current research efforts are on developing metrologies for surface damage and durability study of nanocomposites, and for assessment of nanoparticles release under environmental stresses (UV radiation, thermal, moisture, mechanical stresses).

Prior to joining PMG/EL, Dr. Sung completed her PhD in physics from UCSB, and joined NIST as a Guest Researcher in the Polymers Division in 1993. Thereafter, she worked as an instrumental scientist in the neutron reflectivity facility at the NIST Center for Neutron Research, and as a researcher in the Optical Technology Division, conducting surface and interfacial characterization using optical scattering metrology.

106C

Margaret Kraeling

Margaret E.K. Kraeling, MS is a Research Biologist for the FDA's Center for Food Safety and Applied Nutrition (CFSAN), in the Office of Applied Research and Safety Assessment, Division of Toxicology. Ms. Kraeling received her Bachelor of Science degree in Biological Sciences from Northern Kentucky University and a Master of Science degree in Pharmaceutical Sciences from the University of Cincinnati and joined FDA/CFSAN in 1990. Ms. Kraeling is a principal investigator and study director with CFSAN, and conducts in vitro and in vivo skin absorption and metabolism studies of mostly cosmetic ingredients and contaminants and evaluates the exposure associated with the use of these ingredients in personal care and consumer products.

Her most current research is evaluating the penetration of various nanoparticles (nanosomes, dendrimers and silver nanoparticles) and biologically active anti-aging peptides in animal and human skin. Along with her research duties, Ms. Kraeling served as a reviewer for the Office of Food Additive Safety, evaluating the toxicology and exposure associated with the use of the color additive carbon black (D&C Black No. 2).

Ms. Kraeling is a reviewer for the Journal of Regulatory Science, Nanomedicine: Nanotechnology, Biology, and Medicine, and Cutaneous and Ocular Toxicology. She has authored or co-authored 17 research papers in peer reviewed journals, 10 book chapters and over 45 abstracts presented at national and international conferences. She is a member of the Society of Toxicology (SOT), Councilor of the Dermal Toxicology Specialty Section of SOT, and is Past President for the Association of Government Toxicologists.

Jay Ansell

Dr. Ansell joined the Personal Care Products Council (formerly CTFA) in May 2006 and is Vice President-Cosmetic Programs where he is responsible for providing technical support for the Council staff and various committees and task forces addressing the science and regulation of personal care products.

Dr. Ansell came to the Council from Yves Rocher, a France-based personal care products company, where he served as Director of North American Product Safety and Regulatory Affairs. He previously has been Vice President of Product Safety and Regulatory Affairs at two international specialty chemical companies.

Dr. Ansell has been an invited speaker on topics including safety and risk assessment; he was founder and president of the Council for Advance Agricultural Formulations, chaired both the Alkylphenol Ethoxylates and NMP Producers groups, leads the Council's nanotechnology activities, currently serves as Chairman of the U.S. Technical Advisory Group to ISO TC 217 – Cosmetics, and is past President of the International Society of Regulatory Toxicology and Pharmacology.

Trained as a chemist, Dr. Ansell received his BA from Gettysburg College, Gettysburg, Pennsylvania, and an MS from Marshall University in Huntington, West Virginia. He completed his graduate studies at the State University of New York-Binghamton where he was granted a PhD for his work on novel synthetic routes to bioactive materials and was first certified as a Diplomat of the American Board of Toxicology in 1986.

Roland Franz

Dr. Roland Franz is Head of the Department 'Product Safety and Chemical Analysis' of the Fraunhofer Institute for Process Engineering and Packaging IVV in Freising, Germany. He made his PhD in Organic Chemistry at the University of Würzburg, Germany, followed by a post-doc research in experimental toxicology in the area of carcinogenic primary lesions. Main focus of his scientific work is on interactions between packaging and food. He was and is involved in numerous national and international research activities as well as expert groups in support of legislation and safety of food contact articles. Most recent research activities were within the EU project 'FACET' where the objective was to develop and substantiate a migration model which enables calculation of migration into foodstuffs in support of consumer exposure estimations. Another actual research area was and is on the question whether or not nanoparticles can migrate from food contact materials. He is (co-)author of more than 140 scientific publications. Member and chair of the 'Committee for Consumer Products' of the German Federal Institute for Risk Assessment, BfR, in Berlin. Dr. Franz is a member of the EFSA Panel on Contact Materials, Enzymes and Flavourings (CEF), a member of the International Editorial Board of the Journal *Food Additives and Contaminants* and assistant Editor of the Journal *Food Packaging and Shelf Life*.

Linda Katz

Dr. Linda Katz has held a variety of positions at the FDA. Since 2002 she has been the Director for the Office of Cosmetics and Colors (OCAC), has served as Chief Medical Officer in FDA's Center for Food Safety and Applied Nutrition (CFSAN) since 2007, and was the Acting Deputy Director for Operations at CFSAN from September 2012 through March 2013. In these positions, she establishes the priorities and missions of OCAC, focusing on cosmetic safety, compliance, certification of color additives research, such as nanotechnology, phototoxicity and percutaneous absorption, and addressing safety and medical concerns for CFSAN regulated products. She has had numerous presentations and publications, including those related to nanotechnology from a cosmetic and food perspective, as well as other specific cosmetic and food issues. Prior to assuming leadership of OCAC, she began her FDA career in the Center for Drug Evaluation and Research (CDER), holding positions of Deputy Director for the Division of Over-the-Counter Drug Products, Deputy Director for the Division of Dermatologic and Dental Drug Products, and Team Leader and Acting Director for the Pilot Drug Evaluation Staff. Dr. Katz received her BA in biology from the University of Pennsylvania, her MD from the University of Connecticut and a M.P.H. in epidemiology from the University of Michigan School of Public Health. She completed her internship and residency in Internal Medicine, and fellowship in Rheumatology, at the George Washington University Medical Center, in Washington, D.C. She is a Fellow in the American College of Physicians and a Fellow Member of the American College of Rheumatology and is boarded in both Internal Medicine and Rheumatology. In addition, Dr. Katz maintains an academic appointment, as Associate Clinical Professor of Medicine, at The

Uniformed Services University of the Health Sciences. In her latter position she continues to teach and sees patients at Walter Reed National Military Medical Center.

106D

Elijah Petersen

Elijah Petersen graduated from Case Western Reserve University in 2003 with BS and MS degrees in Civil Engineering and a BA in Psychology. He then received a PhD at the University of Michigan studying the ecological uptake and elimination behaviors of carbon nanotubes using earthworms (*Eisenia foetida*) and sediment-dwelling oligochaetes (*Lumbriculus variegatus*). He then received a Fulbright scholarship to do postdoctoral research at the University of Joensuu in Finland where he studied the uptake and elimination of carbon nanotubes and fullerenes in *Daphnia magna*. Dr. Petersen joined NIST as a National Research Council postdoctoral research fellow from 2009-2010 and then became a staff research scientist in 2010.

Jeff Steevens

Dr. Jeffery A. Steevens is the Senior Scientist (ST) in Biotechnology for the U.S. Army at the U.S. Army Engineer Research and Development Center in Vicksburg, MS. He obtained his bachelor's degree in biochemistry from the University of Missouri at Columbia in 1994 and his doctoral degree in pharmacology and toxicology from the University of Mississippi in 1999. His research activities include risk assessment and management of contaminated sediments and bioavailability and biological effects of military-relevant materials (e.g., explosives, nanomaterials, metals). One of his current responsibilities is leading a multi-disciplinary ERDC research cluster focusing on the fate, transport, and toxicology of advanced materials in Army technologies.

In addition to his research on nanomaterials, he has been a technical advisor to the World Bank on international projects and to the EPA Superfund Program, and provides expertise on many contaminated sediments projects throughout the U.S. Dr. Steevens has actively published the results of his work and has over 60 peer-reviewed journal publications and 20 book chapters and technical reports. He is an active member of several national organizations including the Society of Environmental Toxicology and Chemistry (SETAC), the American Chemical Society (ACS), the American Association for the Advancement of Science (AAAS), and the Society of Toxicology. Dr. Steevens is a Technical Advisor for the nanomaterials work group of the Chemical and Material Risk Management Directorate (CMRMD), Office of the Deputy Under Secretary of Defense. Currently he is a member of the Nanotechnology Environmental and Health Implications (NEHI) Working Group of the Nanoscale Science, Engineering, and Technology (NSET) Subcommittee.

Brian Mader

Brian Mader earned a BS in Chemistry from the University of Minnesota in 1993 and an MA degree from the Department of Civil Engineering at the University of Minnesota in 1996. Brian's MA research advisor was Professor Steven J. Eisenreich and his research involved the study of the fate of organic chemicals in the environment. Specifically Dr. Mader developed a high performance liquid chromatography (HPLC) method to measure the aqueous/solid partition coefficients of polycyclic aromatic hydrocarbons (PAHs) and chlorinated aromatic hydrocarbons. Dr. Mader completed his PhD in Environmental Science and Engineering in 2000 at the Oregon Graduate Institute in Beaverton, Oregon under the direction of Professor James F. Pankow. His doctoral dissertation focused on the physical/chemical processes that govern the atmospheric fate and transport of semi-volatile compounds (SOCs) such as dioxins and PAHs. Dr. Mader developed new analytical methods for the measurement of the gas/particle partition coefficients of dioxins and PAHs. Using field and laboratory data he developed models of the atmospheric distribution of dioxins and PAHs, and in particular probed the influence of aerosol carbon content on the atmospheric distribution of SOCs.

From 2000 until 2002 Dr. Mader conducted research as a postdoctoral scholar at the California Institute of Technology in Pasadena, California working for John Seinfeld. Dr. Mader conducted research regarding the chemical composition of atmospheric organic aerosol particles. Using gas chromatography/mass spectrometry he identified SOCs comprising organic aerosols. He collected organic aerosols using a new high-volume particle trap impactor/denuder sampler that he designed and constructed. These samplers were deployed in 2001 on ground and aircraft platforms in Japan and Korea during an international research project called the Aerosol Characterization Experiment in Asia (ACE-Asia). The goal of this project was to evaluate the influence of aerosol particles on climate change.

Karen Murphy

Karen E Murphy is a research chemist in the Chemical Sciences Division at NIST. She received her BS degree in chemistry from Indiana University of Pennsylvania before coming to NIST in 1989. Her research interests include the application of inductively coupled plasma mass spectrometry (ICP-MS) to the development of high accuracy sample preparation procedures utilizing chemical separations and the implementation of measurement methods to enhance nanometrology including the application of single particle ICP-MS.

Jason White

Jason White is currently Vice Director and Chief Analytical Chemist at the Connecticut Agricultural Experiment Station. He received a BS in Ecology from Juniata College in Huntingdon, PA in 1992. He received a PhD in Environmental Toxicology from Cornell University

in 1997. He had a one-year post-doctoral position at the Connecticut Agricultural Experiment Station in New Haven CT from 1997-1998 in the Department of Soil and Water and joined CAES as a full time scientist in 1998. He also has adjunct status at the University of Texas-El Paso, University of New Haven, Quinnipiac University, and Post University. He is currently serving on the Dissertation Committee of two PhD students at Hasselt University in Belgium and is hosting a one year Post-Doctoral Fellow from Parma University in Italy. He is Managing Editor for the *International Journal of Phytoremediation*, President of the International Phytotechnology Society, on the Editorial Advisory Board (SAB) of *Environmental Science and Technology and Environmental Science and Technology Letters*. His primary research interest is food safety, including the fate and effects of engineered nanomaterials in food and agricultural systems.

106E

Dr. Paul J. Lioy

He is a Professor and Vice Chair, Department of Environmental and Occupational Medicine at Rutgers Robert Wood Johnson Medical School (RWJMS), Piscataway, N.J. He is also Deputy Director for Government Relations at the Rutgers Environmental and Occupational Health Sciences Institute (EOHSI) and is the Director the Institute's program in Exposure Science. All are part of the Rutgers Biomedical Health Sciences (RBHS) Division of Rutgers: The State University.

Dr. Lioy received the International Society of Exposure Science (ISES) Jerome Wesolowski Award for Lifetime Achievement in Exposure in 1998, and in 2003 he was the recipient of the Frank Chambers Award for lifetime achievement in Air Pollution from the Air and Waste Management Association. In 2006 he received the RWJMS R. Walter Schlesinger Basic Science award for Mentoring, and in 2008 he was named the Rutgers University Graduate School Distinguished Alumnus in Mathematics, Engineering and Physical Sciences, the same year he was named Distinguished Lecturer by the ISES. In 2009 he received a Conservation Award and the Ellen Harlin Walworth National medal for Patriotism from the Daughters of the American Revolution. In 2012 he received a community service award from the State of NJ, Union County, the Township of Cranford, NJ and the Chamber of Commerce.

He has been a member of the Science Advisory Board (SAB) of the US EPA, and involved with committees that dealt with air pollution standards, hazardous materials, as well as cost benefit analyses of Clean Air Act. Dr. Lioy was a member of the National Academy of Sciences Board of Toxicology and Environmental Studies, and was Chair of the National Research Council's first committee on Exposure Assessment, and was the Vice Chair of its Committee on Exposure Science in the 21st Century. In addition he has been a member other committees that completed reports on hazardous wastes, air pollution (e.g. ozone and particulate matter), and

human health. Dr. Liroy was a member of the US-Canada International Joint Commission Air Quality Advisory Board (1992-2007) that dealt with trans-boundary issues of Air Pollution and water pollution. He was Vice Chair of the EPA and CEQ WTC Expert Technical Panel (2004-2005).

He is a member of the International Academy of Indoor Air Sciences, and is a Fellow of the Collegium Ramazzini, Carpi, Italy. He is a founder of International Society for Exposure Science and was President from 1993-94. He was Chair of NJ Clean Air Council, 1983-1984, and is currently a Member of the Science Advisory Board of the NJ Department of Environmental Protection. He is on the Executive Committee of the University Center on Disaster Preparedness and Emergency Response of RWJMS/Rutgers/ RWJ Hospital.

Dr. Liroy has been an executive editor or associate editor of 7 journals that deal with environmental science, human exposure and/or air pollution. Currently, he is an Associate editor of the *J. Environmental Health Perspectives*, and Deputy Editor in Chief of the *J. Exposure Science and Environmental Epidemiology*. He has published over 290 peer reviewed papers, including results from scientific studies, reviews and vision on science and science policy, and ethics. He has also contributed book chapters, editorials, and has published five books, including *Dust: the Inside Story of its role in the September 11th Aftermath* (Hardcopy/paperback) written for general audiences and a new book titled *Exposure Science*. Since 2002 he has been identified by Reuters as one of the most cited scientists in the category of Environment/Ecology. Details Dr. Liroy's accomplishments are at http://en.wikipedia.org/wiki/Paul_J._Liroy.

His research has been funded for >35 years by numerous federal and state agencies, and other organizations on air pollution, exposure assessment, disasters, environmental health, and toxic materials. A major focus is on fundamental principles of Human Exposure Science, and their application to State, National and International Environmental Health problems. Included, are research on the Aftermath of the Attack on the WTC, the Toms River Cancer Cluster, Chromium exposure and health effects in Jersey City, NJ, Ozone and Asthma, Air Pollution in China, and nanoparticles in consumer products.

July 8, 2015

205A

Vince Castranova

Dr. Castranova is the former chief of the Pathology and Physiology Research Branch, NIOSH Health Effects Laboratory Division, in Morgantown. He is currently a professor in the Department of Department of Pharmaceutical Sciences, West Virginia University, and an adjunct professor in the Department of Environmental and Occupational Medicine, University of Pittsburgh. He holds a PhD degree in physiology and biophysics from West Virginia University.

205B

Richard Zepp

Richard Zepp is a Senior Research Scientist at the U.S. EPA National Exposure Research Laboratory in Athens, Georgia. He received his BS in Chemistry at Furman University. and PhD from Florida State University. His research interests include processes affecting transformations and transport of nanomaterials and pathogens in the environment. He is a member of the NanoRelease Consumer Products Steering Committee and the UNEP Environmental Effects Assessment Panel. He is an Adjunct Professor at the Rosenstiel School of Marine and Atmospheric Sciences, University of Miami, Miami, Florida and the Department of Chemistry, State University of New York, Syracuse, New York and a member of AGU, ACS, SETAC, ISES, ASM, ASLO, Sigma Xi, and AAAS.

205C

Elijah Petersen

Elijah graduated from Case Western Reserve University in 2003 with BS and MS degrees in Civil Engineering and a BA in Psychology. He then received a PhD at the University of Michigan studying the ecological uptake and elimination behaviors of carbon nanotubes using earthworms (*Eisenia foetida*) and sediment-dwelling oligochaetes (*Lumbriculus variegatus*). He then received a Fulbright scholarship to do postdoctoral research at the University of Joensuu in Finland where he studied the uptake and elimination of carbon nanotubes and fullerenes in *Daphnia magna*. Elijah joined NIST as a National Research Council postdoctoral research fellow from 2009-2010 and then became a staff research scientist in 2010.

Will Boyes

Dr. Boyes is currently serving as Project Leader for Emerging Materials for Chemical Safety for Sustainability in the Office of Research and Development, U.S. Environmental Protection Agency in Research Triangle Park, NC. His role is to coordinate research on engineered nanomaterials across the Office of Research and Development. In addition, Dr. Boyes continues to be a research scientist in the Neurotoxicology Branch, Toxicity Assessment Division, National

Health and Environmental Effects Research Laboratory, where his research focuses on the toxicity of nanomaterials.

Previously, he served as the Acting Director of EPA's Neurotoxicology Division and as Chief of the Neurophysiological Toxicology Branch. Dr. Boyes received a PhD in Environmental Health from the University of Cincinnati, College of Medicine in 1981, and was a National Research Council postdoctoral fellow at the Neurotoxicology Division of the EPA in Research Triangle Park from 1981-1983. Dr. Boyes has served as President of the International Neurotoxicology Association (2007-2009), Associate Editor for *Neurotoxicology* (2009-present), and was named as a Fellow of the Academy of Toxicological Sciences. He is also currently President of the Neurotoxicology Specialty Section of the Society of Toxicology.

Dr. Boyes is the author/coauthor of over 100 peer-reviewed manuscripts or book chapters dealing with various aspects of environmental neurotoxicity, and also has authored or co-authored numerous EPA documents including Neurotoxicity Health Effects Testing Guidelines, Neurotoxicity Risk Assessment Guidelines, nanomaterial research strategy documents, and several EPA reports to Congress.

205D

Sara Brenner

Dr. Brenner is a preventive medicine and public health physician at the SUNY Polytechnic Institute Colleges of Nanoscale Science & Engineering (CNSE), serving as the Assistant Vice President for NanoHealth Initiatives and an Assistant Professor of Nanobioscience. Her research and initiatives aim to develop novel nanotechnology applications in the life sciences, including medicine and public health. Dr. Brenner is leading health and safety research initiatives related to nanoparticle and nanomaterial exposures in the workplace, consumer marketplace, and environment. She was integral in building the NanoHealth and Safety Center at CNSE, a public-private partnership that is addressing gaps in our understanding of the safety and risk associated with the unique characteristics of nanoscale materials. In collaboration with NIOSH, she is working to expand these efforts through the New York State-wide NanoHealth and Safety Consortium. Her research team incorporates theory from many disciplines such as physics, engineering, biology, genetics, medicine, public health, epidemiology, industrial hygiene, and environmental science to advance risk assessment and reduction strategies for occupational exposures, monitoring of materials that may impact population health and public safety, and the development of industrial practice standards for product safety. She is also the CNSE Program Director of the MD/PhD program in medicine and nanoscale science or engineering, a program that she helped co-found with SUNY Downstate Medical Center. It is the first dual-degree clinical training program in nanomedicine that aims to produce a new, hybrid

generation of physician researchers. Dr. Brenner is both personally and professionally dedicated to health and wellness and practices what she preaches by participating in fitness events including road, trail, and snowshoe races ranging from 1 km sprints to 50 mile ultramarathons. She is the recipient of the Albany-Colonie Chamber of Commerce Women of Excellence Award 2012 (Emerging Professional).