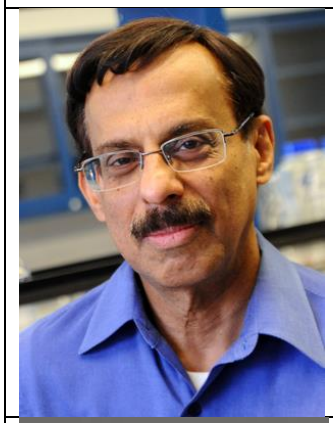
BOSC Chemical Safety for Sustainability (CSS) Subcommittee Members 2016

	Name	Affiliation	Expertise	Background
	**(Chair)** Ponisseril Somasundaran, Ph.D.	La von Duddleson Krumb Professor, Columbia University *(NY Region 2)*	• Bioenvironmental engineering • Chemical engineering • Green chemistry and green engineering • Life-cycle analysis • Nanomaterials	Dr. Somasundaran has expertise in green chemistry, energy, waste water treatment, and nanotoxicity/environmental effects of nanoparticles. He specializes in surface and colloid chemistry. His primary research interests are in particulates and waste processing, enhanced oil recovery, specifically control of fine particle dispersions using surfactants and polymers, deposition of particles and bacteria on surfaces, spectroscopic investigation of micro and nanostructure of adsorbed films, and flotation and ultra-fine grinding.
	**(Vice Chair)** Gina Solomon, M.D., M.P.H.	Deputy Secretary for Science and Health, Office of the Secretary, California EPA *(CA Region 9)*	• Public health • Children's health • Endocrine disruptors • Environmental contaminants • Risk assessment	Dr. Solomon has experience working for a non-governmental organization, hospitals, a research institute, and universities. She addresses technical issues as well as policy. Dr. Solomon's prior work has included research on diesel exhaust and asthma, endocrine disrupting chemicals, pesticides, environmental contaminants in New Orleans after Hurricane Katrina, the health implications of the 2010 Gulf oil spill, and the health effects of climate change.
	Paloma Beamer, Ph.D.	Associate Professor, College of Public Health, University of Arizona *(AZ Region 9)*	• Exposure and dose estimate tools • Health effects modeling • Environmental justice	Dr. Beamer's research focuses on improving exposure assessments for understanding the role of environmental contaminants and disease in order to design better interventions. She has expertise in exposure assessment with an emphasis on vulnerable populations such as children and low-income communities. Dr. Beamer conducts field studies and uses both computer modeling and laboratory techniques in her research. The ultimate goal of her work is to develop more effective interventions and policies for prevention of avoidable cases of certain diseases such as asthma.

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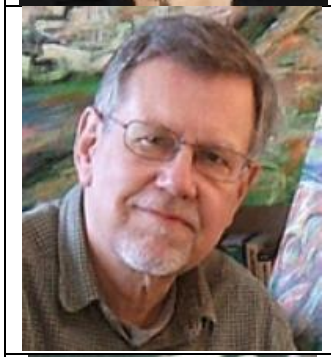
	Chris Gennings, Ph.D.	Professor, Environmental Medicine & Public Health, and Population Health Science and Policy, Icahn School of Medicine at Mount Sinai *(NY Region 2)*	• Chemical mixtures • Exposure and risk assessment • Study design and statistical support	Dr. Genning's research interests focus on design and analysis methodologies for studies of chemical mixtures. This has included methods for both toxicology studies and epidemiology/clinical studies. She is the founding director of a T32 training grant from the NIEHS in Environmental Statistics, focused on the integration of mixtures toxicology and statistical methods. Her research has been supported by the National Institute of Environmental Health Sciences, U.S. EPA, World Health Organization, National Institute of Child Health and Human Development, and the Health Effects Institute.
	Dale Johnson, Pharm.D., Ph.D.	President and CEO, Emiliem, Inc. and Elara Bioscience LLC.; Adjunct Professor, University of Michigan; Adjunct Professor, University of California, Berkeley *(MI Region 5, CA Region 9)*	• Computational toxicology • Pharmacogenomics • Quantitative structure-activity relationship (QSAR) models • Multi-species toxicity studies • Risk assessments	Dr. Johnson, a Board Certified Toxicologist, has technical expertise in all aspects of *in vivo* toxicology testing, computational toxicology and QSAR modeling. At UC Berkeley, Dr. Johnson's research is focused on predictive toxicology and network pharmacology utilizing computational methodology to analyze chemical-biological interactions, model structure activity relationships, and analyze perturbations in systems biology pathways.
	Rebecca Klaper, Ph.D.	Professor, School of Freshwater Sciences, University of Wisconsin-Milwaukee *(WI Region 5)*	• Ecotoxicology • Genomics • Environmental chemistry	Dr. Klaper studies the potential impact of emerging contaminants, such as nanoparticles and pharmaceuticals on aquatic life and how we may design these chemicals to have the least environmental impact. In addition, she examines the transport of these chemicals through the wastewater treatment systems and into the environment and how different treatment technologies may remove them from the waste stream. Her research also links the impact of these chemicals on the health of aquatic species to that of human health.

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	Kyle Kolaja, Ph.D.	Senior Principal Investigator, Nonclinical Development, Celgene Corporation *(NJ Region 2)*	• Stem cell technology • Predictive toxicology	Dr. Kolaja supports the toxicological evaluation of Celgene development candidates and is the NCD representative for the Epigenetics Therapeutic Franchise. Previously, Dr Kolaja was Vice President, Business Development/Cell Therapy at Cellular Dynamics, International, where he sought and established novel clinical and preclinical applications of pluripotent stem cells and their derived tissues. Prior to joining CDI, Dr. Kolaja was Leader/Global Head of Predictive Toxicology Screens and Investigative Toxicology-US at Roche, where he oversaw laboratories that conduct all safety screening assays, provided toxicology support to projects, and applied stem cell-derived tissues to safety. Dr. Kolaja has nearly 70 peer-reviewed publications and reviews.
	Jerzy Leszczynski, Ph.D.	Professor, Jackson State University *(MS Region 4)*	• Computational chemistry • Nanotoxicity • Design of safe nanomaterials	Dr. Leszczynski has vast experience participating in collaborative efforts that bridge government, academia, and industry. His interests include the nature of chemical bonds, theoretical predictions of molecular potential energy surfaces and vibrational spectra, structures and properties of molecules with heavy elements, properties and structure of DNA fragments, nanomaterials including their interactions with biomolecules and toxicity. He also applies computational chemistry methods to environmental problems, surface chemistry, and atmospheric chemistry.
	Jennifer McPartland, Ph.D.	Senior Scientist, Environmental Defense Fund *(DC Region 3)*	• Computational toxicology • Exposure • Public awareness/ stakeholder involvement	Dr. McPartland works to identify and reduce chemical exposures harmful to human health and the environment. Her work at EDF includes science, policy, and marketplace-related initiatives. In each of these areas, she works with diverse groups of stakeholders to determine how improvements can be made to understand and ultimately reduce or eliminate toxic chemical exposures. Dr. McPartland has most recently been focusing on new computational toxicology methods being developed by EPA to better understand and predict chemical hazard and risk.

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	James Stevens, Ph.D.	Distinguished Research Fellow, Eli Lilly *(IN Region 5)*	• High throughput screening • Pharmacology • Pathology	Dr. Stevens' research interests are in the areas of predictive and molecular and investigative toxicology and adverse drug reactions. He has studied the role of gene expression in mechanisms of cell injury for over two decades and was among the first to adopt gene expression analysis to understand mechanisms of toxicity. He was a member of the Board of Directors for Upstate Biotechnology and the Interim Vice President for Research and Development for Argonex Pharmaceuticals.
	Donna Vorhees, Sc.D.	Adjunct Assistant Professor, Department of Environmental Health, Boston University *(MA Region 1)*	• Risk assessment • Multi-pathway exposure assessment • Probabilistic and deterministic modeling	Dr. Vorhees specializes in multi-pathway exposure assessment and human health risk assessment of chemicals in the indoor and outdoor environments. She teaches Risk Assessment Methods at Boston University. Dr. Vorhees has 20 years of consulting experience and has conducted deterministic and probabilistic exposure and risk modeling for chemicals, such as polychlorinated biphenyls, dioxins and furans, petroleum hydrocarbons, and metals (e.g., arsenic, lead, and mercury).
	Katrina Waters, Ph.D.	Scientist, Pacific Northwest National Laboratories *(WA Region 10)*	• Computational toxicology • Microarray data analysis • Quantitative structure-activity relationship (QSAR) models	Dr. Waters' expertise and research interests are focused around the analysis and biological interpretation of global gene and protein expression data related to mechanism of action or applied research. In addition, she has several years of experience developing and carrying out molecular and biochemical assays in the laboratory to test hypotheses resulting from microarray experiments.

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	Clifford P. Weisel, Ph.D.	Professor, Exposure Science, Environmental and Occupational Health Sciences Institute, Rutgers University *(NJ Region 2)*	• Analytical chemistry • Exposure science • Human health risk assessment	Dr. Weisel's research experience includes the determination of biomarkers of exposure, measurement of multiroute exposures to volatile organic compounds and disinfection by-products in drinking water, exposure to children, the role of air pollution in exacerbation of asthma, exposures within aircraft and other modes of transportation, the sources of pollutants to indoor air and their contribution to personal exposure, and the linkage of gene and environmental exposures to identify susceptible populations.
	Mark Wiesner, Ph.D.	Professor, Civil and Environmental Engineering, Duke University *(NC Region 4)*	• Nanotechnology • Environmental systems analysis • Environmental engineering	Dr. Wiesner's research interests include membrane processes, nanostructured materials, transport and fate of nanomaterials in the environment, colloidal and interfacial processes, and environmental systems analysis. Dr. Wiesner's research pioneered the application of membrane processes to environmental separations and water treatment. He co-edited and -authored the book Water Treatment Membrane Process, and served as the founding Chair of the American Water Works Association's Membrane Research Committee. He also co-edited/authored the book Environmental Nanotechnologies.