

BOSC Chemical Safety for Sustainability (CSS) Subcommittee Members 2015

	Name	Affiliation	Expertise	Background	Source Links
	<p>(Chair) Ponisseril Somasundaran, Ph.D.</p>	<p>La von Duddleson Krumb Professor, Columbia University <i>(NY Region 2)</i></p>	<ul style="list-style-type: none"> • Bioenvironmental engineering • Chemical engineering • Green chemistry and green engineering • Life-cycle analysis • Nanomaterials 	<p>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.</p>	<p>Expertise and Background: http://www.aimehq.org/programs/award/bio/ponisseril-somasundaran-1 http://blogs.cuit.columbia.edu/iucrc/about-cpass/center-researchers/ Picture: http://eee.columbia.edu/ponisseril-somasundaran</p>
	<p>(Vice Chair) Gina Solomon, M.D., M.P.H.</p>	<p>Deputy Secretary for Science and Health, Office of the Secretary, California EPA <i>(CA Region 9)</i></p>	<ul style="list-style-type: none"> • Public health • Children's health • Endocrine disruptors • Environmental contaminants • Risk assessment 	<p>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.</p>	<p>Expertise, Background, and Picture: http://www.calepa.ca.gov/About/Bios/Solomon.htm http://coeh.berkeley.edu/people/faculty/solomon.htm</p>
	<p>Paloma Beamer, Ph.D.</p>	<p>Associate Professor, College of Public Health, University of Arizona <i>(AZ Region 9)</i></p>	<ul style="list-style-type: none"> • Exposure and dose estimate tools • Health effects modeling • Environmental justice 	<p>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.</p>	<p>Expertise: http://esrac.arizona.edu/collaborators/beamer Background: https://publichealth.arizona.edu/directory/paloma-beamer Picture: https://publichealth.arizona.edu/news/2011/dr-paloma-beamer-awarded-666k-grant-study-effects-diesel-exhaust-exposure-children-asthma</p>

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	Dale Johnson, Ph.D.	President and CEO, Emiliem, Inc. and Elara Bioscience Inc.; Adjunct Professor, University of Michigan/University of California, Berkeley <i>(MI Region 5, CA Region 9)</i>	<ul style="list-style-type: none"> • Computational toxicology • Pharmacogenomics • Quantitative structure-activity relationship (QSAR) models 	Dr. Johnson has technical expertise in 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.	Expertise: http://www.omicsonline.org/editor-profile/Dale_Johnson/ Background and Picture: http://nst.berkeley.edu/faculty/dale-johnson
	Rebecca Klaper, Ph.D.	Professor, School of Freshwater Sciences, University of Wisconsin-Milwaukee <i>(WI Region 5)</i>	<ul style="list-style-type: none"> • 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.	Expertise, Background, and Picture: http://home.freshwater.uwm.edu/klaperlab/
	Jerzy Leszczynski, Ph.D.	Professor, Jackson State University <i>(MS Region 4)</i>	<ul style="list-style-type: none"> • 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.	Expertise and Background: http://icnanotox.org/leszczynski/ Picture: http://www.jsu.edu/chemistry/theoretical-chemistry/

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	Jennifer McPartland, Ph.D.	Health Scientist, Environmental Defense Fund <i>(DC Region 3)</i>	<ul style="list-style-type: none"> • 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.	Expertise, Background, and Picture: https://www.edf.org/people/jennifer-mcpartland
	James Stevens, Ph.D.	Distinguished Research Fellow, Eli Lilly <i>(IN Region 5)</i>	<ul style="list-style-type: none"> • 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.	Expertise and Background: https://soic.iupui.edu/people/james-stevens/ Picture: https://www.linkedin.com/pub/james-stevens/1b/835/519
	Katrina Waters, Ph.D.	Scientist, Pacific Northwest National Laboratories <i>(WA Region 10)</i>	<ul style="list-style-type: none"> • 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.	Expertise, Background, and Picture: http://www.pnl.gov/science/staff/staff_info.asp?staff_num=7044