Cumulative Impacts: Vulnerability, Risk, and Health
Gina Solomon, M.D., M.P.H., Deputy Secretary for Science and Health, CalEPA

Gina Solomon is the Deputy Secretary for Science and Health at the California Environmental Protection Agency. She has been on the faculty in the division of occupational and environmental medicine at the University of California, San Francisco (UCSF) since 1997, where she still holds the title of clinical professor of health sciences. Dr. Solomon served as the director of the occupational and environmental medicine residency program at UCSF from 2008-2012, the associate director of the UCSF Pediatric Environmental Health Specialty Unit from 2003-2009, and as a Senior Scientist at the Natural Resources Defense Council (NRDC) from 1996-2012. Gina received her bachelor’s degree from Brown University, a Doctorate of Medicine from the Yale University School of Medicine, and a master’s degree in public health from the Harvard School of Public Health. She is board-certified in both internal medicine and occupational and environmental medicine, and is licensed to practice medicine in California.

Addressing Community Vulnerability through Collaboration
Community Panel

Robina Suwol
Founded by Robina Suwol in 1998, California Safe Schools (CSS) is children’s environmental health and environmental justice coalition. CSS achieved national prominence by spearheading the Los Angeles Unified Integrated Pest Management Policy, the most stringent pesticide policy in the nation for K-12 public schools and the first to embrace the “Precautionary Principle” and “Right to Know”. The success of the policy led to California’s Healthy Schools Act. Today the LA Unified Integrated Pest Management Policy serves as an international model for school districts and communities. On October 6, 2005, Governor Schwarzenegger signed AB 405 (Montanez) sponsored by California Safe Schools. The bill bans experimental pesticides, whose health effects are unknown, from California k-12 public schools. As a result, more than 6 million California children and hundreds of thousands of school children are protected from experimental chemicals, whose health effects are unknown. CSS continues to be a leader on children’s environmental health, with an emphasis on schools and environmental justice communities. Under Robina’s leadership, CSS has facilitated changes at the policy level as well as at the grassroots, which creates a lasting institutional protection.

Jesse Marquez
Jesse Marquez is the founder and executive director of the non-profit community based Environmental Justice Organization the Coalition for A Safe Environment (the Coalition). The Coalition was established in April 2001 in Wilmington, California to eliminate, reduce and mitigate the public health, public safety and community socio-economic impacts caused primarily by, International Trade Marine Ports, Freight Transportation Corridors, Petroleum Industries and Energy Industries. The Coalition is involved in community organizing, family assistance, public education, leadership development, community empowerment, urban planning, community sustainability, emergency preparedness, economic development, public policy & program evaluation, public advocacy, public right-to-know, protection of public health, public safety, environmental, social justice and civil rights. The Coalition represents the public’s best interests, supports social equity, prepares & distributes public information, conducts community based research, supports public health, public safety, zero emission, emissions capture & hazardous materials treatment technologies, evaluates environmental impact reports, investigates environmental incidents, prepares public policy, program & environmental impact report public comment documents and attends governmental agency public meetings.
Case Study

Mohsen Nazemi, Deputy Director, Department of Toxic Substances Control

Mohsen Nazemi is the Deputy Director for the Brownfields and Environmental Restoration Program at DTSC. Governor Brown appointed him on September 16, 2016. Nazemi has thirty-eight years of experience as an environmental regulator at the South Coast Air Quality Management District (SCAQMD), where he served for eight years as the Deputy Executive Officer for the Office of Engineering and Compliance. In that capacity, he was responsible for strategic planning and program implementation, and organizing, directing and overseeing operations of a staff of more than 300 staff. Mr. Nazemi’s career spans 40 years of regulatory agency, private sector, academic, and research experience in engineering, air quality, and environmental fields. His experience includes more than 38 years in engineering, permitting, compliance, and enforcement, as well as rule and policy development and implementation, with more than 25 years at executive and senior management levels at SCAQMD. Throughout his career, he has served as Chair, Co-chair or member on numerous statewide and national committees and task forces on issues ranging from permitting, multi-media enforcement, energy, and petroleum refinery regulation, to pollution prevention, oil spill prevention and response, and environmental justice, to name only a few. He is a registered Professional Engineer with a Masters of Science in Chemical Engineering from UCLA, and holds certificates in Hazardous Materials Management.

West Oakland Air Pollution Monitoring Project
Melissa Lunden, Ph.D., Chief Scientist, Aclima

Melissa’s research career has focused on the transport and fate of pollutants in the environment. She received her Ph.D. at the California Institute of Technology with an emphasis on aerosol formation and structure. As a staff scientist at Lawrence Berkeley National Laboratory, she directed investigations of environmental processes in a wide variety of locations including the Sierra Nevada forests, traffic tunnels, and the Washington, D.C. and Boston subway systems. A specific focus of Melissa’s research efforts has been indoor air quality and underscoring the need for pollutant characterization on the local, personal scale. She is excited to be working with the team at Aclima to bring the vision of ubiquitous environmental monitoring to fruition.

USEPA Environmental Justice Program
Charles Lee, Senior Policy Advisor for Environmental Justice, USEPA

Mr. Lee is widely recognized as a true pioneer in the arena of environmental justice. He was the principal author of the landmark report, Toxic Wastes and Race in the United States. He helped to spearhead the emergence of a national environmental justice movement and federal action including the First National People of Color Environmental Leadership Summit, Executive Order 12898, EPA’s Office of Environmental Justice, National Environmental Justice Advisory Council, and the Federal Interagency Working Group on Environmental Justice. Charles Lee is currently the Senior Policy Advisor for Environmental Justice at the USEPA. In this capacity, he leads the development and implementation of EPA’s agency-wide environmental justice strategic plans, i.e., Plan EJ 2014 and now EJ 2020. He has served in multiple capacities, ranging from creating the United Church of Christ’s environmental justice program to directing EPA’s environmental justice office. He was a charter member of the National Environmental Justice Advisory Council, where he chaired its Waste and Facility Siting committee, as well as serving on Institute of Medicine Committee on Environmental Justice and other panels.
Environmental Justice Screening and Mapping Tool (EJScreen)
Kevin Olp, Program Manager, Environmental Task Force, CalEPA

Kevin Olp currently serves as the Program Director for the CalEPA Environmental Justice Taskforce, where he oversees the implementation of the task force and other environmental justice initiatives. Prior to his role in CalEPA he worked for nearly seven years in the US EPA’s Office of Environmental Justice, where he most recently was the Director of Communications. In this capacity, he led the development of USEPA’s environmental justice screening and mapping tool – EJSCREEN – and also helped implement rollout strategies for key agency priorities including EJ 2020, the Agency’s strategic plan for implementing environmental justice throughout the federal government between the years 2016-2020.

Health Impacts Assessment (HIA)
Shannon Griffin, B.S., M.S., USEPA

Shannon Griffin is a biologist with the USEPA in Cincinnati, Ohio. She is currently involved in studies which focus on the development of quantitative approaches to evaluate community health and well-being. She is also involved in using USEPA web-based tools and Health Impact Assessment to inform community decision-making while promoting community outreach and engagement. Shannon has worked extensively on the development and application of innovative methods which utilize salivary antibody responses as non-invasive indicators of infection from environmental pathogens. In addition, her work has included developing and validating molecular-based techniques to measure occurrence of microbial contaminants in various environmental matrices. Shannon holds BS and MS degrees in biological sciences from the University of Cincinnati.

Decision Analysis for a Sustainable Environment, Economy & Society (DASEES)
Brian Dyson, Ph.D., USEPA

Brian Dyson is an Operations Research Analyst with the USEPA in Cincinnati, OH. He is the Project lead in the Sustainable and Healthy Communities Research Program for Decision Science and Support Tools. He started with the USEPA working on land management decision support for non-point source runoff and habitat conservation. His current work within the Sustainable and Healthy Communities research program is aimed at integrating decision methods and developing decision support tools for community resilience planning, contaminated site remediation, landfill siting, sustainable materials management, and watershed/estuary management. He holds a PhD in Environmental Engineering with expertise in simulation-optimization and multi-criteria decision analysis methods.

Data Needs for Cumulative Impacts and/or Community Vulnerability
Alvaro Alvarado, Ph.D., California Air Resources Board

Alvaro has a Ph.D. in Environmental Toxicology from UC Riverside. He supervises a team of health scientists at the California Air Resources Board. The team is responsible for evaluating the health impacts of air pollution and providing advice on how air quality regulations affect public health. He has provided expert witness testimony, lectured at UC Davis, and has given interviews in English and Spanish on the health effects associated with air pollution exposure. His team oversaw the research contract that developed the Environmental Justice Screening Method, which formed much of the basis of CalEnviroScreen.
Andrew Slocombe, Research Scientist, Office of Environmental Health Hazard Assessment

Andrew is a Research Scientist with the State of California’s Office of Environmental Health Hazard Assessment. Among his responsibilities are the analysis and evaluation of public health, chemical exposure, environmental hazard, and demographic databases for their suitability in CalEnviroScreen - a geographic screening tool used to identify disadvantaged communities. Andrew conducts biostatistical analysis and provides scientific expertise for the development of the tool. He also communicates proposed approaches and results of CalEnviroScreen at public meetings and training sessions. He has worked as a health risk assessment consultant and researched water quality in rural Guatemala. He is a graduate of the University of California, Berkeley School of Public Health.

Spatial Prioritization Geographical Information Tool (SPGIT)
Rick Fears, P.G., Senior Engineering Geologist, DTSC

Rick is currently managing the Statewide Geographical Information Systems team within the Geological Services Branch at the Department of Toxic Substances Control. Rick has 29 years of private and governmental environmental and geotechnical experience. Rick participates in the interagency LA Basin Groundwater Convening Workgroup.

Low Cost Monitoring Equipment
Andrea Polidori, Ph.D., Manager, SCAQMD

Andrea Polidori is the Atmospheric Measurements Manager for Science and Technology Advancement at the South Coast Air Quality Management District. His primary responsibilities include the overall management of all SCAQMD ambient air monitoring network operations, special monitoring programs, and related projects. He is also involved in the analysis of data collected from numerous field activities and air monitoring projects, and is currently leading the design, development and implementation of the Air Quality Sensor Performance Evaluation Center (AQ-SPEC), a program created to conduct comprehensive performance tests of commercially available, low-cost air quality sensors. He is also managing SCAQMD’s fence-line air monitoring program. Dr. Polidori received his Bachelor of Science degree in Environmental Sciences Urbino University in Italy and his Doctor of Philosophy degree in Environmental Sciences from Rutgers University in New Jersey.