# Meet the Research Screening Committee

The Research Screening Committee provides robust scientific peer review for CARB's research projects. The Committee can have up to eleven members to provide guidance on the wide range of topics relevant to CARB programs.

## Background

As required by State law (Health and Safety Code Section 39700), CARB sponsors a research program guided by the mission to provide sound and timely scientific results to support CARB's policies and programs. CARB's research program was established by the Legislature in 1971 and has formed the basis of CARB's programs since its inception. The research program's goals of informing health-based air quality standards, reducing air pollution exposures, and protecting California from the potential impacts of climate change have been met through a diverse portfolio of projects.

State law also requires that CARB establish the Research Screening Committee (RSC) to review proposed and completed research projects. The RSC provides robust scientific peer review for CARB's research projects and consists of up to eleven members encompassing physicians, scientists, biologists, chemists, engineers, meteorologists, and other subject matter experts who have the knowledge necessary to effectively advise on CARB's health, environmental justice, air quality, and climate resilience.

# Aly M. Tawfik, PhD, PTP

California State University, Fresno

Dr. Aly Tawfik is an associate professor of transportation systems engineering and director of the Transportation Institute at California State University, Fresno. His area of expertise includes modeling, simulation and optimization of individual travel behavior and of transportation systems; however, he has a particular passion for transportation sustainability and the future of transportation. He is active on research projects and grants focusing on travel data innovations, GIS applications in transportation, and using technology to minimize travel and transportation footprints. His other research projects focus on shared mobility and transportation automation and electrification. He serves on local, national, and international transportation boards and committees. He is the author of many peer-reviewed publications and has given keynote presentations at local, national, and international conferences.

## Sam Silva, PhD

University of Southern California

Sam Silva is an assistant professor in the Department of Earth Sciences and the Department of Civil and Environmental Engineering at the University of Southern California. Prior to his current position, he worked as a research data scientist at the Pacific Northwest National Laboratory, a U.S. Department of Energy research laboratory. He received a Ph.D. in Environmental Engineering and Computation from the Massachusetts Institute of Technology, and an M.S. in Atmospheric Science and B.S. in Physics from the University of Arizona. His research focuses on air pollution and climate change, with particular interest in the convergence of traditional computational methods with modern data science and artificial intelligence techniques.

## Bryan Hubbell, PhD

Resources For the Future

Dr. Bryan Hubbell is a Senior Fellow at RFF. Hubbell is an expert on the health and environmental impacts of air pollution. He served as the national program director for the Air, Climate, and Energy Research Program in the US Environmental Protection Agency's Office of Research and Development. He notably led the EPA team that developed the Environmental Benefits Mapping and Analysis Program (BenMAP), a tool now used worldwide to evaluate the benefits of clean air. He also led the Risk and Benefits Group, where he was responsible for assessing exposure and risks related to criteria air pollutants and performing benefits analyses for major air pollution regulations. His research interests involve strengthening evidence-based approaches to climate adaptation and resilience to inform environmental policy decisions.

## Michael Schmeltz, DrPH, MS

California State University, East Bay

Dr. Michael Schmeltz has over a decade of experience working on occupational and environmental health issues. He is currently an Assistant Professor at California State University, East Bay. His research focuses on the use of geospatial and epidemiological methods for risk assessments to examine social and structural vulnerabilities communities face from environmental and climate hazards. He has also worked on climate change governance and policy development, including extreme heat action plans and GHG emission reduction in transportation. Dr. Schmeltz serves in advisory roles, including the US EPA Board of Scientific Counselors and the Bay Area Air Quality Management District.

# Thomas H. Bradley, PhD

Colorado State University

Dr. Thomas H. Bradley is a nationally recognized expert in sustainable transportation systems and vehicle technology. He is currently the Woodward Professor and Head of the Department of Systems Engineering at Colorado State University. His research focuses on the design, modeling, and optimization of advanced vehicle technologies, including electric vehicles, hybrid powertrains, and fuel cell systems. Dr. Bradley has authored more than 100 peer-reviewed publications and collaborates with government agencies, national laboratories, and industry partners to develop solutions that improve vehicle efficiency and reduce environmental impacts.

## Danae Hernández-Cortés, PhD

Arizona State University

Dr. Danae Hernández-Cortés is an economist with deep expertise in environmental justice, climate policy, and the distributional impacts of environmental regulation. She is currently an Assistant Professor at Arizona State University, jointly appointed in the School for the Future of Innovation in Society and the School of Sustainability. She is also a Faculty Research Fellow at the National Bureau of Economic Research. Her research focuses on how environmental policies affect different communities, using tools such as causal inference, remote sensing, and atmospheric modeling to evaluate inequality in pollution exposure and policy outcomes. Dr. Hernández-Cortés has examined issues including California's cap-and-trade program, disparities in air pollution, and labor market impacts of renewable energy policies.

She is committed to advancing equity in environmental policy. Originally from Mexico, Dr. Hernández-Cortés brings a global perspective to her work and collaborates with diverse communities and policy stakeholders to inform more just and effective climate solutions.