

RESEARCH PROPOSALS

June 21, 2007

California Environmental Protection Agency



Air Resources Board

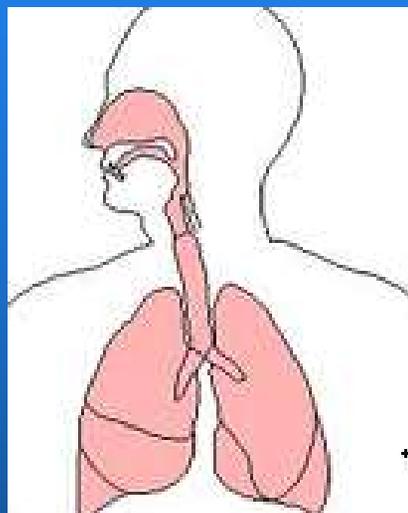
Spatial Synoptic Classification Approach to Projected Heat Vulnerability under Future Climate Change Scenarios

Kent University
Scott Sheridan, Ph.D.
\$191,553 (24 months)

Objective: To investigate the influence of climate change over the course of this century on heat-related deaths under different emissions scenarios.

Expected Results: Estimates of heat waves and heat-related deaths across California's seven largest metropolitan areas through 2100.

Effect of GSTM1 Genotype on Ozone-Induced Allergic Airway Inflammation



University of California, San Francisco
John Balmes, M.D.
Original: \$497,990
Augmentation: \$250,000 (24 months)

Objective: To determine whether specific genotypes and pre-exposure to allergen enhance inflammatory responses to ozone exposure.

Expected Results: Characterization of the susceptibility of asthmatics to ozone exposure and potential explanation for the wide variability in responses of asthmatics to ozone.

Cardiovascular Health Effects of Fine and Ultrafine Particles during Freeway Travel

University of California, Los Angeles

William Hinds

Original: \$580,205

Augmentation: \$60,469

Objective: To determine the cardiovascular effects of exposure to ambient air during travel on freeways.

Expected Results: Data on the effects of UFP on cardiac function and blood markers of systemic inflammation, and more information about freeway pollutant exposures.

Improving the Carbon Dioxide Emission Estimates from the Combustion of Fossil Fuels in California



UCB/LBNL
Lynn Price
Original: \$75,000
Augmentation: \$30,000

Objective: To collect spatial disaggregated data on energy consumption.

Expected Results: Improve the characterization of California's CO₂ emissions from a wide variety of local sources.

RECOMMENDATION

**Approve Resolutions
07-22, 23, 24 and 07-30**