

**State of California  
AIR RESOURCES BOARD**

**Research Screening Committee Meeting  
Cal/EPA Headquarters Building  
1001 I Street  
Conference Room 510  
Sacramento, California 95814  
(916) 445-0753**

**February 24, 2011  
10:30 a.m.**

**ADVANCE AGENDA**

**Interagency Agreement**

1. "Near Freeway Spatial Gradients in Particulate Biological Activity," University of California, Los Angeles, \$340,632, Proposal No. 2723-270

The objective of this project is to investigate seasonal and spatial variations in the biological activity and chemical composition of particulate matter samples. Samples of both fine and coarse particulate matter (PM) will be collected upwind and at five locations downwind of the I-5 freeway during the summer and winter. The samples will initially be analyzed for chemical composition and chemical reactivity. Subsequently, biological activity will be assessed in a cultured cell model. The main goal of this project is to test the hypothesis that there are spatial gradients in PM composition, chemical reactivity, and biological activity that correlate with distance from the freeway. The results from this project have the potential to influence regulations by providing information on both the spatial gradient of on-road emissions in the vicinity of a major highway, and the extent to which particle composition and biological activity change with distance from a roadway.