

Effects of Ultrafine Particulate Matter Exposure in an Animal Model of Neurodegenerative Disease

Principal Investigator: Arthur K. Cho, Ph.D.
University of California, Los Angeles

Co-Investigators:

- Michael Kleinman, Ph.D, UC Irvine
- William Melega, Ph.D., UCLA

Contract Manager: Lori Miyasato, Research Division

CARB Research Seminar for Contract 14-315

1:00 pm, April 3, 2019 – Klamath Hearing Room



Announcements

- For our online audience: questions for the speaker can be sent to: Lori.Miyasato@arb.ca.gov
- Additional information about the speaker, slides, and other materials can be found at: <https://ww3.arb.ca.gov/research/seminars/cho/cho.htm>
- Additional research seminars at: <https://ww3.arb.ca.gov/research/seminars/seminars.htm>
- Air Pollution & the Brain Fact Sheet at: <https://ww2.arb.ca.gov/resources/fact-sheets/air-pollution-and-brain>

Background

- Air pollution-related cardiovascular and respiratory health effects well documented
- Less known about brain impacts
 - U.S. EPA, Health Effects Institute: more brain/PM studies needed^{1,2}
- This study: does ultrafine PM accelerate Parkinson's disease symptoms?

¹U.S. EPA (2009) Integrated Science Assessment for Particulate Matter.

²HEI Review Panel on Ultrafine Particles (2013) Understanding the Health Effects of Ambient Ultrafine Particles.

Today's Speaker: Dr. Arthur K. Cho

- Emeritus Professor of Molecular and Medical Pharmacology and Environmental Health Sciences, UCLA Center for Health Sciences
- Research: focused on relationship between chemical properties and biological effects of compounds related to amphetamines & quinones
- Studies led to development of assays for reactive chemical species in air samples