A postdoctoral research fellow is sought to work on funded projects related to toxicological responses from air pollution exposure. We are interested in using high level chemical characterization methods to quantify the components of particulate matter most responsible for human health effects, with a particular focus on cardiovascular mechanisms. The first project is an NIH-funded program that investigates the cardiovascular effects of aging diesel exhaust on a transgenic mouse model using a custom-built 13m³ smog chamber. An additional project involves building a semi-continuous instrument that is sensitive to aerosol components that induce reactive oxygen in both acellular and cellular models of oxidative stress. This project includes both laboratory design and optimization, and comparative field studies. Major instruments available in our lab include SMPS, APS, 3 particle-into-liquid samplers, Dionex ion chromatograph, Thermo Electron gas instruments, Agilent GC-ECD, Sunset Labs OC/EC field instrument, XAct 625 semicontinuous XRF, Spectramax M2, and others. Opportunities for postdoc-driven independent research are also possible.

Applicants should have a Ph.D. in toxicology, environmental health, or a related field, and should be able to provide evidence of success in lab-based research experience, with preferred experience in animal model research, cell culture, and/or biomarker chemistry. Postdoctoral scientists who are highly motivated and able to work independently are strongly preferred. The position is available December 1, 2012. The initial appointment will be for 1 year, with additional years contingent upon mutual agreement. Salary will be commensurate with experience; the position also includes health insurance and other benefits.

To apply, please send a cover letter, curriculum vitae, and contact information for three references to Professor Rick Peltier (rpeltier@schoolph.umass.edu). Applications will be reviewed until the position is filled. For more information see our website at http://people.umass.edu/aerosollab, or contact Dr. Peltier by email or telephone (413-545-1317).

The University of Massachusetts, Amherst is located in the scenic Pioneer Valley of Western Massachusetts, and is just two hours from Boston and two and half hours from New York City. UMass is the flagship institute of the University system with 22k undergraduates and 6k graduate students. UMass is an affirmative action/equal opportunity employer and applications from women and underrepresented minorities are particularly encouraged.