

BIOGRAPHICAL SKETCH

NAME: Joy E. Lawrence		POSITION TITLE: Research Associate	
EDUCATION/TRAINING			
INSTITUTION AND LOCATION	DEGREE	YEAR(S)	FIELD OF STUDY
Mount Holyoke College, South Hadley Massachusetts	B.A.	1979-1983	Chemistry
Harvard School of Public Health, Boston Massachusetts	M.S.	1988-1990	Industrial Hygiene
Harvard School of Public Health, Boston Massachusetts	S.D.	1990-1994	Environmental Health/Air Pollution

Current position:

Research Associate, Harvard School of Public Health, Exposure Epidemiology and Risk Program.

Current efforts include the generation and characterization of exposures to concentrated ambient particles and other substances in support of laboratory studies on the mechanisms of morbidity and mortality of ambient air particulate. Other current efforts include the generation and characterization of exposures to particulate matter from specific sources, using a mobile photochemical laboratory to allow assessment of toxicity of primary and secondary particulate. Ongoing efforts include data analysis, data management, and QA/QC in support of air pollution toxicology studies. Also provide training, assistance, and guidance for doctoral students and post-doctoral fellows in studies relating to air pollution toxicology.

Peer Reviewed Publications:

Lawrence, J., Koutrakis, P., Wolfson, M., Ferguson, S., Godleski, J. (2004) Performance Stability of the Harvard Ambient Particle Concentrator. *AEROSOL SCI TECHNOL* 38:219-227.

Savage, ST, **Lawrence, J**, Katz, T, Stearns, RC, Coull, BA, Godleski, JJ (2003) Does the Harvard/US EPA ambient particle concentrator change the toxic potential of particles? *J. AIR WASTE MANAGE. ASSOC.* 53: 1088-1097.

Wellenius, GA, Coull, BA, Godleski, JJ, Koutrakis, P, Okabe, K, Savage, ST, **Lawrence, JE**, Murthy, GGK, Verrier, RL (2003) Inhalation of concentrated ambient air particles exacerbates myocardial ischemia in conscious dogs. *ENVIRON. HEALTH PERSP.*, 111(4): 402-408.

Batalha, JRF, Saldiva, PHN, Clarke, RW, Coull, BA, Stearns, RC, **Lawrence, J**, Murthy, GGK, Koutrakis, P, Godleski, JJ (2002) Concentrated ambient air particles induce vasoconstriction of small pulmonary arteries in rats. *ENVIRON. HEALTH PERSP.* 110(12): 1191- 1197.

- Godleski JJ, Clarke RW, Coull BA, Saldva PHN, Jiang N-F, **Lawrence J**, Koutrakis, P (2002) Composition of inhaled urban air particles determines acute pulmonary responses. ANN. OCCUP. HYG. 46(S1):419-424.
- Gurgueira, SA, **Lawrence, J**, Coull, B, Murthy, GGK, Gonzalez-Flecha, B (2002) Rapid increases in the steady-state concentration of reactive oxygen species in the lungs and heart after particulate air pollution inhalation. ENVIRON. HEALTH PERSP. 110(8): 749-755.
- Saldiva, PHN, Clarke, RW, Coull, BA, Stearns, RC, **Lawrence, J**, Murthy, GGK, Diaz, E, Koutrakis, P, Suh, H, Tsuda, A, Godleski, JJ (2002) Lung inflammation induced by concentrated ambient air particles is related to particle composition. AM. J. RESPIR. CRIT. CARE MED. 165(12): 1610-1617.
- Goldsmith, CAW, Ning, YY, Qin, GZ, Imrich, A, **Lawrence, J**, Murthy, GGK, Catalano, PJ, Kobzik, L (2002) Combined air pollution particle and ozone exposure increases airway responsiveness in mice. INHAL. TOXICOL. (2002) 14(4): 325-347.
- Clarke, RW, Coull, B, Reinisch, U, Catalano, P, Killingsworth, CR, Koutrakis, P, Kavouras, I, Murthy, GGK, **Lawrence, J**, Lovett, E, Wolfson, JM, Verrier, RL, Godleski, JJ (2000) Inhaled concentrated ambient particles are associated with hematologic and bronchoalveolar lavage changes in canines. ENVIRON. HEALTH PERSP. 108(12): 1179-1187.
- Kavouras, IG, **Lawrence, J**, Koutrakis, P, Stephanou, EG, Oyola, P (1999) Measurement of particulate aliphatic and polynuclear aromatic hydrocarbons in Santiago de Chile: source reconciliation and evaluation of sampling artifacts. ATMOS. ENVIRON. 33(30): 4977-4986.
- Goldsmith, CAW, Hamada, K, Ning, YY, Qin, GZ, Catalano, P, Murthy, GGK, **Lawrence, J**, Kobzik, L (1999) Effects of environmental aerosols on airway hyperresponsiveness in a murine model of asthma. INHAL. TOXICOL. 11(11): 981-998.
- Allen, GA, **Lawrence, J**, Koutrakis, P (1999) Field validation of a semi-continuous method for aerosol black carbon (aethalometer) and temporal patterns of summertime hourly black carbon measurements in southwestern PA. ATMOS. ENVIRON. 33(5): 817-823.
- Lawrence, J**, Koutrakis, P (1996) Measurement and speciation of gas and particulate phase organic acidity in an urban environment .1. Analytical. J. GEOPHYS. RES.- ATMOSPHERES 101(D4): 9159-9169.
- Lawrence, J**, Koutrakis, P (1996) Measurement and speciation of gas and particulate phase organic acidity in an urban environment .2. Speciation. J. GEOPHYS. RES.- ATMOSPHERES 101(D4): 9171-9184.
- Lawrence, JE**, Koutrakis, P (1994) Measurement of atmospheric formic and acetic-acids: Methods evaluation and results from field studies. ENVIRON. SCI. TECHNOL. 28(5): 957-964.