

BIOGRAPHICAL SKETCH

Provide the following information for the key personnel in the order listed on Form Page 2.
Photocopy this page or follow this format for each person.

NAME		POSITION TITLE	
Joel Schwartz		Associate Professor Environmental Epidemiology Associate Epidemiologist, BWH, Associate Professor of Medicine	
EDUCATION/TRAINING (<i>Begin with baccalaureate or other initial professional education, such as nursing, and include postdoctoral training.</i>)			
INSTITUTION AND LOCATION	DEGREE (if applicable)	YEAR(s)	FIELD OF STUDY
Brandeis University	B.A.	1969	Math, Physics
Brandeis University	Ph.D.	1980	Statistical Physics

RESEARCH AND PROFESSIONAL EXPERIENCE: Concluding with present position, list, in chronological order, previous employment, experience, and honors. Include present membership on any Federal Government public advisory committee. List, in chronological order, the titles, all authors, and complete references to all publications during the past three years and to representative earlier publications pertinent to this application. If the list of publications in the last three years exceeds two pages, select the most pertinent publications. **DO NOT EXCEED TWO PAGES.**

Experience

1977-1979 Legislative Assistant for Energy and Environment, Congressman Timothy Wirth
 1979-1987 Staff Scientist, U.S. Environmental Protection Agency, Washington, DC
 1987-1988 Visiting Scientist, Department of Biostatistics, Harvard School of Public Health, Boston, MA
 1990-1994 Senior Scientist, U.S. Environmental Protection Agency, Washington, D.C.
 1994- Associate Professor Environmental Epidemiology, Harvard School of Public Health, Boston, MA
 1994- Associate Epidemiologist, Brigham and Women's Hospital, Boston, MA
 1994- Associate Professor of Medicine, Harvard Medical School, Boston, MA

Professional Societies

American Statistical Association
 American Thoracic Society
 Society of Epidemiologic Research
 International Society for Environmental Epidemiology

Professional Service

National Academy of Sciences' Committee on Assessing Lead Exposure in Critical Populations
 National Academy of Sciences' Committee on Environmental Epidemiology
 EPA Environmental Health Review Panel
 CDC Advisory Committee on Childhood Lead Poisoning Prevention

Professional Awards

1991 John D. and Catherine T. MacArthur Fellowship Award
 1984, 1986 U.S. Environmental Protection Agency Silver Medal
 1988, 1989, 1990 U.S. Environmental Protection Agency Scientific Achievement Award

Books and Book Chapters

Bellinger D., **Schwartz, J.** Lead Toxicity: Neurobehavior in children and blood pressure in adults. In: Topics in Environmental Epidemiology, (Savitz D, Steenland K, Anto J, Eds.), (1996) Oxford University Press, London.
Schwartz J. Health effects of air pollution from traffic: ozone and particulate matter. In: Health at the Crossroads, (McMichael A, Fletcher T., ed.) (1995) John Wiley and Sons, London.
Schwartz, J., Pitcher, H., Levin, R., Ostro, B., Nichols, A. (1985). The costs and benefits of reducing lead in gasoline. US EPA, EPA 230-05-85-006. Washington D.C.

Selected Publications

Zeger SL, Thomas D, Dominici F, Samet J, **Schwartz J**, Dockery D, Cohen A. Exposure measurement error in time-series studies of air pollution: concepts and consequences. *Environ Health Perspect* 2000;108:419-426.
Schwartz J. The Distributed Lag between Air Pollution and Daily Deaths. *Epidemiol* 2000;11:320-326.

- Schwartz J** and Zanobetti A. Using meta-smoothing to estimate dose-response trends across multiple studies, with application to air pollution and daily death. *Epidemiology* 2000;11(6):666-672.
- Schwartz J.** Is There Harvesting in the Association of Airborne Particles with Daily Deaths and Hospital Admissions? *Epidemiol* 2001;12:55-61.
- Laden F, Neas LM, Dockery DW, **Schwartz J.** Association of fine particulate matter from different sources with daily mortality in six US cities. *Environ Health Perspect* 2000;108:941-947.
- Schwartz J.** Daily deaths are associated with combustion particles rather than SO₂ in Philadelphia. *Occup Environ Med* 2000; 57:692-697.
- Braga AL, Zanobetti A, **Schwartz J.** Do respiratory epidemics confound the association between air pollution and daily deaths? *Eur Respir J* 2000;16(4):723-8.
- Coull BA, **Schwartz J,** and Wand MP. Respiratory Health and Air Pollution: Additive Mixed Model Analyses. *Biostatistics*, in press.
- Schwartz J,** Norris G, Larson T, Sheppard L, Claiborne C, Koenig J. Episodes of high coarse particle concentrations are not associated with increased mortality. *Environmental Health Perspectives* 1999;7:339-342..
- Schwartz J.** Air Pollution and Hospital Admissions for Heart Disease in Eight US Counties. *Epidemiology* 1999;10:17-22.
- Cheng Y, **Schwartz J,** Vokonas PS, Weiss ST, Arp A, Hu H. Electrocardiographic conduction disturbances in association with low-level lead exposure: The Normative Aging Study. *Am J Cardiol* 1998;82(5):594-599 .
- Neas LM and **Schwartz J.** Pulmonary Function Levels as Predictors of Mortality in a National Sample of US Adults. *Am J Epidemiol* 1998;147:1011-1017.
- Zmirou D, **Schwartz J,** Saez M, Zanobetti A, Wojtymiak B, Touloumi G, Spix C, Ponce de Leon A, LeMoullec Y, Bacharova L, Schouten J, Ponka A, Katsouyanni K. Time series analysis of air pollution and cause specific mortality: a quantitative summary in Europe (APHEA study). *Epidemiology* 1998 Sep;9(5):495-503.
- Timonen KL, Viels en J, **Schwartz J,** Gotti A, Vondra V, Gratziau C, Giaever P, Roemer W, Brunekreef B. Chronic respiratory symptoms, skin results, and lung function as predictors of peak flow variability. *Am J Respir Crit Care Med* 1997; 156:776-782.
- Schwartz, J.** (1997) Air pollution and hospital admissions for cardiovascular disease in Tucson. *Epidemiol* 8:371-377.
- Ackermann-Lieblich U, Leuenberger P, **Schwartz J** et al. Lung function and long term exposure to air pollutants in Switzerland. *Am J Respir Crit Care Med* 1997;155:122-129.
- Schwartz, J.,** Dockery, D.W., Neas, LM. (1996). Is daily mortality associated specifically with fine particles? *J. Air Waste Manage. Assoc.* 46:2-14.
- Schwartz, J.** (1996) Air pollution and hospital admissions for respiratory disease. *Epid.* 7:20-28.
- Neas, L.M., and **Schwartz, J.** (1996) The determinants of pulmonary diffusing capacity in a national sample of US adults. *Am. J. Respir. Crit. Care Med.* 153: 656-664.
- Verhoeff, A.P., Hoek, G., **Schwartz, J,** van Wijnen, J.H. (1996). Air pollution and daily mortality in Amsterdam, the Netherlands. *Epid.* 7:225-230.
- Schwartz, J.** and Morris, R. (1995) Air pollution and hospital admissions for cardiovascular disease in Detroit, Michigan. *Am. J. Epid.* 50:23-35.
- Schwartz, J.** and Weiss S.T. (1995) Relationship of skin test reactivity to decrements in pulmonary function in children with asthma or frequent wheezing. *Am. J. Respir. Crit. Care Med.* 152:2176-2180.
- Schwartz, J.** (1994) Nonparametric smoothing in the analysis of air pollution and respiratory illness. *Canadian J Stat* 22: 471-487.
- Schwartz, J.** (1994) Air pollution and hospital admissions for the elderly in Birmingham, Alabama. *Am. J. Epid.* 139:589-598.
- Schwartz, J.** (1994) Low level lead exposure and children's IQ: A meta-analysis and search for a threshold. *Environ. Res.* 65:42-55.
- Schwartz, J.** (1994) What are people dying of on high air pollution days? *Environ. Res.* 64:26-35.
- Schwartz, J.** (1994) Air pollution and hospital admissions for the elderly in Detroit, Michigan. *Am J Respir Crit Care Med* 150:648-655.
- Schwartz, J.,** Weiss, S.T. (1994) Relationship between dietary vitamin C intake and pulmonary function in the First National Health and Nutrition Examination Survey (NHANES 1). *Am. J. Clin. Nutr.* 59:110-114.
- Schwartz, J.,** Weiss, S.T. (1993) Cellular markers of inflammation: Peripheral blood neutrophils and eosinophils predict respiratory symptoms in the first national health and nutrition examination survey. *Chest* 104:1210-1215.
- Leuenberger, P., **Schwartz, J.,** Ackerman-Lieblich, U., et al. (1994) Passive smoking exposure in adults and chronic respiratory symptoms (SAPALDIA study). *Am. J. Respir.Crit. Care Med.* 150:1221-1228.
- Bateson T and **Schwartz J.** Control for seasonal variation and time trend in case-crossover studies of acute effects of environmental exposures. *Epidemiology* 1999;54:596-605.
- Peters A, Liu E, Verrier RL, **Schwartz J,** Gold DR, Mittleman M, Baliff J, Oh A, Allen G, Monahan K, Dockery D. Air pollution and incidence of cardiac arrhythmia. *Epidemiology* 2000;11:11-17.
- Gold DR, Litonjua A, **Schwartz J,** Lovett E, Larson A, Nearing B, Allen G, Verrier M, Cherry R, Verrier R. Ambient Pollution and Heart Rate Variability. *Circulation* 2000;101:1267-1273.
- Zanobetti A, **Schwartz J,** Dockery DW. Airborne particles are a risk factor for hospital admissions for heart and lung disease. *Environ Health Perspect* 2000;108:1071-1077.
- Schwartz J.** Air Pollution and Blood Markers of Cardiovascular Risk. *Environ Health Perspect*, in press.
- Magari SR, Hauser R, **Schwartz J,** Williams PL, Smith TJ, Christiani DC. Association of heart rate variability with occupational and environmental exposure to particulate air pollution. *Circulation*, in press.

