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**BIOGRAPHICAL SKETCH**

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NAME	POSITION TITLE
Frances Silverman	Associate Professor, Department of Medicine, University of Toronto

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**EDUCATION**

INSTITUTION AND LOCATION	DEGREE	YEAR	FIELD OF STUDY
McGill University, Montreal	Ph.D	1978	Respiratory Physiology
McGill University, Montreal	M.S.	1967	Physiology
McGill University, Montreal	B.S.	1963	Science

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**University Appointments**

2001-present Associate Director, Gage Occupational and Environmental Health Unit  
 2001-present Director Research, Gage Occupational and Environmental Health Unit  
 1998-present Director, Collaborative Program, Environment and Health  
 1996-present Associate Director, (E&H) Institute for Environmental Studies  
 1992-present Associate Professor, Department of Medicine  
 1992-present Associate Professor, Dept. of Public Health  
 1992-present Associate Professor, School of Physical & Health Education  
 1982-present Member, Department of Community Health  
 1981-present Member, Institute for Medical Sciences  
 1997-00 Acting Director, Gage Occupational and Environmental Health Unit

**Hospital Appointments**

1999-present Allied Health Care Staff, Department of Medicine, St. Michael's Hospital  
 1984-present Allied Health Care Staff, Dept. of Occ & Env Health, St. Michael's Hospital  
 1996-present Staff Scientist, St. Michael's Hospital Research Centre  
 1993-present Senior Staff Scientist, University Health Network (The Toronto Hospital)  
 1987-present Staff Research Scientist, University Health Network (Toronto Hospital)  
 1974-present Associate (non-medical), Toronto Western Hospital

**Manuscripts in preparation.**

1. Urch, B., Silverman, F., Brook, J.R., Corey, P., Lukic, K., Dupuis, A., Rajagopalan, S., and Brook, R.D. "Exposure to concentrated ambient fine particles and ozone causes a rapid elevation in diastolic blood pressure in healthy adults."

**Refereed Publications.**

1. Urch, B., Brook, J.R., Wasserstein, D., Brook, R.D., Rajagopalan, S., Corey, P. and Silverman, F. "Relative contributions of PM<sub>2.5</sub> chemical constituents to acute arterial vasoconstriction in humans." *Inhalation Toxicology*. 16: 345-352, 2004.
2. Brook, R., Brook, J., Urch, B., Vincent, R., Rajagopalan, S., Silverman, F. "Inhalation of fine particulate air pollution and ozone causes acute arterial vasoconstriction in healthy adults." *Circulation*. 105: pp. 1534-1536, 2002. Selected for Press Release by American Heart Association.
3. Zimmerman, B., Urch, B., Mercado, B. "Food allergy: Frequency of adrenaline administration." *Canadian J. Allergy Clin. Immunol.* 6: 159-161, 2001.

4. Zimmerman, B., Urch, B. "Peanut allergy: Children who lose the positive skin test response." *J. Allergy Clin. Immunol.* 107(3): pp. 558-559, 2001.
5. Alexis, N., Urch, B., Tarlo, S., Corey, P., Pengelly, D., O'Byrne, P., Silverman, F., "Cyclooxygenase-1 (COX-1) metabolites play a different role in ozone-induced pulmonary function decline in asthmatics compared to normals." *Inhalation Toxicology*, Vol. 12, No. 12, 1205-1224, 2000.
6. Zimmerman, B., Silverman, F.S., Tarlo, S.M., Chapman, K., Kubay, J.M., Urch, B. "Induced sputum: Comparison of post-infectious cough with allergic asthma in children." *J. Allergy Clin. Immunol.* 105(3): pp. 495-499, 2000. Selected as Editor's Choice.
7. Petrovic S, Urch B, Brook J, Datema J, Purdham J, Liu L, Lukic Z, Zimmerman B, Tofler G, Downar E, Corey P, Tarlo S, Broder I, Dales R., Silverman F. "Cardiorespiratory effects of concentrated ambient PM<sub>2.5</sub>: A pilot study using controlled human exposures." *Inhalation Toxicology* 12 (Supplement 1): pp. 173-188, 2000.
8. Liu, L., Leech, J.A., Urch, R.B., Poon, R., Zimmerman, B., Kubay, J.M., Silverman, F.S. "A comparison of biomarkers of ozone exposure in human plasma, nasal lavage and sputum." *Inhalation Toxicology* 11: pp. 657-674, 1999 .