

## BIOGRAPHICAL SKETCH

<b>NAME</b> Jeffrey Brook	<b>POSITION TITLE</b> Adjunct Professor		
<b>EDUCATION/TRAINING</b>			
<b>INSTITUTION AND LOCATION</b>	<b>DEGREE</b>	<b>YEAR</b>	<b>FIELD OF STUDY</b>
Michigan State University	B.S.	1982	Physical Sciences
McGill University	Diploma	1983	Meteorology
University of Michigan	M.S.	1988	Atmospheric Science
University of Michigan	PhD	1991	Air Pollution Meteorology

### Positions and Honors.

#### Positions:

08/83 - 08/86	Operational Meteorologist, Atmospheric Environment Service
09/86 – 05/87	Meteorology Teaching Assistant, Department of Atmospheric, Oceanic and Space Sciences, University of Michigan.
05/87 – 05/88	Research Assistant, NOAA, Great Lakes Environmental Research Laboratory, Ann Arbor, Michigan
09/87 – 12/90	Research Assistant, Michigan Atmospheric Deposition Laboratory, Department of Atmospheric, Oceanic and Space Sciences, University of Michigan.
01/91 – 05/91	Lecturer in Atmospheric Sciences, Department of Atmospheric, Oceanic and Space Sciences, University of Michigan.
07/91-03/03	Research Scientist, Meteorological Service of Canada, Air Quality Research Branch, Air Quality Processes Research Division
07/95 – 10/00	Lecturer, Department of Preventive Medicine and Biostatistics The University of Toronto
10/00 - present	Assistant Professor, Department of Public Health Science, The University of Toronto
04/03 – present	Senior Research Scientist, Meteorological Service of Canada, Air Quality Research Branch, Air Quality Processes Research Division
07/03 – present	Professor, Department of Chemical Engineering, The University of Toronto

#### Honors:

1991	ACCESS I Participant, Atmospheric Chemistry Colloquium for Emerging Senior Scientists, Massachusetts Institute of Technology.
1990	The University of Michigan, College of Engineering Atmospheric, Oceanic and Space Sciences Outstanding Achievement Award-Graduate Level.
1982-1983	Atmospheric Environment Service Fellowship in Meteorology..

#### Selected Publications:

1. Brook J.R., Strawbridge K., Snyder B.J., Boudries H., Worsnop D., Anlauf K., Sharma S. and Hayden K. 2003: Towards an understanding of the fine particle variations in the LFV: integration of chemical, physical and meteorological observations. *Atmos. Envir.* (in press)
2. Brook J.R., Johnson D. and Mamedov A. Determination of the Source Areas

- Contributing to Regionally High Warm Season PM<sub>2.5</sub> in Eastern North America. *J. of Air and Waste Management Assoc.* (in press).
3. Burnett R.T., Stieb D., Brook J.R., Cakmak S., Dales R., Raizenne M., Vincent R. and Dann T. The short-term effects of nitrogen dioxide on mortality in Canadian cities. *Archives of Environmental Health* (in press).
  4. Jerrett, M., R. Burnett, J. Brook, P. Kanaroglou, C. Giovis, N. Finkelstein, B. Hutchison. 2003: Do socioeconomic conditions modify the short-term association between air pollution and mortality: a zonal time series from Hamilton, Canada. *Journal of Epidemiology and Community Health*. **58**, 31-40
  5. Urch B, Brook J.R., Wasserstein D., Brook R. D., Rajagopalan S., Corey, P and Silverman F., 2004: Relative Contributions of PM<sub>2.5</sub> chemical constituents to acute arterial vasoconstriction in humans. *Inhalation Toxicology*, 16(6-7), 345-352.
  6. Fan X., Brook J.R., and S. Mabury, 2003: Sampling semivolatile organic species associated with PM<sub>2.5</sub> using an integrated organic gas and particle sampler. *Envir. Sci. Technol.* **37**, 3145-3151.
  7. Womiloju T.O., Miller J.D., Paul M. Mayer P.M. and J.R. Brook, 2003: Methods to determine the biological composition of particulate matter collected from outdoor air. *Atmos. Envir.* **37**, 4335-4344.
  8. Lee P. K., Brook J.R., Dabek-Zlotorzynska E. and S. Mabury, 2003: Identification of the major sources contributing to PM<sub>2.5</sub> observed in Toronto, *Envir. Sci. Technol.* **37**, 4831-4840.
  9. Zhang L., Brook J.R. and Vet. R. 2003: A revised parameterization for gaseous dry deposition in air-quality models. *Atmos. Chem. Phys.*, **3**, 2067-2082
  10. Gilbert N.L., Woodhouse S., Stieb D.M., Brook J.R., 2003: Ambient NO<sub>2</sub> monitoring near a major highway using passive diffusion samplers: a pilot study. *Science of the Total Environment*, **312**, 43-46
  11. Goldberg, M.S., Burnett, R.T., Valois, M.-F., Flegel K., Bailar ,J.C.III, Brook J.R., Vincent R. and K. Radon, 2003: Associations between ambient air pollution and daily mortality among persons with congestive heart failure. *Environmental Research*, 91, 8-20.
  12. Maynard, R., Krewski D., Burnett R.T., Samet J., Brook J.R., Granville G. and L. Craig, 2003: Health and air quality: directions for policy-relevant research. *J. of Toxicology and Environmental Health, Part A*, **66**, 1891-1903.
  13. Urquizo N., Brook J.R., Walmsley J.L. and Burrows W.R., 2003: An empirical approach for Estimation of sulphate concentration in high elevation fog in mountainous areas. *Atmos. Envir.* **37**, 1087-1100.
  14. Zhang L., Brook J.R. and Vet R., 2003: Evaluation of a non-stomatal resistance parameterization for SO<sub>2</sub> dry deposition. *Atmospheric Environment* **37**, 2941-2947
  15. Brook R.D., Brook J.R., Rajagopalan S., 2003: Air pollution: the “heart” of the problem. *Current Hypertension Reports*, **5**, 32-39.
  16. Brook J.R., Lillyman, C.D., Mamedov A., Shepherd M., 2002: Regional transport and urban contributions to fine particle (PM<sub>2.5</sub>) concentrations in southeastern Canada. *J of Air and Waste Management Assoc.* **52**, 174-185.
  17. Brook R.D., Brook J.R., Urch B., Vincent R., Rajagopalan S. and Silverman: 2002: Inhalation of fine particulate air pollution and ozone causes acute arterial vasoconstriction in healthy adults. *Circulation*, **105**: 1534-1536.