

Dan Lawson Crouse, PhD

Research Associate
Department of Sociology
University of New Brunswick

Associate Director, Research
New Brunswick Institute for Research, Data, and Training (NB-IRDT)

email: dlcrouse@gmail.com
Phone: 506 458 7436

Education

- 2010 Doctorate of Philosophy (PhD)
 Department of Geography, McGill University, Montreal, QC
 Dissertation: On the Associations Between Local Concentrations of Ambient Air
 Pollution, Neighbourhood-scale Deprivation, and Postmenopausal Breast
 Cancer in Montreal, Canada
 Supervisors: Nancy A. Ross, Mark S. Goldberg
- 2002 Master of Environmental Studies (MES)
 School of Planning, University of Waterloo, Waterloo, ON
 Thesis: Spatial Coincidence of Poverty, Ill-health, and Environmental Risks to
 Well-being in Lima, Peru
 Supervisor: G. Brent Hall
- 1999 Bachelor of Environmental Studies, Geography Minor (BES, Honours)
 School of Planning, University of Waterloo, Waterloo, ON

Professional Experiences

- 2015 - Research Associate
 Department of Sociology, and
 New Brunswick Institute for Research, Data, and Training (NB-IRDT)
 University of New Brunswick
 Fredericton, NB
- Epidemiologist
 Maritime SPOR Support Unit (MSSU)
 Halifax, NS
- 2014 - 2015 Epidemiologist/Medical Geographer
 Environmental Health, Science, and Research Bureau
 Health Canada, Ottawa, ON
- 2013 Research Analyst

Health Analysis Division
Statistics Canada, Ottawa, ON

2010 - 2013 NSERC Visiting Fellow
Environmental Health, Science, and Research Bureau
Health Canada, Ottawa, ON

2003 - 2005 Project Manager
Department of Geography
McGill University, Montreal, QC

2003 Research Assistant
School of Geography & Geology
McMaster University, Hamilton, ON

Refereed Publications

49 peer-reviewed articles published or in press

Summary of publication record from Scopus as of December 6, 2017:

1,026 total citations

H-index = 15

Submitted

Crouse DL, Balram A, Hystad P, Pinault L, van den Bosch M, Chen H, Rainham D, Thomson EM, Close CH, van Donkelaar A, Martin RV, Ménard R, Robichaud A, Villeneuve P. Associations between living near water and risk of mortality among urban Canadians. *The Lancet* (submitted)

Cakmak S, Hebbern C, Pinault L, Lavigne E, **Crouse DL**, Tjepkema. Associations between long-term PM_{2.5} and ozone exposure and mortality in the Canadian Census Health and Environment Cohort (CANCHEC), by spatial synoptic classification zone. *Environment International* (submitted)

Pinault L, Brauer M, **Crouse DL**, Weichenthal S, Erickson A, van Donkelaar A, Martin RV, Charbonneau S, Hystad P, Brook JR, Tjepkema M, Burnett RT. Diabetes modifies susceptibility to the effects of PM_{2.5} air pollution exposure on cardiovascular mortality in a national Canadian cohort. *Epidemiology* (submitted)

Lavigne E, Belair M-A, Rodriguez-Duque D, Do M, Stieb D, Hystad P, van Donkelaar A, Martin RV; **Crouse DL**, Crighton E, Chen H, Burnett RT; Weichenthal S, Villeneuve PJ, To T, Brook JR, Johnson M, Cakmak S, Yasseen III AS, Walker M. Effect modification of prenatal exposure to ambient air pollution and childhood asthma incidence. *European Respiratory Journal* (submitted)

Leonard PSJ, **Crouse DL**, Boudreau J, Gupta N, McDonald JT. What explains maternal postoperative outcomes after caesarean section? Results from a population-based cohort study. *Obstetrics & Gynecology* (submitted)

Buteau S, Goldberg MS, Burnett R, Gasparrini A, Valois M-F, Brophy J, **Crouse DL**, Hatzopoulou M. Longitudinal study of the associations between ambient air pollution

and daily mortality in congestive heart failure: Case-crossover and nested case-control analyses using a distributed lag nonlinear model. *Environment International* (submitted)

Pinault L, Thomson EM, Colman I, Tjepkema M, van Donkelaar A, Martin RV, Hystad P, Shin H, **Crouse DL**, Burnett RT. Self-reported stress and distress associations with air pollution exposure in Canada. *Health & Place* (submitted)

In press

Crouse DL, Leonard PSJ, Boudreau J, McDonald JT. Associations between provider and hospital volumes and postoperative mortality following total hip arthroplasty in New Brunswick: Results from a provincial-level cohort study. *Canadian Journal of Surgery*. (accepted)

Carrier M, Apparicio P, Séguin A-M, **Crouse DL**. School locations and road transportation nuisances in Montreal: An environmental equity diagnosis. *Transport Policy*. (accepted)

2017

Crouse DL, Pinault L, Balram A, Hystad P, Peters PA, Chen H, van Donkelaar A, Martin RV, Ménard R, Robichaud A, Villeneuve P. Urban greenness and mortality in Canada's largest cities: Results from a national cohort study. *The Lancet Planetary Health*. 2017; 1: e289-97

Pinault L, Weichenthal S, **Crouse DL**, Brauer M, Erickson A, van Donkelaar A, Martin RV, Hystad P, Chen H, Finès P, Brook JR, Tjepkema M, Burnett RT. Associations between fine particulate matter and mortality in the 2001 Canadian Census Health and Environment Cohort (2001 CanCHEC). *Environmental Research*. 2017; 159: 406-415.

Goldberg MS, Labrèche F, Weichenthal S, Lavigne E, Valois M-F, Hatzopoulou M, Van Ryswyk K, Shekarrizfard M, Villeneuve PJ, **Crouse DL**, Parent M-E. The association between the incidence of postmenopausal breast cancer and concentrations at street-level of nitrogen dioxide and ultrafine particles. *Environmental Research*. 2017; 158:7-15.

Lavigne E, Belair M-A, Stieb DM, Hystad P, van Donkelaar A, Martin RV, **Crouse DL**, Crighton E, Chen H, Brook JR, Burnett RT, Weichenthal S, Villeneuve PJ, To T, Johnson M, Walker M. Maternal exposure to ambient air pollution and risk of early childhood cancers: a population-based study in Ontario, Canada. *Environment International*. 2017; 100: 139-147.

Buteau S, Hatzopoulou M, **Crouse DL**, Smargiassi A, Burnett RT, Logan T, Deville Cavellin L, Goldberg MS. Comparison of spatiotemporal prediction models of daily exposure of individuals to ambient nitrogen dioxide and ozone in Montreal, Canada. *Environmental Research*. 2017; 156: 201-230.

Jerrett M, Turner MC, Beckerman B, Pope CA III, van Donkelaar A, Martin RV, Serre M, **Crouse DL**, Gapstur SM, Krewski D, Diver WR, Coogan PF, Thurston GD, Burnett RT. Comparing the Health Effects of Ambient Particulate Matter Estimated using Ground-

based versus Remote Sensing Exposure Estimates. *Environmental Health Perspectives*. 2017; 125(4): 552-559.

Goldberg MS, Villeneuve PJ, **Crouse DL**. Does Exposure Prediction Bias Health-Effect Estimation? The Relationship Between Confounding Adjustment and Exposure Prediction. *Epidemiology*. 2017; 28(1): e2-e3.

2016

Nasari MN, Szyszkowicz M, Chen H, **Crouse DL**, Turner MC, Jerrett M, Pope CA III, Hubbell B, Fann N, Cohen A, Gapstur SM, Diver WR, Stieb D, Forouzanfar MH, Kim S-Y, Olives C, Krewski D, Burnett RT. A Class of Non-Linear Exposure-Response Models Suitable for Health Impact Assessment Applicable to Large Cohort Studies of Ambient Air Pollution. *Air Quality, Atmosphere, and Health*. 2016; 9: 961-972.

Ashley-Martin, J, Lavigne E, Arbuckle TE, Johnson M, Hystad P, **Crouse DL**, Marshall JS, Dodds L. Air pollution during pregnancy and cord blood immune system biomarkers. *Journal of Occupational and Environmental Medicine*. 2016; 58(10):979-986.

Lavigne E, Ashley-Martin J, Dodds L, Arbuckle TE, Hystad P, Johnson M, **Crouse DL**, Ettinger AS, Shapiro GD, Fisher M, Morisset A-S, Taback S, Bouchard MF, Sun L, Monnier P, Dallaire R, and Fraser WD. Air pollution exposure during pregnancy and fetal markers of metabolic function: The MIREC Study. *American Journal of Epidemiology*. 2016; 183(9): 842-851.

Tomczak A, Miller AB, Weichenthal SA, To T, Wall C, van Donkelaar A, Martin RV, **Crouse DL**, Villeneuve PJ. Long-term exposure to fine particulate matter air pollution and the risk of lung cancer among participants of the Canadian National Breast Screening Study. *International Journal of Cancer*. 2016; 139: 1958-1966.

Cakmak S, Hebbern C, **Crouse DL**, Burnett RT. Ozone exposure and cardiovascular-related mortality in the Canadian Census Health and Environment Cohort (CanCHEC) by spatial synoptic classification zone. *Environmental Pollution*. 2016; 214: 589-599.

Carrier M, Apparicio P, Kestens Y, Seguin A-M, Pham H, **Crouse DL**, Siemiatycki J. Application of a Global Environmental Equity Index in Montreal: Diagnostic and Further Implications. *Annals of the American Association of Geographers*. 2016; 106(0): 1-18.

Shekarrizfard M, Faghieh-Imani A, **Crouse DL**, Goldberg MS, Ross NA, Eluru N, Hatzopoulou M. Individual exposure to traffic related air pollution across land-use clusters. *Transportation Research Part D*. 2016; 46: 339-350.

Turner MC, Jerrett M, Pope CA III, Krewski D, Gapstur SM, Diver WR, Beckerman BS, Marshall JD, Su J, **Crouse DL**, Burnett RT. Long-Term Ozone Exposure and Mortality in a Large Prospective Study. *American Journal of Respiratory and Critical Care Medicine*. 2016; 193(10): 1134-1142.

Crouse DL, Philip S, van Donkelaar A, Martin RV, Jessiman B, Peters PA, Weichenthal S, Brook JR, Hubbell B, Burnett RT. A New Method to Jointly Estimate the Mortality Risk of Long-Term Exposure to Ambient Fine Particulate Matter and its Components. *Scientific Reports*. 2016; 6(18916): 1-10.

- Stieb DM, Chen L, Hystad P, Beckerman BS, Jerrett M, Tjepkema M, **Crouse DL**, Omariba W, Peters PA, van Donkelaar A, Martin RV, Burnett RT, Liu S, Smith-Doiron M, Dugandzic RM. A national study of the association between traffic-related air pollution and adverse pregnancy outcomes in Canada, 1999-2008. *Environmental Research*. 2016; 148: 513-526.
- Lavigne E, Yasseen AS III, Stieb DM, Hystad P, van Donkelaar A, Martin RV, Brook JR, **Crouse DL**, Burnett RT, Chen H, Weichenthal S, Johnson M, Villeneuve PJ, Walker M. Ambient air pollution and adverse birth outcomes: differences by maternal comorbidities. *Environmental Research*. 2016; 148: 457-466.
- Pinault L, **Crouse DL**, Jerrett M, Brauer M, Tjepkema M. Spatial associations between socioeconomic groups and NO₂ air pollution exposure within three large Canadian cities. *Environmental Research*. 2016; 147: 373-382.
- Carrier M, Apparicio P, Seguin A-M, **Crouse DL**. The cumulative effect of nuisances from road transportation in residential sectors on the Island of Montreal – Identification of the most exposed groups and areas. *Transportation Research Part D*. 2016; 46: 11-25.
- Pinault L, **Crouse DL**, Jerrett M, Brauer M, Tjepkema M. Socioeconomic differences in ambient air pollution exposure among children in the three largest Canadian cities. *Health Reports*. 2016; 27(7): 3-8.
- Pinault L, Tjepkema M, **Crouse DL**, Weichenthal S, van Donkelaar A, Martin RV, Brauer M, Chen H, Burnett RT. Risk estimates of mortality attributed to low concentrations of ambient fine particulate matter in the Canadian Community Health Survey Cohort. *Environmental Health*. 2016; 15(18): 1-15.
- Stieb DM, Chen, L, Beckerman BS, Jerrett M, **Crouse DL**, Omariba DWR, Peters PA, van Donkelaar A, Martin RV, Burnett RT, Gilbert NL, Tjepkema M, Liu S, Dugandzic RM. Association of pregnancy outcomes and PM_{2.5} in a national Canadian study. *Environmental Health Perspectives*. 2016; 124(2): 243-249.
- Weichenthal S, **Crouse DL**, Godri-Pollitt K, Evans G, van Donkelaar A, Martin RV, Burnett RT. Oxidative Burden of Fine Particulate Air Pollution and Risk of Cause-Specific Mortality in the Canadian Census Health and Environment Cohort (CanCHEC). *Environmental Research*. 2016; 146: 92-99.

2015

- Crouse DL**, Peters, PA, Hystad P, Brook JR, van Donkelaar A, Martin RV, Villeneuve PJ, Jerrett M, Goldberg MS, Pope CA III, Brauer M, Brook RD, Burnett RT. Associations between ambient PM_{2.5}, O₃, and NO₂ and mortality in the Canadian Census Health and Environment Cohort (CanCHEC) over a 16-year follow-up. *Environmental Health Perspectives*. 2015; 123(11): 1180-1186.
- Kharol SK, Martin RV, Philip S, Boys B, Lamsal LN, Jerrett M, Brauer M, **Crouse DL**, McLinden C, Burnett RT. Assessment of the Magnitude and Recent Trends in Satellite-Derived Ground-Level Nitrogen Dioxide over North America. *Atmospheric Environment*. 2015; 118: 236-245.
- Shekarizfard M, Yasmin S, Valois M-F, Goldberg MS, **Crouse DL**, Ross, NA. Investigating the Role of Transport Models in Epidemiologic Studies of Traffic Related Air Pollution and Health Effects. *Environmental Research*. 2015; 140: 282-291.

Villeneuve PJ, Weichenthal SA, **Crouse DL**, Miller AB, To T, Martin RV, van Donkelaar A, Wall C, Burnett RT. Long-term exposure to fine particulate matter air pollution and mortality among Canadian women. *Epidemiology*. 2015; 26(4): 536-545.

Hystad P, Villeneuve PJ, Goldberg MS, **Crouse DL**, Johnson K, and the Canadian Cancer Registries Epidemiology Research Group. Exposure to traffic-related air pollution and the risk of developing breast cancer among women in eight Canadian provinces: a case-control study. *Environment International*. 2015; 74: 240-248.

Crouse DL, Peters, PA, Villeneuve PJ, Proux M-O, Shin HH, Goldberg MS, Johnson M, Wheeler AJ, Allen RW, Atari DO, Jerrett M, Brauer M, Brook JR, Burnett RT. Within- and between-city contrasts in nitrogen dioxide and mortality in 10 Canadian cities. *Journal of Exposure Science and Environmental Epidemiology*. 2015; 25(5): 482-489.

2014

Shin HH, Cakmak S, Brion O, Villeneuve PJ, Turner MC, Goldberg MS, Jerrett M, Chen H, **Crouse DL**, Peters PA, Pope CA III, Burnett RT. Indirect Adjustment for Multiple Missing Variables Applicable to Environmental Epidemiology. *Environmental Research*. 2014; 134: 482-487.

Carrier M, Séguin A-M, Apparicio P, **Crouse DL**. Ambient air pollution concentration in Montreal and environmental equity: Are children at risk at school? *Case Studies on Transport Policy*. 2014; 2(2): 61-69.

Carrier M, Apparicio P, Seguin A-M, **Crouse DL**. The application of three methods to measure the statistical association between different social groups and the concentration of air pollutants in Montreal: A case of environmental equity. *Transportation Research Part D*. 2014; 30: 38–52.

2013

Carrier M, Séguin A-M, Apparicio P, **Crouse DL**. Les résidences pour personnes âgées de l'île de Montréal appartenant aux parcs social et privé: une exposition inéquitable à la pollution de l'air? *Cahiers de géographie du Québec*. 2013; 57(161): 239-256.

Peters PA, Tjepkema M, Fines P, Wilkins R, **Crouse DL**, Chan PC, Burnett RT. Data Resource Profile: 1991 Canadian Census cohort. *International Journal of Epidemiology*. 2013; 42(5): 1319-1326.

Brook RD, Cakmak S, Turner MC, Brook JR, **Crouse DL**, Peters PA, van Donkelaar A, Villeneuve PJ, Brion O, Jerrett M, Martin RV, Rajagopalan S, Goldberg MS, Pope III CA, Burnett RT. Long-Term Fine Particulate Matter Exposure and Mortality from Diabetes Mellitus in Canada. *Diabetes Care*. 2013; 36(10): 3313-3320.

Hatzopoulou M, Weichenthal S, Barreau G, Goldberg MS, Farrell W, **Crouse DL**, Ross NA. A web-based route planning tool to reduce cyclists' exposures to traffic pollution: A case study in Montreal, Canada. *Environmental Research*. 2013; 123: 58-61.

Parent M-E, Goldberg MS, **Crouse DL**, Ross NA, Chen H, Valois MF, Liautaud A. Traffic-Related Air Pollution and Prostate Cancer Risk: a Case-Control Study in Montreal, Canada. *Occupational and Environmental Medicine*. 2013; 70: 511–518.

2012

Crouse DL, Peters PA, van Donkelaar A, Goldberg MS, Villeneuve PJ, Brion O, Khan S, Atari DO, Jerrett M, Pope III CA, Brauer M, Brook JR, Martin RV, Stieb D, Burnett RT. Risk of Cardiovascular Mortality in Relation to Long-term Exposure to Low Concentrations of Fine Particulate Matter: A Canadian National-level Cohort Study. *Environmental Health Perspectives*. 2012; 120(5): 708-714.

Strauss J, Miranda-Moreno L, **Crouse D**, Goldberg MS, Ross NA, Hatzopoulou M. Investigating the link between cyclist volumes and air pollution along 3 bicycle facilities in a dense urban core. *Transportation Research Part D*. 2012; 17: 619-625.

2010

Crouse DL, Goldberg MS, Ross NA, Chen H, Labrèche F. Postmenopausal Breast Cancer is Associated with Exposure to Traffic-related Air Pollution in Montreal, Canada: A Case-Control Study. *Environmental Health Perspectives*. 2010; 118 (11): 1578-1583.

Gregory E, **Crouse DL**, Krishnamoorthy P, Legault L. Comparisons of Type 1 and 2 diabetes socioeconomic characteristics in a Montreal pediatric clinic. *Canadian Journal of Diabetes*. 2010; 34(4): 340-345.

Chen H, Goldberg MS, **Crouse DL**, Burnett RT, Jerrett M, Villeneuve PJ, Wheeler AJ, Labrèche F, Ross NA. Back-extrapolation of Estimates of Exposure from Current Land-use Regression Models. *Atmospheric Environment*. 2010; 44(35): 4346-4354.

2009

Crouse DL, Goldberg MS, Ross NA. A Prediction-based Approach to Modelling Temporal and Spatial Variability of Traffic-related Air Pollution in Montreal, Canada. *Atmospheric Environment*. 2009; 43: 5075-5084.

Crouse DL, Ross NA, Goldberg MS. Double Burden of Deprivation and High Concentrations of Ambient Air Pollution at the Neighbourhood-scale in Montreal, Canada. *Social Science and Medicine*. 2009; (69): 971-981.

2007

Ross NA, Tremblay S, Khan S, **Crouse DL**, Tremblay M, Berthelot J-M. Body Mass Index in Urban Canada: Neighbourhood and Metropolitan Area Effects. *American Journal of Public Health*. 2007; 97(3): 500-508.

Jerrett M, Arain A, Kanaroglou P, Beckerman B, **Crouse DL**, Gilbert NL, Brook JR, Finkelstein N, Finkelstein, M. Modelling the Intra-Urban Variability of Ambient Traffic Pollution in Toronto, Canada. *Journal of Toxicology and Environmental Health, Part A*. 2007; 70: 200-212.

Non-refereed Papers and Reports

Ross NA, Berthelot JM, **Crouse DL**, Fines P, Khan S, Sanmartin C, Tremblay S. Unpacking the Socioeconomic Health Gradient: A Canadian Intra-Metropolitan Research Program. Submitted to Health Canada, Ottawa, September 2005.

Crouse DL. Spatial Coincidence of Poverty, Ill-Health and Environmental Risks to Population Well-being in the Cono Norte of Lima, Peru. Unpublished Master's Thesis. University of Waterloo, 2002.

Hall GB, **Crouse DL**, Peters PA. The Transfer of GIS Technology to Community Planning in Peru. *Plan Canada*. 2001; 41 (2): 15-16.

Presentations

Crouse DL, Balram A. Does Living in Greener Areas and Near Water Affect Mortality? The Canadian Urban Environmental Health Research Consortium (CANUE) Expert Webinars Series, Online, October 2017.

Crouse DL, Peters, PA, Hystad P, Brook JR, van Donkelaar A, Martin RV, Villeneuve PJ, Jerrett M, Goldberg MS, Pope CA III, Brauer M, Brook RD, Burnett RT. Associations between ambient PM_{2.5}, O₃, and NO₂ and mortality in the Canadian Census Health and Environment Cohort (CanCHEC) over a 16-year follow-up. Poster presented at the Health Effects Institute Annual meeting. Alexandria, VA, April 2017.

Crouse DL. Brauer M, Burnett R, Weichenthal S, Erickson A, Martin RV, Hystad P, Brook JR, Tjepkema M, Pinault L. Mortality due to Air Pollution at Low levels of Exposure (MAPLE): Exposure assessment plan. Presented at the Health Effects Institute working group meeting to discuss studies assessing health effects of long-term exposure to low levels of ambient air pollution. Alexandria, VA, April 2017.

Crouse DL. Kotze G, Arsenault T. Exploring Environmental Health Indicators for Children in NB. Presented at Healthy Lives Begin Prenatally; a Conference of the New Brunswick Children's Environmental Health Collaborative. New Maryland, NB, January 2017.

Crouse DL. Nature-Health Interconnections: using GIS to link exposures to natural environments for analyses of health. Presented at the ESRI Canada Maritimes User Conference. Fredericton, NB, October 2016.

Crouse DL, Rainham D. Nature-health interconnections: Evidence, mechanisms, and current research. Presented at the Canadian Association of Geographers 2016 Annual Meeting. Halifax, NS, June 2016.

Crouse DL. The New Brunswick Institute for Research, Data, and Training. Health Research in New Brunswick for You. Presented to New Brunswick MLAs. Fredericton, NB, April 2016.

Crouse DL. Methods and Potential for Linking Administrative Datasets with Environmental Data Sources. Presented at the Atlantic Research Data Centre & University of New Brunswick Research Data Centre joint information session. Halifax, NS, March 2016.

Crouse DL, Peters PA, Villeneuve PJ, Proux M-O, Shin HH, Goldberg MS, Johnson M, Wheeler AJ, Allen RW, Atari DO, Jerrett M, Brauer M, Brook JR, Burnett RT. Within- and between-city contrasts in nitrogen dioxide and mortality in 10 Canadian cities.

Presented at the ESRI Canada Maritimes User Conference. Halifax, NS, October 2015.

Crouse DL, Peters PA, Villeneuve PJ, Proux M-O, Shin HH, Goldberg MS, Johnson M, Wheeler AJ, Allen RW, Atari DO, Jerrett M, Brauer M, Brook JR, Burnett RT. Within- and between-city contrasts in nitrogen dioxide and mortality in 10 Canadian cities. Presented at the Health Canada Science Forum. Ottawa, ON, February 2015.

Crouse DL, Peters PA, Villeneuve PJ, Proux M-O, Shin HH, Goldberg MS, Johnson M, Wheeler AJ, Allen RW, Atari DO, Jerrett M, Brauer M, Brook JR, Burnett RT. Within- and between-city contrasts in nitrogen dioxide and mortality in 10 Canadian cities. Presented at the 9th Annual Air Quality: Science and Application conference. Garmisch-Partenkirchen, Germany, March 2014.

Crouse DL, Peters PA, Villeneuve PJ, Proux M-O, Shin HH, Goldberg MS, Johnson M, Wheeler AJ, Allen RW, Atari DO, Jerrett M, Brauer M, Brook JR, Burnett RT. Within- and between-city contrasts in nitrogen dioxide and mortality in 10 Canadian cities. Presented at the Statistics Canada Science Seminar, Ottawa, ON, March 2014.

Crouse DL, Peters PA, Burnett R. Using the Canadian Census Health and Environmental Cohort to Support Canadian Accountability Tools. Presented at the Health Canada Science Forum. Ottawa, ON, December 2013.

Crouse DL, Goldberg MS, Ross NA. Associations Between Local Concentrations of Ambient Air Pollution, Neighbourhood-scale Deprivation, and Postmenopausal Breast Cancer in Montreal, Quebec. Presented at the Occupational and Environmental Health Seminar Series, School of Public Health, University of California, Berkeley, California, October 2010.

Crouse DL, Goldberg MS, Ross NA, Chen H, Labrèche F. Postmenopausal Breast Cancer is Associated with Exposure to Traffic-related Air Pollution in Montreal, Canada. Presented at the American Association for Aerosol Research Specialty Conference. San Diego, California, March 2010.

Crouse DL, Ross NA, Goldberg MS. Risks to Health Associated with Exposure to Local Concentrations of Ambient Air Pollution in Montreal. Presented at Seminar Series, Division of Clinical Epidemiology, McGill University Health Centre. Montreal, QC, December 2009.

Crouse DL, Ross NA, Goldberg MS. Risks to Health Associated with Exposure to Local Concentrations of Ambient Air Pollution in Montreal. Presented at Joint Seminar Series, Transportation Research At McGill (TRAM) and Centre interuniversitaire de recherche sur les réseaux d'entreprise, la logistique, et le transport (CIRRELT). Montreal, QC, September 2009.

Crouse DL, Ross NA, Goldberg MS. Double Burden of Deprivation and High Concentrations of Ambient Air Pollution at the Neighbourhood scale in Montreal, Canada. Presented at the International Society for Environmental Epidemiology Annual Conference. Dublin, Ireland, August 2009.

Crouse DL, Ross NA, Goldberg MS. Double Burden of Deprivation and High Concentrations of Ambient Air Pollution at the Neighbourhood Scale in Montreal, Canada. Presented at the International Symposium in Medical Geography. Hamilton, ON, July 2009.

Crouse DL. Environmental and social inequalities in Montreal neighbourhoods: A land

use regression approach. Presented at Groupe de recherche en épidémiologie des zoonoses et santé publique, Spatial Statistics Lecture Series, Faculté de médecine vétérinaire de l'Université de Montréal. Saint-Hyacinthe, QC, March 2008.

Crouse DL, Ross NA, Goldberg MS. Environmental and Social Inequalities in Montreal Neighbourhoods: A Land Use Regression Approach. Presented at the Canadian Public Health Association Annual Meeting. Ottawa, ON, September 2007.

Crouse DL. Modelling Traffic-related Air Pollution in Montreal. Presented at Border Air Quality Study (BAQS) Meeting. Ottawa, ON, February 2007.

Crouse DL. Modelling Traffic-related Air Pollution in Montreal. Presented at Border Air Quality Study (BAQS) Team Meeting. Blaine, Washington, January 2007.

Crouse DL, Hall GB. Building Capacity in Spatial Information Technology use for a Community-based Organization in Lima, Peru. Presented at the Canadian Association of Geographers 2002 Annual Meeting. Toronto, ON, June 2002.

Crouse DL, Peters PA. Identifying Areas of Poverty and Environmental Stress with the Use of Socioeconomic Statistics: a preliminary analysis of Carabayllo, Peru. Presented at GISDECO, International Rice Research Institute, Los Baños, Philippines, November 2000.

Courses Taught & Guest Lectures

Introduction to Clinical Epidemiology. Lecture to ClinEpi: An Introduction to Patient-Oriented Health Research Workshop. Maritime SPOR Support Unit, Halifax, NS, November 2017.

Spatial Analytics for Health Research. Co-taught two-day workshop to 20 participants. Maritime SPOR Support Unit, Fredericton, NB, November 2017.

SOCI 6801: Social and Spatial Determinants of Health (independent/directed studies course), University of New Brunswick, Fredericton, NB, Fall 2017

Introduction to Clinical Epidemiology. Lecture to ClinEpi: An Introduction to Patient-Oriented Health Research Workshop. Maritime SPOR Support Unit, Saint John, NB, November 2016.

Place and Space in Health Research. Lecture to undergraduate course, Health Research Methods. Carleton University, Ottawa, ON, November 2016.

Spatial Analytics for Health Research. Co-taught two-day workshop to 10 participants. Maritime SPOR Support Unit, Charlottetown, PE, June 2016.

Air pollution and Health. Lecture to undergraduate course, Sociology of Health. University of New Brunswick, Fredericton, NB, February 2016.

Spatial Analytics for Health Research. Co-taught two-day workshop to 20 participants. Maritime SPOR Support Unit, Halifax, NS, February 2016.

Introduction to Clinical Epidemiology. Lecture to ClinEpi: An Introduction to Patient-Oriented Health Research Workshop. Maritime SPOR Support Unit, Halifax, NS, November 2015.

Introduction to ArcGIS. Co-taught two-day workshop to 20 participants. Maritime SPOR

Support Unit, Fredericton, NB, November 2015.

The Role of the Physical Environment in Health Inequalities. Lecture to undergraduate course, Health Geography. McGill University, Montreal, QC, February 2011.

Spatial Modelling of Air Pollution in Montreal: A Land Use Regression Approach. Lecture to undergraduate course, Socioeconomic Applications of GIS. McGill University, Montreal, QC, March 2010.

The Role of the Physical Environment in Health Inequalities. Lecture to undergraduate course, Health Geography. McGill University, Montreal, QC, February 2010.

The Role of the Physical Environment in Health Inequalities. Lecture to undergraduate course Health Geography. McGill University, Montreal, QC, February 2009.

Students

Supervisor

Sandra Magalhaes, Postdoctoral Fellow, University of New Brunswick, 2017-18. "The Role of Environmental Air Pollution in Multiple Sclerosis Risk and Hospitalization: A Study Using Administrative Data from New Brunswick" (Co-supervisor with Neeru Gupta).

James Dunbar, MA Sociology, University of New Brunswick, 2015-16. "I Do?: Timing of Marriage and Common Law Unions After Experiencing Family Disruption. Practices and Opinions of Canadian Youth" (Co-supervisor with Lucia Tramonte).

Committee Member

Isabel Garcés, Masters of Applied Health Sciences, University of New Brunswick, 2015-16. "Individual and ecological determinants of access to mental health services for youth: An analysis of survey and census data".

Awards and Distinctions

2010 Jacques May Thesis Prize for top doctoral dissertation in Medical Geography
Association of American Geographers (250 US\$)

2009 Visiting Fellowship in a Canadian Government Laboratory
Natural Sciences and Engineering Research Council of Canada (NSERC),
(58,000\$ x 3 years)

2008 Warren Fellowship in GIS, Research award
Department of Geography, McGill University, (5,000\$)

2006 Canada Graduate Scholarship
Canadian Institutes for Health Research (CIHR), (35,000\$ x 3 years)

2001 Innovative Research Award
Canadian International Development Agency (CIDA), (10,000\$)

- 2000 Ed Forrest Education Endowment Award
Geospatial Information Technology Association (GITA), (2,000 US\$)
- 1998 John Geddes Memorial Award, Research Award
Faculty of Environmental Studies, University of Waterloo, (150\$)

Grants

Awarded

- 2017 Co-Investigator: Outcomes in older adults with isolated hip fractures: A comprehensive study across regional hospitals in New Brunswick. PIs: Neil Branch, Pamela Jarrett, James Wagg.
New Brunswick Trauma Program Research Fund (\$10,000)
- 2015 Co-Investigator: Identifying the shape of the association between long-term exposure to low levels of ambient air pollution and the risk of mortality: An extension of the Canadian Census Health and Environment Cohort using innovative data linkage and exposure methodology. PI: Michael Brauer.
Health Effects Institute (\$1,707,314 US)

Submitted/Pending

Principal Investigator: The benefits of residential exposures to natural environments on mental health and well-being among participants of the Canadian Longitudinal Study on Aging.

CIHR Project Grant (\$145,000)

Co-Investigator: PLACE: The Population, Longevity, and Community Environment project. PI: Paul Villeneuve.

CIHR Project Grant (\$1,530,000)

Co-principal applicant (with Daniel Rainham). Developing a nature-based solutions framework and research incubator in support of healthy cities.

CIHR Planning and Dissemination Grant (\$10,000)

Co-Investigator: Evaluating the impact of hospital restructuring on access to health services and health outcomes in New Brunswick. PI: Ted McDonald.

CIHR Project Grant (\$240,000)

Co-Investigator: Personalized risk prediction of mortality and chronic disease: methods to improve the use of multiple sources of data and information. PI: Doug Manuel.

Catalyst Grant: Personalized Health Catalyst Grants (\$200,000)

Co-Investigator: Surveillance of new and emerging animal transmitted diseases. PI: Anil

Adishesh.

Canadian AgriSafety Applied Research Program (\$473,100)

Academic Activities and Service

Selected journals for which I have peer-reviewed manuscripts (total reviews, 57):

American Journal of Preventive Medicine
Atmospheric Environment
BMJ
Canadian Journal of Public Health
Environmental Impact Assessment Review
Environment International
Environmental Health Perspectives
Environmental Pollution
Environmental Research
Environmental Science & Technology
Epidemiology
European Heart Journal
Health & Place
International Journal of Health Geographics
Journal of Exposure Science and Environmental Epidemiology
New England Journal of Medicine
Science of the Total Environment
Social Science and Medicine
The Canadian Geographer
The Lancet Planetary Health

- 2017 Peer-reviewer for Elsevier Book Proposal: Quantitative Air Pollution.
- 2016-2017 Member. New Brunswick Children's Environmental Health Collaborative.
- 2016-2017 Member. Hiring committee, New Brunswick Institute for Research, Data, and Training.
- 2016 Peer-reviewer for Natural Sciences and Engineering Research Council of Canada (NSERC) Discovery Grant proposal.
- 2016-2017 Member. Board of Directors, The Canadian Urban Environmental Health Research Consortium (CANUE).
- 2016 Member. Graduate Program Committee, Department of Sociology, University of New Brunswick.
- 2007-2008 Student representative. Graduate Affairs committee, Department of Geography, McGill University.
- 2007 Departmental Representative. Faculty Review Committee, Faculty of Science, McGill University.
- 2007 Student representative. Departmental Hiring Committee, Department of Geography, McGill University.
- 2006-2008 VP Event Coordinator. Graduate Student Society, Department of

Geography, McGill University.

Media Citations

October 11, 2017: Press release picked up by national media; presented on local and national radio and television news: "National study suggests greener surroundings lead to a longer life"

April 24, 2017: Le Devoir newspaper, Montreal, QC: "Les Montréalais des quartiers défavorisés doivent souvent composer avec la proximité des grandes artères"

December 2016: Profiled as an innovative researcher in the 2015-16 UNB President's Annual Report: "Our health, our world"

January 27, 2016: CBC News New Brunswick and CBC Radio 1 interview: "Clean air advocates applaud online portal for pollution data"

December 7, 2015: Telegraph-Journal newspaper, St. John, NB: "Fronting the data revolution in New Brunswick"

November 2, 2015: Press release picked up by national and international print media; presented on local and national radio and television news: "New study links life expectancy to pollution, diabetes among higher risks"

May 1, 2012: Environmental Health Perspectives, News/Science Selections: "Hearts over Time: Cardiovascular Mortality Risk Linked to Long-Term PM_{2.5} Exposure"

October 6, 2010: Press release picked up by national and international print media; presented on local and national radio and television news: "Montreal study links air pollution to breast cancer"

October 3, 2009: Montreal Gazette newspaper, Montreal, QC: "Who owns the roads in Montreal?"

August 20, 2009: CBC Radio 1 interview: "A study shows that air pollution in the city is worse in some affluent neighbourhoods"

August 20, 2009: La Presse newspaper, Montreal, QC: "La pollution ne connaît pas de quartier"

March 22, 2002: Alternatives Journal: "Plotting Against Poverty"