Department of Economics Brock University 500 Glenridge Avenue St. Catharines, Ontario L2S 3A1

Diane P. Dupont

Education

Ph.D. (Economics), The University of British Columbia, Fields: Environmental and Natural Resources and Public Finance, 1988

MA (Economics), The University of Toronto, 1979

Honours BA (Economics and German), Carleton University, 1978

Academic Experience

Professor, Economics, Brock University (07/2002 -)

Visiting Scholar, Centre for Social and Economic Research on the Global Environment, University of East Anglia, UK (07/2002-06/2003)

Associate Professor, Economics, Brock University (07/1993-06/2002)

Director, Environmental Economics Program, Brock University (07/1996-06/1999)

Visiting Scholar, School of Behavioral Science, University of Colorado at Boulder (01/1996-06/1996)

Assistant Professor, Economics, Brock University (07/1990-06/1993)

Assistant Professor, Agricultural Economics and Business, University of Guelph (07/1988-06/1990)

Contract Lecturer, Economics, University of British Columbia (07/1979-08/1979) (09/1987-04/1988) (04/1984-07/1984)

Selected Honours and Distinctions

Chancellor's Chair for Research Excellence, Brock University (2006-2009)

Member and (as of 04/2008) Chair of the *Scientific Advisory Committee for the Worldfish Centre, Penang, Malaysia.*

Member, Board of Directors, North American Association of Fisheries Economists (2003-2007)

Expert reviewer, *Royal Society of Canada Expert Panel Report on Air Quality Standards for Particulate Matter and Ozone* (2001)

Member, Social Sciences and Humanities (SSHRC) Adjudication Committee 7 (Economics) (1997-1998)

Member, *Executive Council of the Canadian Economics* Association (1997-2000)

Awards

Programme in Natural Resource Economics Scholarship, The University of British Columbia (1980-1981)

Ontario Graduate Fellowship, The University of Toronto (1978-1979)

Francis Lynch In Course Scholarship, Carleton University (1975-1976)

C.J. MacKenzie Entrance Scholarship, Carleton University (1974-1975)

Administration

Over my years at Brock I have both been an elected Member of Senate and also Vice-President of the Brock University Faculty Association. In addition, I have been either Chair or Member (or both) of a number of University Committees, including Promotion and Tenure, Pensions, Salaries and Benefits, and Sabbaticals. I have also sat on a number of departmental and interdepartmental committees including Chair of Recruitment (Economics) and the Youth Lifestyle Choices – Community University Research Alliance Grant Writing and Proposal Review Committees.

Scholarly and Professional Activities

Member of : Association of Environmental and Resource Economists, American Agricultural Economics Association, International Water Association, Canadian Agricultural Economics Society, International Institute for Fisheries Economics and Trade

Associate Editor, Australian Journal of Agricultural and Resource *Economics* (2007-)

Internal Referee for *Review of the Department of Recreation and Leisure Studies, Brock University* (2006)

External Referee (and Chair) for the Unit Review of the Department of Economics, University of Regina. (2002)

Co-organizer (with Steven Renzetti) of 11th Annual Canadian Resource Environmental Economics group meetings (held at Brock (2000)

External examiner on Doctoral Thesis (Université de Québec-INRS-Eau) (2000)

Consulted for a number of organizations including: Health Canada, International Joint Commission (Lake Levels Study Board), Pollution Probe, Great Lakes Fisheries Commission, Ontario Ministry of Natural Resources, Canadian Water Network

Reviewer for : Journal of Environmental Economics and Management, Marine Resource Economics, American Journal of Agricultural Economics, Agricultural Systems, Canadian Journal of Agricultural Economics, Canadian Water Resources Journal, Agricultural Systems, Canadian Water Resources Journal, Environmental and Resource Economics, Society and Natural Resources, Land Economics, Journal of Productivity Analysis, Journal of Agricultural Economics, Journal of Environmental Management, Journal of Water and Health, Water Resources Research, Journal of Forestry Economics, Canadian Public Policy, Environment and Development Economics, Canadian Journal of Economics, Social Sciences and Humanities Research Council, National Institutes for Water Resources, United States National Science Foundation Scholar's Program

Selected University Administered Research Funding

External Grants

2008-2012 National Centres of Excellence - the Canadian Water Network. Principal investigator. Total value of grant is \$402,000 over four years. I am the PI and my share is \$113,200.

2007-2009 National Centres of Excellence - the Canadian Water Network. Principal investigator. Over the two years this project will receive \$122,800. My share of this is \$76,200.

2005-2007 National Centres of Excellence - the Canadian Water Network. Principal investigator. My share of the overall budget for the project is \$67,000 over the two years.

2002-2003 Health Canada Chief Scientist Fund. I was a co-principal investigator (with V. Adamowicz, A. Krupnick, and A. Macdonald). Total amount of grant is \$56,000.

2001-2005 National Centres of Excellence - the Canadian Water Network. Co-principal investigator (along with Pierre Payment, INRS-Institut Armand-Frappier, Laval). The budget for our project is about \$216,000 for four years. My share was \$180,000.

2001-2002 Donner Foundation Grant (with Steven Renzetti) in amount of \$28,600 for 18 months.

1996-1999 Social Sciences and Humanities Research Council Strategic Grant in order to examine the role of uncertainty in the global competitiveness of fisheries. (With other researchers across Canada.) Total value of grant is \$58,800.

1993-1996 Green Plan's Tri-council Eco-Research Program (with researchers at McMaster University) to study the restoration of Hamilton Harbour. Total value of the grant was \$2.1 million. My share was \$50,000.

1993-1995 Environment Canada's Green Plan Competition Grant under the program entitled "Economic Instruments for Environmental Protection" (with Professor Steven Renzetti). Total value of the grant is \$36,630.

1991-1994 Social Sciences and Humanities Research Council of Canada Research Grant in the amount of \$24,100.

1989-1991 Social Sciences and Humanities Research Council of Canada Research Grant in the amount of \$18,645.

I have had numerous internal grants including one to bring in speakers to a special series entitled "Environment and Society in the New Millennium : Moving Canada towards a Sustainable Society". We brought in Dr. Stuart Smith, Chair of National Roundtable on the Economy and the Environment and Dr. Patricia Roberts-Pichette, Executive Secretary, UN Man and Biosphere Program.

Selected Invited Seminars and Presentations

2007 "Drinking Water Valuation: Challenges, Approaches, and Opportunities" Invited address to the National Academy of Science, Institute of Medicine's (IOM) workshop entitled "Global Environmental Health: Research Gaps and Barriers for Providing Sustainable Water, Sanitation, and Hygiene Services", Washington, October 18, 2007.

2007 "Canadian water valuation and demand modelling: state of the art and future directions") Invited presentation with co-author, Steven Renzetti, Economics, to the Mathematical Modelling of Water Resource Allocation Strategies at the Banff International Research Station, Banff, September 8-9, 2007.

2006 "Consumer Perceptions of Municipal Drinking Water Quality" Invited presentation to the annual conference of the Ontario Branch of the Canadian Institute of Public Health Inspectors. Niagara Falls, Ontario, September 13, 2006.

2006 "Drinking Water Quality and Climate Change: What Are Consumers Willing to Pay to Reduce Health Risks" (with V. Adamowicz and A. Krupnick) at the University of Guelph, Department of Agricultural Economics and Business Seminar series. January 13, 2006.

2004 "Value of Good Quality Drinking Water to Canadians" Presentation made to the Canadian Water Network's Summer Watershed Workshop 2004. June 1, 2004. Renison College, University of Waterloo.

2003 "Measuring Success in ITQ Fisheries" invited seminar presentation to the CEMARE group, University of Portsmouth, United Kingdom.

2003 "Profits, Prices and Productivity Effects of Multi-species Individual Transferable Quotas" Invited paper presented at a Conference in honour of the 50th Anniversary of the Centre for Fisheries Economics, Norwegian Business School, Bergen, Norway. June 10-11, 2003.

1999 "An Economic Analysis Of the Benefits Of Stream Rehabilitation" Invited presentation at the Second International Conference on Natural Channel Systems in Niagara Falls, March 1-4, 1999.

1994 "The Role of Economic Incentives in Making Fishing Location Choices ". Invited Speaker at the 11th Annual Pacific Coast Resource Modeling Conference, University of California, San Diego, July 11-14, 1994.

In addition, I have presented papers at over 30 academic conferences and participated at meetings held in Canada, the United States, Peru, the Netherlands, England, and Norway.

Student Supervision

1 MSc completed (Principal Supervisor)

2 MBE completed (Principal Supervisor)

1 MBE in progress (Principal Supervisor)

1 PhD (as external examiner)

5 Honours BA Thesis (3 for which I was Principal Supervisor and 2 for which I was Joint Supervisor)

Refereed Journal Publications

- Renzetti, S. and Dupont, D.P. (forthcoming) "Measuring the Technical Efficiency of Municipal Water Suppliers: the Role of Environmental Factors" *Land Economics*. Accepted for publication, September 2008.
- Bateman, I.J., Day, B.H., Dupont, D. P. and Georgiou, S. (forthcoming) "Procedural invariance testing of the one-and-one-halfbound dichotomous choice elicitation method" *The Review of Economics and Statistics*. Accepted for publication, April 2008.
- Dupont, D. P. and S. Renzetti (2008) "Good to the Last Drop? An Assessment of Canadian Water Value Estimates" *Canadian Water Resources Journal.* 33(4):363-374.
- Willoughby, T., Chalmers, H., Busseri, M.A., Bosacki, S., Dupont, D., Marini, Z., Rose-Krasnor, L., Sadava, S., Ward, A., & Woloshyn, V. 2007 Adolescent non-involvement in multiple risk behaviors: An

indicator of successful development? *Applied Developmental Science*, 11(2), 89-103.

- Grafton, R.Q., Arnason, R., Bjørndal, T., Campbell, D., Campbell, H., Clark, C., Connor, C., **Dupont, D**., Hannesson, R., Hilborn R., Kirkley, J., Kompas, T., Lane, D., Munro, G., Pascoe, S., Squires, D., Steinshamn, S. ,Turris, B. and Weninger, Q. **2006.** "Incentive-Based Approaches to Sustainable Fisheries" in *Canadian Journal of Fisheries and Aquatic Sciences*. 63: 699–710.
- Dupont, D. P., Fox, K., Gordon, D., and Grafton, R.Q. 2005 "Profit and Price Effects of Multi-species Individual Transferable Quotas" in *Journal of Agricultural Economics*. 56(1):31-57.
- Dupont, D. P. 2005 "Tapping into Consumers' Perceptions of Drinking Water Quality in Canada: Information to Assist Utilities to Better Manage Their Operations" in *Canadian Water Resources Journal*. 30(1):11-20.
- Adamowicz, W., Dupont, D. P., and Krupnick, A. 2004 "The Value Of Good Quality Drinking Water To Canadians And The Role Of Risk Perceptions: A Preliminary Analysis" in *Journal of Toxicology and Environmental Health. Part A: Current Issues*. 67(20-22): 1825-1844.
- Renzetti, S. and Dupont, D.P. 2004 "The Performance Of Municipal Water Utilities: Evidence On The Role Of Ownership" in *Journal of Toxicology and Environmental Health. Part A: Current Issues.* 67(20-22): 1861-1878.
- Dupont, D. P. 2004 "Do children matter? An examination of gender differences in environmental valuation" in *Ecological Economics* 49(3): 273-286.
- Dupont, D. P. 2003 "CVM Embedding Effects When There Are Active, Potentially Active and Passive Users of Environmental Goods" *Environmental & Resource Economics*. 25(3): 319-341.
- Renzetti, S. and Dupont, D. P. 2003 "Ownership and Performance of Water Utilities" *Greener Management International* Summer 2003:9-19.
- Dupont, D.P.; Grafton, R.Q.; Kirkley, J. and Squires, D. 2002 "Capacity Utilization Measures and Excess Capacity in Multi-Product Privatized Fisheries" *Resource and Energy Economics*. 24(3): 193-210.

- Dupont, D.P. and Renzetti, S. 2001 "The Role Of Water In Manufacturing" *Environmental & Resource Economics*. 18(4): 411-432.
- 15. **Dupont, D.P.** and Grafton, R.Q. **2000** "Multi-Species Individual Transferable Quotas: The Scotia-Fundy Mobile Gear Groundfishery" *Marine Resource Economics*. 15(3): 205-220.
- 16. **Dupont, D.P. 2000** "Individual Transferable Vessel Quotas and Efficient Restructuring of the Primary Harvesting Sector" *Annals of Operations Research*. 94:275-294.
- Renzetti, S. and Dupont, D.P. 1999 "An Assessment of the Impact of Charging for Provincial Water Use Permits" *Canadian Public Policy*. 25(3): 361-378. (Reprinted in The Economics of Industrial Water Use edited by Steven Renzetti. Chapter 24: 491-508. Edward Elgar Publishing Inc., Cheltenham, UK.)
- Dupont, D.P. and Renzetti, S. 1998 "Water Use in the Canadian Food Processing Industry" in *Canadian Journal of Agricultural Economics* 46:83-92.
- Dupont, D.P. 1993 "Price Uncertainty, Expectations Formation, and Fishers' Location Choices" *Marine Resource Economics* 8(3): 219-247.
- Dupont, D.P. and Phipps, S. 1991 "Distributional Consequences of Fisheries Regulations" *Canadian Journal of Economics* 24(1): 206-220.
- Dupont, D.P. 1991 "Testing for Input Substitution in a Regulated Fishery" *American Journal of Agricultural Economics* 73(1): 155-164.
- Dupont, D.P. and Phipps, S. 1991 "Individual Vessel Quotas and Income Effects" *Canadian Journal of Regional Science* 14(2):157-180.
- 23. **Dupont, D.P. 1990** "Rent Dissipation in Restricted Access Fisheries" *Journal of Environmental Economics and Management* 19(1): 26-44.

Authored Book

The Economics of the Environment and Natural Resources (Basil Blackwell, 2004) 503 pp. co-authored with W. Adamowicz, Q. Grafton, H. Nelson, and S. Renzetti.

Chapters in Books

- Dupont, D. and H. Nelson "Salmon Fisheries of British Columbia" chapter in the *Handbook of Fisheries Conservation and Management* edited by R. Q. Grafton, R. Hilborn, D. Squires, M. Tait, and M. Williams. (forthcoming in 2008) Oxford University Press.
- Bateman, I.J., Day, B.H., Dupont, D., Georgiou, S., Matias, N.G.N., Morimoto, S., and Subramanian, L., 2006 "Cost–Benefit Analysis and the Prevention of Eutrophication" In Pearce, D.W. (ed) *Environmental Valuation in Developed Countries*, Edward Elgar Publishing, Cheltenham. Chapter 15. pp. 317-339.
- Dupont, D. and D.V. Gordon 2006 "Shadow Prices for Fishing Quota: Fishing with Econometrics" in *Frontiers in the Economics of the Fishery: Papers in Honour of Professor Gordon Munro* edited by Bjørndal, T., Gordon, D.V., Arnason, R., and Sumaila, U.R. Blackwell, Oxford. Chapter 6.
- Renzetti, S. and Dupont, D. 2005 "Water Pricing" in J. H. Lehr and J. Keeley (eds.) Water Encyclopedia: Water Quality and Resource Development, John Wiley Publishing. May 2005.
- Renzetti, S. and Dupont, D. 2005 "Valuing Water Resource" in J. H. Lehr and J. Keeley (eds.) Water Encyclopedia: Water Quality and Resource Development. John Wiley Publishing. May 2005.
- Dupont, D. P. and S. Renzetti 2005 "Cost-Benefit Analysis of Water Quality Improvement in Hamilton Harbour, Canada" in *Cost Benefit Analysis and Water Resources Management* edited by Roy Brouwer and David Pearce. Edward Elgar Publishing Co. Ch. 9. pp. 195-222.
- Renzetti, S. and D. Dupont 2003 "Ownership and Performance of Water Utilities" Greener Management International, Summer, issue 42: 9-19. This article was reprinted in J. Chenoweth and J. Bird, 2005 eds. The Business Of Water Supply And Sustainable Development, Greenleaf Publishing, Sheffield, UK. Ch. 7. pp. 99-110.

- Renzetti, S. and Dupont, D. 2002 "The Relationship between the Ownership and Performance of Municipal Water Utilities" in J. Bogardi and S. Castelein eds. Selected Papers of the International Conference From Conflict to Co-operation in International Water Resources Management: Challenges and Opportunities, UNESCO-IHE Delft, The Netherlands, 20-22 November, 2002. UNESCO-IHP Technical Documents in Hydrology no. 31, pp. 140-151.
- Dupont, D.P. 1996 "Limited entry fishing programs : theory and canadian practice." Chapter 7 in *Fisheries and uncertainty: A precautionary approach to resource management*. Editors D.V. Gordon and G.R. Munro (Calgary: University of Calgary Press). pp.125-147.

Other Publications and Book Reviews

- Bateman, I., Carson, R.T., Day, B., Dupont, D.P., Louviere, J.J., Morimoto, S., Scarpa, R., and Wang, P. 2008 "Choice Set Awareness and Ordering Effects in Discrete Choice Experiments" CSERGE Working Paper EDM2008-01. Centre for Social and Economic Research on the Global Environment, University of East Anglia.
- Adamowicz, V., Dupont, D., Krupnick, A., and Zhang, J. 2007 "Valuation of Cancer and Microbial Disease Risk Reductions in Municipal Drinking Water: An Analysis of Risk Context Using Multiple Valuation Methods" *Resources for the Future Discussion Paper 07-39.* July 2007. 34 pp.
- Bateman, I.J., Day, B.H., Dupont, D., Georgiou, S., Matias, N.G.N. Morimoto, S. and Subramanian, L. 2006 "Does phosphate treatment for prevention of eutrophication pass the benefit-cost test?" CSERGE Refereed Working Paper EDM06-13, Centre for Social and Economic Research on the Global Environment, University of East Anglia.
- Adamowicz, V.; Dupont, D.P. and Krupnick, A. 2005 "Willingness to Pay to Reduce Community Health Risks from Municipal Drinking Water: A Stated Preference Study" Report written for the United Stated Environmental Protection Agency. October 2005. 62 pp.
- Bateman, I., Day, B., Dupont, D., and Georgiou, S. 2004. "Ooh La La: Testing the One-And-One-Half Bound Dichotomous Choice Elicitation Method for Robustness to Anomalies" CSERGE Refereed Working Paper EDM-2004-06 Centre for Social and Economic Research on the Global Environment (CSERGE) Working Paper Series on Environmental Decision Making. 58pp.

- Adamowicz, V.; Dupont, D.P. and Krupnick, A. 2003 "The Economic Value of Water to the Health of Canadians: Final Report on Development and Testing of Preference Elicitation Instrument" Final Report to *Health Canada*. 220 pp.
- 7. Renzetti, S. and **Dupont, D. P. 2003** "The Value of Water in Manufacturing" *CSERGE Refereed Working Paper ECM 03-03*. 21 pp.
- Dupont, D. P. 2003 "Do Children Matter? An Examination of Gender Differences in Environmental Valuation" *CSERGE Refereed Working Paper ECM 03-01.* 30 pp.
- 9. **Dupont, D. P.** and A. Ward **2002.** "The Economic Impacts of Cigarette Tax Reductions on Youth Smoking in Canada". Manuscript submitted for review to Statistics Canada as fulfilment of requirement to use micro-data at the McMaster Research Data Centre.
- 10. Renzetti, S. and **Dupont, D. P. 2002** "The Value of Water in Manufacturing" Brock Department of Economics Working Paper 2002-12.
- 11. **Dupont, D. P.** and S. Renzetti **2002** "The Relationship Between Ownership and Performance of Municipal Water Utilities" Brock Department of Economics Working Paper 2002-10.
- 12. **Dupont, D.P. 2002** "CVM Question Ordering Effects When There are Active and Passive Users of Environmental Goods" Brock Department of Economics Working Paper 2002-06.
- 13. **Dupont, D. P. 2002** "Gender and Rugrats: Environmental Valuation in the Presence of Children" Brock Department of Economics Working Paper 2002-05.
- Willoughby, T., Bogaert, T., Bosacki, S., Chalmers, H., Dupont, D., Marini, Z., Reker, D., Rose-Krasnor, L., Sadava, S., & Ward, T. (YLC-CURA). 2001 Report on Youth Lifestyle Choices in the Niagara Region: Findings from the Youth Resilience Questionnaire. Research Report.
- 15. Renzetti, S. and Dupont, D.P. 1997 "An Economic Assessment of the Impact of a Provincial Water Use Charge: Phase Two" Report prepared for the Lands and Natural Heritage Branch of the Ontario Ministry of Natural Resources. May 1997.

- 16. Renzetti, S. and Dupont, D.P. 1996 "An Economic Assessment of the Impact of Adopting a Provincial Water Use Charge : Phase One" Report prepared for the Lands and Natural Heritage Branch of the Ontario Ministry of Natural Resources. December 1996.
- Renzetti, S. and Dupont, D.P. 1995 "An investigation into the design of economic instruments to promote efficient industrial water use." A report for *Environment Canada's Economic Instruments Initiatives -University Research Program*. May 1995.
- Dupont, D.P. 1995 Review of "Getting the green light : environmental regulation and investment in Canada" by J. Benedickson, G.B. Doern, and N. Olewiler, in *Canadian Public Policy*. XXI (4) December 1995. pp. 478-479.
- Dupont, D.P. 1994 "Measuring the Benefits of Better Recreational Opportunities Using the Contingent Valuation Method" in *McMaster University Ecowise Seminar Series Reports*. pp. 65-75.
- Renzetti, Steven and Dupont, Diane P. 1993 "An Investigation into Sunset Chemicals and the Economic Dimension". *Report for Pollution Probe*. October 1993.
- 21. **Dupont, D.P. 1993** "Comment on Dale Jamieson : Ecology, Social Theory, and the Green Movement" **Brock Review** 2(1):66-70.
- 22. **Dupont, D.P. 1992** Review of "SYSTAT, a software package for scientists and fisheries modellers" in *Natural Resource Modeling* 5(4): 515-518.
- 23. Dupont, D.P. 1992 "Economic Assessment of the Performance of Alternative Environmental Policy Instruments as They Pertain to Agriculture and Water Quality" *Agriculture and Water Quality*. *Proceedings of an Interdisciplinary Symposium* Centre for Soil and Water Conservation. University of Guelph. pp.165-190.
- 24. **Dupont, D.P. 1991** "Input Controls in a Fishery : Success or Failure?" Refereed conference abstract in *American Journal of Agricultural Economics* 72(5) : 1359.
- Dupont, D.P. 1990 "A Penny for Your Thoughts Economics of Raising Fish". *I.D.E.A.S.* 1990 (Innovation-Diversification-Entrepreneurship in the Agricultural Sector) Ontario Ministry of Agriculture and Food, Toronto. pp. 126-127.

26. Dupont, D.P. 1990 "Economic Valuation and Impact of Fisheries".

Manuscript written at the request of the *Great Lakes Fisheries Commission Board of Technical Experts Economic Value Task Area* headed by Lee Anderson and Barry Smith.

- 27. **Dupont, D.P. 1990** "Evaluating the Impact of Water Quality Upon the Value of Recreational Fishing" in *International and Transboundary Water Resources Issues* edited by John E. Fitzgibbon. Proceedings of a Symposium sponsored by the Canadian Water Resources Association / American Water Resources Association Conference. AWRA, Bethesda, Maryland. pp. 565-574.
- 28. van Duren, E ; Dickson, E.; **Dupont, D.** and Martin, L. **1989** "The Impact of the Canada-U.S. Free Trade Agreement on the Food Processing Sectors Supplied by Marketing Boards in Ontario". Manuscript written for the *Ontario Industrial Restructuring Commission*.

Papers Under Review

- 1."Valuation of Cancer and Microbial Disease Risk Reductions in Municipal Drinking Water: An Analysis of Risk Context Using Multiple Valuation Methods" (with Adamowicz, W., Krupnick, A., and Zhang, J.) submitted to *Journal of Environmental Economics and Management* in August 2007. Resubmitted November 2008.
- "Choice Set Awareness and Ordering Effects in Discrete Choice Experiments" (with I. Bateman, R. Carson, B. Day, J. Louviere, S. Morimoto, R. Scarpa and P. Wang) submitted to *Journal of Environmental Economics and Management* in June 2008. Revise and resubmit received October 2008.

Papers Being Prepared for Submission

 "An Empirical Study on the Role of Altruism in the Valuation of Municipal Drinking Water Risk Reductions" J. Zhang, W. Adamowicz, A. Krupnick, **D. Dupont**.