Curriculum Vitae

NAME: Stephan Schott

DEPARTMENT: School of Public Policy and Administration

TELEPHONE NUMBER IN DEPARTMENT: 2557

Date: May 03 2019

A EDUCATION

B.SocSci (Ottawa University (1994)), M.A. (University of Guelph (1995)), Ph.D. (University of Guelph (2000)).

PhD Thesis: Optimal Management of Multiple Cohort Fisheries with an Empirical Application to the Harvest of Northern Cod.

B EMPLOYMENT

1. Academic Appointments

Associate Professor (since July 2012)

Visiting Fellow, School of Economics, University of Adelaide, Australia, (Jan.-July 2007) Assistant Professor, School of Public Policy, Carleton University (2002-2012) Postdoctoral Fellow, School of Public Admin, Carleton University (Jan. 2001-Dec. 2001) Postdoctoral Fellow, Economics Department, McMaster University (January 2000-December 2000)

2. Other Employment

Bank Apprenticeship, Dresdner Bank Hamburg (1987-1989)

C PROFESSIONAL HONOURS

D PUBLICATIONS

1. Refereed Scholarly Publications

a. Articles in refereed Journals (all double blind peer reviewed)

D. Lysenko and S. Schott (2019) Food Security and Wildlife Management in Nunavut. <u>Ecological Economics</u> 156 (2019) 360–374.

M. Gramiak and S. Schott (2018). "Amplifying Indigenous Voices in National Environmental Governance and the Sustainable Development Strategy", Graham, Katherine A.H. and Allan M. Maslove. *How Ottawa Spends*, 2018-2019: Next? How Ottawa Spends. Ottawa, ON: Carleton University, School of Public Policy and Administration, 2018. DOI: http://doi.org/10.22215/hos/2018-19

- A.Belayneh, T. Rodon and S. Schott (2018) Mining Economies, Mining Families: Inuit Business Development and Employment in the Eastern Sub-Arctic, <u>The Northern Review</u>. (47): 59-78.
- T. Rodon, I. Lemus-Laudon and S. Schott. (2018). Impact and Benefit Agreement (IBA) Revenue Allocation Strategies for Indigenous Community Development. <u>The Northern Review</u>. (47): 9-29.
- N. Buckley, S. Mestelman, R.A Muller, S. Schott and J. Zhang (2017). "The Effects of Communication on the Partnership Solution to the Commons, *Environmental and Resource Economics*, forthcoming, DOI 10.1007/s10640-017-0124-9.
- A.Pappin, M. Mesbah, A. Hakani and S. Schott (2016). Response to Comment on "Diminishing Returns or Compounding Benefits of Air Pollution Control? The Case of NO_x and Ozone", Environmental Science & Technology (2016).
- A.Pappin, M. Mesbah, A. Hakani and S. Schott (2015). "Diminishing Returns or Compounding Benefits of Air Pollution Control? The Case of NOx and Ozone" Environmental Science & Technology (July 2015), DOI: 10.1021/acs.est.5b00950.
- S. Morteza Mesbah, Amir Hakami, and Stephan Schott (2015). "Optimal Ozone Control with Inclusion of Spatiotemporal Marginal Damages and Electricity Demand", Environmental Science and Technology (June 2015), DOI: 10.1021/acs.est.5b01178.
- M. Retallack and S. Schott (2014). "Cultural Values and Ecosystem Management at the Subwatershed Level", <u>Environmental Policy and Governance</u>, published online July 21 2014, DOI: 10.1002/eet.1652, 13 pages.
- A.Sedoff, S. Schott and B. Karney (2014). "Sustainable power and scenic beauty: The Niagara River Water Diversion Treaty and its relevance today", <u>Energy Policy</u>, 66 (2014) 526–536.
- S. Morteza Mesbah, Amir Hakami, and Stephan Schott (2013). "Optimal Ozone Reduction Policy Design Using Adjoint-Based NO_x Marginal Damage Information", <u>Environmental Science and Technology</u>, 47 (23), pp 13528–13535.
- S. Schott (2013). "Carbon Pricing Options for Canada", <u>Canadian Public Policy</u>, Volume 39, S109-S124.
- T. Rodon and S.Schott (2013). "Towards a Sustainable Future for Nunavik", <u>Polar Record</u>, 1-17, March 2013.
- U. R. Ozkan and S. Schott (2013). "Sustainable Development and Capabilities for the Polar Region", Social Indicators Research, Vol. 114:1259-1283.

- Mesbah, S. M., Hakami, A., Schott, S., (2012). "Improving NOx cap-and-trade system with adjoint based emission exchange rate", <u>Environmental Science and Technology</u>, Vol. 46, 11905–11912, 2012.
- M.D. Heintzelman, S. W. Salant and S. Schott (2009). Putting free-riding to work: A Partnership Solution to the common-property problem. *Journal of Environmental Economics and Management*, 57 (3), 309-320.
- S. Schott, N. Buckley, S. Mestelman an R.A. Muller (2007). "Output Sharing in Partnerships as a Common Pool Resource Management Instrument", *Environmental and Resource Economics*, 37 (4): 697-711, August 2007.

Stephan Schott, "The Optimal Selection and Harvest of Multiple Cohorts". *Marine Resource Economics*, Vol. 16, No. 2, 2001, pp. 109-126.

b. Articles in Refereed Conference Proceedings

Stephan Schott, "A Partnership Solution to the Tragedy of the Commons", 4thToulouse Conference on Environment and Resource Economics, Toulouse, France, May 2001, *Digital Library of the Commons*, http://hdl.handle.net/10535/5367. (peer-reviewed)

c. Chapters in Edited Books.

U.R. Ozkan, S Schott (2017). Political and fiscal limitations of Inuit self-determination in the Canadian Arctic, In: *Northern Sustainabilities: Understanding & Addressing Change in the Circumpolar World, [Ed G Fondahl & G. Wilson], Springer Polar Sciences.*

N Buckley, S Mestelman, RA Muller, M Rogers, S Schott and J. Zhang (2017). Appropriation from a common pool resource: effects of the characteristics of the common pool resource, the appropriators and the existence of communication, Ch 2 in *Natural Resources and Environmental Policy in the Era of Global Change*, [Ed.A Botelho], World Scientific Publisher.

Stephan Schott and Graham Campbell 2013. "National Energy Strategies of Major Industrialized Countries", <u>International Handbook of Energy Security</u>, edited by Hugh Dyer and Julia Trombetta, Edward Elgar: 174-205.

Stephan Schott and Coady Wing (2006). "Information Disclosure as an Environmental Policy Instrument and Self-regulatory Tool", *Innovation, Science and Environment: Canadian Policies and Performance* 2006-2007, *Vol.1*, edited by Bruce Doern, McGill/Queen's Press, pages 213-232. (peer-reviewed)

P-O. Pineau and Stephan Schott (2005). "Pricing and Technology Options: An Analysis of Ontario Electricity Capacity Requirements and GHG Emissions", in <u>Energy and the Environment, GERAD, 25th Anniversary Volume, chapter 10, pages 239-260, edited by R. Loulou, J.P. Waubb and G. Zaccour, Springer: New York, 2005. (peer-reviewed)</u>

Stephan Schott (2004). "New Fishery Management in Atlantic Canada: Communities, Governments and Alternative Targets", *How Ottawa Spends*, 25th Anniversary Edition, edited by Bruce Doern, Queens'/McGill Press, 2004, pages 151-172. (peer reviewed)

Stephan Schott (2004). "Sustainable and Socially Efficient Electricity Production: How Will Ontario Satisfy the Criteria?", chapter 7 in *Energy Policy and the Struggle for Sustainable Development*, edited by Bruce Doern, Toronto: University of Toronto Press, pages 193-224. (double blind peer-reviewed).

2. Refereed Scholarly Work in Progress

Stephan Schott, James Qitsualik, Simon Okpakok, Peter Van Coeverden de Groot Jacqueline Chapman, Stephen Lougheed, Virginia Walker (2019). "Operationalizing Knowledge Coevolution: Towards a Sustainable Fishery for Nunavummiut", to be submitted to *Arctic Science*.

J. Chapman and S. Schott (2019). "Knowledge co-evolution: generating new understanding by strengthening – not altering – distinct knowledge systems", to be submitted to *Sustainability Science*.

A.Belayneh, T. Rodon and S. Schott (2018). "Unravelling the local and regional impacts of mining on indigenous employment and business development", working paper.

K. Sakaguchi and S. Schott (2016). "Clean Energy versus Waterfall Viewing: How Can we Assess Tradeoffs at Niagara Falls?", working paper.

3. Other (Non-refereed) Scholarly Publications

- a. Articles in non-refereed journals
- S. Schott, "Defining Sustainable Energy Policy in the Canadian Context", <u>Public Sector Digest</u>, Spring 2014, 31-35.
- S. Schott, "Are there any Convincing Economic Reasons for Electricity Privatization And Deregulation in Ontario? *Policy Options*, Vol. 23, No.7, October 2002, pp. 40-42.
- b. Articles in non-refereed conference proceedings

Stephan Schott (2015). "The New Energy Union: Priorities and Conflicting Policy Objectives". Paper prepared for the Climate Change and Renewable Energy Policy in the EU and Canada Workshop held at Carleton University, Ottawa on October 1-2, 2015

Stephan Schott and Coady Wing, "Join the Leader, Imitate or Follow: Evolutionary Stable Strategies in the Commons, North American Regional Meeting of the International Association for the Study of the Commons, Arizona State University, U.S., 2010 Digital Library of the Commons, http://hdl.handle.net/10535/6532.

N. Buckley, St. Mestelman, R.A. Muller, S.Schott and J. Zhang (2009), "Shut Up and Fish: The Role of Communication when Output-Sharing is used to Manage a Common Pool Resource", *Atlantic Canada Economics Association Papers & Proceedings* 2009, 35 pages.

Stephan Schott, Neil Buckley, Stuart Mestelman and R. Andrew Muller (2002), "Shirking for Dollars: Regulating the Exploitation of a Common Pool Resource", <u>Atlantic Canada Economics Association Papers & Proceedings</u> 2002, 15 pages.

c. Technical reports

In collaboration with ICF Canada (2016). Avoided cost evaluation methods in the context of autonomous energy systems in Québec, Consulting Report for Hydro Québec.

D. Cherniak, V. Dufresne, L Keyte, A. Mallett and S. Schott (2015). "Report on the State of Alternative Energy in the Arctic", commissioned by Canadian High Arctic Research Station (CHARS), presented to Polar Knowledge Canada, *CURVE*, 209 pages.

Jose Gonzalez, Restco (Remote Energy Security Technologies Collaborative) and Stephan Schott (2012), "An Energy Blueprint for the Canadian High Arctic Research Station (CHARS)" for Aboriginal Affairs and Northern Development Canada (AANDC).

Thierry Rodon and Stephan Schott (2010), "Toward a Sustainable Future for Nunavik" Briefing Paper for Makivik Corporation on the State of the Nunavik Economy and on Possible Models of Sustainable Development.

STRATOS and Stephan Schott (2003). "Convergence Analytical Framework for Evaluating Canada/U.S. Environmental Performance", for Environment Canada.

- d. Online Tools and Publications
- S. Schott, A. Hayes, R. Oikle (2018). Towards a Sustainable Fishery for Nunavummiut Online Interactive Atlas (Nunaliit based): https://tsfn.gcrc.carleton.ca/index.html

4. Creative or Professional Publications

Documentary Movie:

Iqalungmiut: a **Gjoa Haven knowledge-sharing workshop**; Wolfe, S A; Schott, S; Chapman, J. Geological Survey of Canada, Open File 8478, 2018, 3 pages, https://doi.org/10.4095/313097

S. Schott (2011). "We need a National Energy Strategy more than any Country in the World", *The Hill Times*, December 5, 2011.

A. Mallett, J. Meadowcroft, S. Schott and G. Toner (2010). "Contributing to Canada's Energy Literacy: Educating a Potential Energy Superpower", *The Hill Times*, December 6, 2010.

E. OTHER SCHOLARLY OR PROFESSIONAL ACTIVITY

1. Editorial Responsibilities

Sustainability Science, Editorial Board, April 2015-2018, renewed until 2022.

Canadian Journal of Agricultural Economics Editorial Board, July 2012-June 2015.

2. Papers presented/Keynote Talks

"Towards a Sustainable Fishery for Nunavummiut: Exploring Commercial Fishery Options for the North", CanNor Workshop, April 2019.

"Local engagement and indigenous empowerment in natural resource co-management in Canada's Arctic, Arctic Circle, April 2019.

"Canada's Energy Sector and the Environment: Towards Diversification and a Cleaner Economy?" Jean Monnet Policy Workshop: The EU and Canada in the Face of Changing US Global Policy, March 2019.

"Inuit Business Experiences with the Mining Industry in Nunatsiavut and Nunavik", Nunatsiavut Business Summit, Goose Bay, February 2019.

"Extractive Industries and Economic Development in the Eastern Subarctic", Arctic Net, December 2018.

"The impact of major mining projects on Inuit employment and residency in the Eastern Canadian Sub-Arctic", Arctic Net, December 2018.

"Food Security and the Economics of Hunting and Fishing in the Arctic", Invited Seminar, Clarkson University, Potsdam, United States, November 2018.

"Knowledge Co-production, Collaboration, And Capacity Building In Arctic Conservation Biology", with Jacqueline Chapman, North American Congress for Conservation Biology, Toronto, Canada, July 2018.

"The impact of major mining projects on Inuit business development, employment and migration in the Canadian Sub-arctic." Canadian Economics Association, Montreal, Canada, June 2018.

"The impact of major mining projects on Inuit employment and residency in the Canadian Sub-arctic", MINERAL Workshop, Sept-Isles, May 2018.

- "Inuit Businesses' Experiences with Major Mining Projects in the Canadian Sub-arctic", Nunavik Mining Workshop, Kuujjuaq, April 24th 2018.
- "Food Security and Inshore Fishery Development in the Arctic" Canadian Fisheries and Aquaculture Genomics Forum, Ottawa, April 11 2018.
- "Food Security and the Economics of Harvesting in the Arctic", SPPA Brown Bag Seminar, April 6th 2018.
- "Energy Market Reforms to Enable a Green Transition in Canada", Jean Monnet Network Policy Workshop, "Clean Energy and Climate Policy in Canada and the EU: An Exchange of Experiences, Views and Visions for the Future", February 9th 2018, Carleton University.
- "Exploring commercial fishery options for Gjoa Haven", NOAHA Research Meeting, January 30 2018, Shaw Centre, Ottawa/
- "The impact of major mining projects on Inuit Business Development in the Canadian Subarctic", Artic Change, Québec City, December 2017.
- "Food Security and Sustainable Fishery Development in the North: Apples, Oranges, and Country Food", Seminar in Environmental Studies at Queen's University, Kingston, On., Nov. 7th 2017.

Webinar in the Arctic Summer Institute (August 9th 2017) for the Ecologic Institute (Washington/Berlin): "Food Security and Sustainable Fisheries in the Arctic"

- "Mining Economies, Mining Families: Extractive Industries and Business Development in the Canadian Sub-arctic", ICASS, Umea, Sweden, June 8th 2017.
- "Food security and sustainable fishery development: A harvest study for Gjoa Haven, Nunavut", Government of Nunavut Fisheries and Sealing Workshop, Ottawa, April 25th 2017.
- "The Integration of Local Knowledge with Science", Clear Seas Symposium, Halifax, Nova Scotia, March 27, 2017.

Plenary Talk at Arctic Net (Winnipeg, Dec. 8 2016): "Sustainable Development in the Arctic: Major Challenges and Opportunities".

"Towards a Sustainable Fishery for Nunavummiut: The Integration of Traditional Knowledge with Western Science", Arctic Net, Winnipeg, Dec. 8 2016.

"Mining Economies, Mining Families: Extractive Industries and Human Development in the Eastern Subarctic, RESDA Workshop Ottawa, October 26-28. Webinar in the Arctic Summer Institute (July 20th 2016) for the Ecologic Institute (Washington/Berlin): "Alternative Energy and Sustainable Development in the Arctic"

"Food Security and Wildlife Management in Nunavut", Canadian Economics Association, Ottawa, June 3-5 2016.

Qitsualik J., van Coeverden de Groot P, Lougheed SC, Schott S, Walker VK (2016) Towards a sustainable fishery for Nunavummiut. Genomics on the Hill, Ottawa, presentation.

"Mining Economies, Mining Families: Extractive Industries and Human Development in the Eastern Subarctic-Findings from Business Focus Groups", Kuujjuaq Mining Workshop, Kuujjuaq, QC, April 2016.

"Towards a Sustainable Fishery for Nunavummiut-Insights from a Traditional Ecological Knowledge Workshop in Gjoa Haven", Government of Nunavut Fisheries and Sealing Meeting, Montreal, QC, April 2016.

"The State of Alternative Energy in the Arctic-Future Research Recommendations", ONSEP Webinar, January 2016.

"Mining Economies, Mining Families: Extractive Industries and Human Development in the Eastern Subarctic", RESDA Workshop, Kuujjuaq, QC, October 2015.

"The New Energy Union: Priorities and Conflicting Policy Objectives", Center for European Studies Conference, Ottawa, On., October 2015.

"Clean Energy versus Waterfall Viewing: How Can we Assess Tradeoffs at Niagara Falls?", Canadian Economics Association, May 2015, Ryerson University.

"Harvesting, Food Security and Wildlife Management in Nunavut", <u>International Association of the Study of the Commons</u>, Edmonton, Alberta, May 2015.

"Individual and Collective Well-being in the Arctic", <u>Resource and Sustainable Development in the Arctic Workshop</u>, Goose Bay. Labrador, October 2014.

"The Importance of Harvesting in the Nunavut Economy", <u>International Congress of Arctic Social Sciences</u>, University of Northern British Columbia, Prince George, BC, May 2014.

"Individual and Collective Well-being in the Arctic", <u>International Congress of Arctic Social Sciences</u>, University of Northern British Columbia, Prince George, BC, May 2014.

Keynote address at Ontario Centre for Engineering and Public Policy, May 30 2014 Toronto, Ontario: "The Role of Engineering in the Future Direction of Policy-Making"

"Turning off Niagara Falls? Conflicting Water Uses in the Niagara River Watershed", Ontario Network for Sustainable Energy policy Workshop, Picton, Ontario, April 2014.

- "Marginal Valuations of Water Flow Adjustments over Niagara Falls", Canadian Resource and Environmental Economics Conference, Brock University, St. Catherines, September 2013.
- "What can we expect from "cheap talk" in limited access CPR environments?", <u>20th Annual Conference of the European Association of Environmental and Resource Economists</u>, June 2013 in Toulouse, France.
- "Coalition formation with endowment constraints in limited access CPR environments", Canadian Economics Association, Montreal, May 2013.
- "Effort Provision in Competing Output-Sharing Partnerships with Public and Private Communication", 19th Annual Conference of the European Association of Environmental and Resource Economists, June 2012 in Prague, Czech Republic.
- "What can we Expect from Cheap Talk?", <u>Canadian Economics Association</u>, June 2012 in Calgary.
- "How Does Communication and Output Sharing Affect Intergroup Competition, Intragroup Conflict and Social Efficiency?", <u>Canadian Resource and Environmental Economics Meeting</u>, September 2011, Québec City.
- "Energy Security and Climate Change Policy in North America", 2nd <u>Annual ONSEP</u> <u>Workshop</u>, Niagara-on-the-Lake, April 2011.
- "The Political Economy of Energy and Continental Integration", <u>Studies in Political Economy Conference</u>, Carleton University, January 2011.
- "Join the Leader, Imitate or Follow: Evolutionary Stable Strategies in the Commons", International Association of the Study of the Commons Conference, Arizona State University, October 2010.
- "The Role of Sharing in the North", <u>International Society for Ecological Economics</u>, August 2010, Oldenburg, Germany.
- "Balancing the Natural Beauty of Niagara Falls: Tourism and Clean Power Generation" Ontario Network for Sustainable Energy Policy Workshop, April 2010, Niagara-on-the Lake.
- "Building a Sustainable Future for Nunavik" (with Thierry Rodon), <u>Nunavik Economic Summit</u>, April 2010, Kuujjuak, Quebec.
- "Cooperation or Increasing the Race for the Resource? What Happens when Output-Sharing Partnerships Communicate?" <u>Ocean Management Research Network</u>, October 2009.

- "The Regulation of Polluters in Noncompetitive Markets", <u>European Association of Environmental and Resource Economists Conference</u>, June 2009, Amsterdam, Netherlands.
- "Energy security, oil (tar) sands development and climate change: What route to take in North America?", <u>Canadian Economics Association Conference</u>, May 2009, University of Toronto.
- "Socioeconomic Impacts of Oil (Tar) Sands Development: What Route to Take in North America?" NANES Symposium, Arizona State University, Jan. 26/27 2009.
- "The Optimal Taxation of Polluters in Non-Competitive Markets: Does Regulatory Sequence Matter?", <u>Canadian Economics Association Conference</u>, June 2008, Vancouver.
- "The Impact of Information Disclosure and Decentralized E-mail Communication on Common Pool Resource Users' Behaviour", <u>Canadian Economics Association</u> <u>Conference</u>, June 2008, Vancouver.
- "Toward Industry Responsibility: Myths and Fears", <u>Community of Federal Regulators</u> National Workshop Panel Discussion, November 2007.
- "Smart Taxation and Regulatory Coordination with Polluters in Imperfect Markets", <u>The University of Adelaide School of Economics Workshop</u>, Adelaide, Australia, February 17, 2007, <u>Carleton University</u>, <u>SEPPP Brown Bag Seminar</u>, January 5, 2007, <u>Clarkson</u> University Seminar, Potsdam, New York, Unites States, November 15, 2006.
- "Sustainable Electricity Generation: The Ontario Dilemma", with Keith Stewart, presented at <u>Transatlantic Energy Conference</u>, Sept.9/10, 2005, York University.
- "Reforming Atlantic Canada's Cod Fishery Policy", <u>Canadian Economics Association Meeting</u>, Carleton University, Ottawa, May 2003.
- "Using Prices and Property Rights to Manage the Environment: Lessons from the Fisheries". <u>Havana University Workshop on Involvement of Local Governments in Environmental Policy Making</u>, Havana, Cuba, February 2001.
- "The Significance of the Fisherian Harvest Rule in a Single Cohort Model". <u>Canadian Economics Association Meeting</u>, University of British Columbia, Vancouver, 2000.

3. Research Grants and Contracts

April 1 2019-March 31 2020 Polar Knowledge Canada (\$ 449,449) "Food security and sustainable fishery development: Seasonal and spatial variations in hunting and fishing in Gjoa Haven", sole PI, extension with additional funding.

June 2018-October 2019 IESO Education and Capacity Building Grant with MoCreebec Eeyoud Council, Moose Factory (\$ 97,222), one of two PIs.

Polar Knowledge Canada (\$ 227,033) April 1 2017-March 31 2019. "Food security and sustainable fishery development: Seasonal and spatial variations in hunting and fishing in Gjoa Haven".

2016-2022 SSHRC – Partnership Grant (\$ 2.5 M). MinErAL Knowledge Network on Mining Encounters and Indigenous Sustainable Livelihoods: Cross-Perspectives from the Circumpolar North and Melanesia/Australia, co-applicant.

Environment Canada (\$ 16,500): Economics and Environmental Policy Research Network: "Payments for Ecosystem Services: taking social networks, distributive impacts, and trust into account", **principal investigator**.

Genome Canada (\$ 5.6 million): "Towards a Sustainable Fishery for Nunavummiut" Virginia K. Walker (PI), Queen's University; Stephen C. Lougheed, Queen's University; Peter Van Coeverden de Groot, Queen's University; Stephan Schott (**co-lead**), Carleton University.

Arctic Net (\$296,595): "Mining Economies, Mining Families: Extractive Industries and Human Development in the Eastern Subarctic", April 2015-2018, **principal investigator** with Thierry Rodon and Ben Bradshaw.

Aboriginal Affairs and Northern Development Canada (AANDC(\$ 81,249)): "Report on the State of Domestic Energy Provision in the Arctic", **co-principal investigator** with Alexandra Mallett, July 2014-March 2015.

Aboriginal Affairs and Northern Development Canada (AANDC), "An Energy Blueprint for the Canadian High Arctic Research Station (CHARS)", \$ 10,000 with ReSTCo.

SSHRC Insight Development Grant (\$ 65,000), June 2011-May 2013: "Balancing the Natural Beauty of Niagara Falls", **principal investigator**, with Bryan Karney (Faculty of Engineering at the University of Toronto) as a co-applicant.

Major Collaborative Research Initiatives Programme \$ 2,500,000 (Canada Foundation for Innovation Initiative), "Resources and Sustainable Development in the Arctic", **coapplicant** with several others.

SSHRC Research Development Initiative (78,500), April 2009-2010:"Understanding the New Northern Economy", **co-applicant** with Frances Abele (principal investigator) and Thierry Rodon.

SSHRC Standard Research Grant (\$ 90,000), April 2008-2011: "Managing Common Pool Resources through Output-Sharing Partnerships", **co-applicant** with Stuart Mestelman (principal investigator), Andy R. Muller and Neil J. Buckley.

S. Schwartz and S. Schott, "An Economic Experiment to Ascertain the Prevalence of Adjudication Errors in the CPP-D Program", Contract for HRDSC, June-September 2008.

SSHRC 4A-Grant: "Illegal, Unreported and Unregulated Harvesting", 2006, \$ 10,000.

GR6-Grant: "Communication and Information Disclosure in Commons and Social Dilemmas", 2004, \$ 1,500.

SSHRC 4A-Grant: "Communication and Output-Sharing between Social Groups Exploiting Common-Pool Resources", 2003, \$ 5,000.

SSHRC 4A-Grant: "An Analytical and Experimental evaluation of Partnerships as Common Property Resource Management Instruments", 2002, \$ 5,000.

GR-6 Grant: "Sustainable Electricity Production", 2002, \$ 5000.

4. Other Professional Activities

a.Tri-council responsibilities:

SSHRC referee for Insight Grant Competition, January 2017. SSHRC referee for standard research grant application, January 2009 and February 2014.

b.External referee for scholarly journals

Hunter Gatherer Research, February 2018.

Arctic, March 2017.

Review of European and Russian Affairs Journal, June 2016.

School of Public Policy, University of Calgary, Research Paper Series, November 2015

Ecology and Society: March 2014

International Game Theory Review: July 2013

Games: July 2013

Energy Policy: March 2013.

<u>Canadian Public Policy</u>: October 2012. Experimental Economics: March 2012.

Environmental and Resource Economics: September 2011.

Journal of Economic Behavior and Organization: June 2011/June 2012

Land Economics: May 2011/October 2012.

Sustainability Science: June 2009.

Canadian Journal of Agricultural Economics: June 2007.

<u>International Journal for Urban and Regional Research</u>: March 2006. Marine Resource Economics: 2001, December 2004 and spring 2006.

Canadian Water Resources Journal: October 2004.

<u>Pacific Economic Review</u>: January 2003. <u>Studies in Political Economy</u>: April 2003.

c. TV Interviews

Aboriginal People's Television Network with Nigel Newlove, January 7, 2016 on new Arctic Food Security and Fishery Project.

Expert Panel Appearance on Goldhawk Live (CPAC) for one hour on the phone in topic "How well is Canada balancing future energy needs with protecting the environment?", May 9, 2010.

<u>CBC Newsworld Live TV Interview</u> with Fred Langen, May 6, 2003 on problems with Atlantic Canada's fishery management and the cod moratorium.

d. Radio Interviews

CHEZ 1310 with Ed Hand, January 6th 2016 on new Arctic Food Security and Fishery Project.

Radio interview with CBC News on Earth Hour, April, 2011.

Radio interview with CKCU on March 3, 2008 on "A Carbon Tax for Ontario".

Radio interview with <u>CBC Ottawa Morning</u> on February 13, 2006: "New energy sources for electricity generation in Ontario: A reply to the OPG report", February 2006.

12 Live radio interviews about sustaining electricity conservation after the Blackout of August 14, 2003 with <u>CBC Toronto</u>, <u>Ottawa</u>, <u>Vancouver</u>, <u>Whitehorse</u>, <u>Halifax</u>, <u>St. John's</u>, <u>Thunder Bay</u>, <u>Windsor</u>, <u>Winnipeg</u>, <u>Calgary</u>, <u>Montréal and Quebec City</u>.

<u>CBC Radio Interview</u> on Devolution of Natural Resource Rights in the Northwest Territories, with Dave Miller from CBC North, Yellowknife, Ottawa, February 1, 2002

e. Print Media

Interview with <u>Le Droit</u>, August 2005 about the second anniversary of the North American blackout.

f. Organized Workshops

Whitefish Identification Workshop, 5 Elders, Gjoa Haven, May 7th 2018. Harvest Study Training and Feedback Workshop, 15 hunters, Gjoa Haven, May 4 2018.

F ACADEMIC RESPONSIBILITIES (TEACHING)

<u>Undergraduate courses taught:</u>

Econ 1000 for Nunavut, specially designed distance hybrid education course for public servants in Nunavut, delivered summer 2007 on behalf of Economics Department.

Econ 1000 for Nunavut, specially designed distance education course for public servants in Nunavut, delivered winter 2007 on behalf of Economics Department.

Renewable Resource Economics, Department of Economics, McMaster University, 2000 Introductory Macroeconomics, Department of Economics, McMaster University, 2000 Economic Growth and Environmental Quality, Distance Learning, Department of Economics, University of Guelph, 1999

Introductory Microeconomics, Distance Learning, Department of Economics, University of Guelph, 1996, 1998

Graduate courses taught:

Energy Evaluation and Assessment Tools (SERG 5003) 2019

Theoretical Foundations of Public Policy (PADM 6011) 2019

Energy Economics (PADM 5510) 2013, 2014, 2016, 2018, 2019

Environmental and Ecological Economics (PADM 5618), 2009, 2010, 2013

Economic Models of Politics, 2006

Natural Resource and Environmental Management (PADM 5703 Y), Winter 2004, 2005, Fall 2005,

Markets, Prices and Government (PADM 6111), Fall 2003, Fall 2010, Fall 2011, Fall 2012/13, Fall 2014, Winter 2017, Fall 2017

Microeconomics for Management and Policy 2003, 2005, 2008, 2009, 2011 Economics of Public Policy I, 2002

Natural Resource Management (PADM 5614), 2002, winter 2008, 2010, 2011, fall 2012/13, fall 2014, winter 2016, 2018

Public Sector Pricing and Investment (Cost-Benefit Analysis), 2001, 2002, 2004, 2010 Macroeconomics for Management and Policy*, 2001, 2002, 2003, 2005, 2006, 2008, 2009

Professional and specially designed courses

Development of 2 Modules of Cost-Benefit Analysis for the Professional Certificate in Energy Programming and Evaluation, delivered in July 2011 and in September 2012 *Economics of Public Policy*, developed for students of Public Policy Knowledge Network in Georgia, December 2006.

Cost-Benefit Analysis, developed for students of Public Policy Knowledge Network in Georgia, December 2006.

Graduate Supervisions:

PhD:

Russell Iqbal (Public Policy), co-supervisor with Gerald Grant (Business), in progress. Anteneh Belayneh (Public Policy), supervisor, in progress.

Elen Lemaitre-Curri (Public Policy), supervisor, in progress.

Matthew Retallack (Public Policy), co-supervisor (with Graeme Auld), **completed** August 2017.

Mohammad Zebian (Public Policy), supervisor, in progress.

Morteza Mesbah (Civil & Environmental Engineering), joint supervision with Amir Hakami, successfully **defended thesis** in March 2014.

M.<u>A.:</u>

Joshua Russell (M.A. Sustainable Energy Policy), Thesis, co-supervised with Jean Duquette, successfully defended April 17 2019.

Keelia Lafreniere (MASc Sustainable Energy Policy), Thesis co-supervised with Jean Duquette, in progress.

Ben Derochie (M.A.Sustainable Energy Policy) with Yukon Energy Research Centre; "Offgrid solutions for Northern residents and utilities", co-supervised with Jean Duquette, completed.

Peter Massie (Sustainable Energy Policy), "From a Good Deal to a Windfall", Major Research Project Supervisor, completed June 2015.

Ryan

Allison Bone (Carleton University, Politial Economy), Cleaning Up The Harbour: The

Hamilton Harbour Remedial Action Plan as a Sustainable Common Property Institution M.A. Thesis Supervisor, thesis defended May 5, 2009.

Darek Gondor (Carleton University, SPPA), "Ecolabelling and consumer choice: An analysis of consumer behaviour in response to MSC labels in Japan", (major research paper) completed fall 2009.

Ryan Legault McGill (Carleton University, SPPA), "Water and Sewage Management in Iqaluit: Traditional Experiences and Contemporary Problems", (major research paper) completed September 2008.

Coady Wing (Carleton University, SPPA), 2006.

Undergraduate Supervisions:

Honours students:

Mary Gramiak, CUREB summer supervision, summer 2017.

Lukas Marshy, Honours Essay, Bachelor of Public Affairs, 2016-2017.

Norhan Awadallah, Honours Essay, Bachelor of Public Affairs, "The Green Pyramid Scheme: Egypt's Hopeful Shift towards Sustainable Power Generation", April 2015.

Mara Abolins, Honours Essay, Bachelor of Public Affairs, "Bulk Water Export from Canada", completed.

Cheryl Johnson, Honours Essay, Bachelor of Science, Integrated Science & Policy: "Evaluation of Energy Sources for Ontario's Electricity Sector", completed May 2009. Shawn McCallum (Environmental Studies), "Canada's Wind Power Potential", Honours Essay 2005/2006, completed.

Coady Wing (Kroeger College of Public Affairs), "An Exploration of Social Cooperation and an Online Experiment with Endogenous Communication", Honours Essay 2003/2004, completed.

Committee Member:

PhD:

Marc Wickham (Public Policy), committee member, in progress.

Neil Ladell (Natural Resource Management), Simon Frasier University, committee member, in progress.

Ruby Dagher, (Carleton University, SPPA), **thesis defended and completed, August 2017**. Jeff Cottes (Carleton University, SPPA), *Sustainable Biofuels: A Transitions Approach to Understanding the Global Expansion of Ethanol and Biodiesel*, **successfully defended, August 2012.**

Djoulassi K. Oloufade (Ottawa University, Economics), *Analysis of Legal Institutions, Conflict and Trade*, supervisor Louis Hotte, **successfully defended July 2012.**

Richard Levesque (Carleton University, SPPA), PhD Committee Member, A Theory of Policymaking in the Case of Rights Exercised about Actions, completed December 2009.

Derek Ireland (Carleton University, SPPA), *India's Competition regimes and Informal Business Institutions: Interaction, Conflict and Accommodation*, PhD Committee Member, thesis defended Dec. 3, 2008.

Natalia Boliari (Carleton University, SPPA), *Property Rights and Land Management: A Study of the Evolution of Land Tenure in Bulgaria*, PhD Committee Member, **thesis defended Nov. 28, 2008**.

Judith Lipp (Dalhousie University, Interdisciplinary Studies), PhD Committee Member, **defended April 1, 2008.**

M.A.:

Yuichi Amano (Carleton University, Political Economy), M.A. Thesis Committee Member, thesis defended January 2009.

External Examinations

PhD.:

Mihailo Radoman, Dept. of Economics, Carleton University, defended April 2015 (internal external).

Ahmed Nasim Sydee, *THREE ESSAYS ON ACCESS PRICING*, Carleton University Department of Economics, April 2010 (internal external).

Ning Qi, "Two Essays on the Effects of Common Property Management on the Poor", University of Guelph, Department of Economics, defended December 15, 2008. Jun Chen, "Monopoly, Competition and Productive Efficiency", Carleton University, Department of Economics, defended November 2008.

M.A.:

Raelyne Dopko (Carleton University, Psychology), *Effects of Nature on Cooperation in a Commons Dilemma: Implications for Sustainability*, defended September 2012. Lucie Robidoux (Carleton University, Norman Patterson School of International Affairs), *From Natural Resource Scarcity to Social Resource Scarcity: A Better Explanatory Model for Environmental Conflict?*, defended May 2006.

G. Administrative Responsibilities:

University Level:

FPA Benchmarking of Research Centres Committee, 2016-2018

Sustainable Energy Quality Assurance Committee, 2015-2018

PhD Curriculum Review Committee, 2018

75th Anniversary Expo Committee Chair for Sustainability, 2016-2018

Grad Faculty Board Member

Green Revolving Fund Committee Member (since February 2013)

Sustainable Energy Management and Admissions Committee (member) 2010-2018

ACC (member) 2006

Learning Commons Committee (member) 2004/2005

Liaison of School of Public Policy and Administration for Canadian Economics Association Conference, May 29-June 1, 2003 at Carleton University

OGS Vetting Committee, (member), October 2002, October 2012

SSHRC Vetting Committee, (member), October 2002, October 2012.

Learning Commons Committee, 2004.

Faculty Level:

Faculty of Public Affairs Research Centres Benchmarking Project, November 2016-present Search committee for new Director for NPSIA, November 2016-January 2017

Faculty Board Committee (member), 2008

PAM Faculty Computing Committee (member) 2004-2006, 2008/2009/2010/2011

PAM Faculty Computing Sub-Committee for Software Fund (member) 2005-2006

<u>Departmental Level:</u>

Hiring Committee in engineering for an Assistant Professor in Sustainable Energy, Fall 2016

M.A. Graduate Advisor for Sustainable Energy Policy, (July 2010-2017) Innovation, Science and Environment (ISE) Concentration Leader (since 2008) Member of executive board of SIGNALS (network between current students, alumni and faculty with interest in sustainable development and environmental policy): 2003-2009, 2016-2018

Departmental Essay Contest (member) 2008 ISE Stream Advisor, Fall 2005 M.A. Review Committee, 2004.

H OTHER

Academic Heads Roundtable "One Person's Journey: Research and Teaching with Indigenous Communities and Governments", March 27th 2018, Carleton University.

Panelist December 4th 2014: "Canadian Arctic Riches: To preserve or exploit?" presented by the Canada Science and Technology Museum.

Panelist Sept. 27, 2012: "Economic Development and Governance in the Arctic: Challenges for Europe and Canada", Carleton University, organized by Canadian International Council, Centre for European Studies and Embassy of France.

Panelist Nov. 2011: "Poverty and the Environment", Carleton University's Green Energy Symposium.

Organization of Discussion Panel (with Christopher Stoney) on "Regional Transit for the Nation's Capital, moderator Giacomo Panico (CBC Radio), February 2011.

Panelist, August 2010: "Sustainable Development in Emerging Economies: Following the Priority of Ecology?" World Congress of the International Society for Ecological Economics, Oldenburg, Germany.

Panelist, March 2010: "Post-Copenhagen: The Path Forward", CSERC.