

April 2024

PETER J. M. NICHOLSON; Ph.D., ONS, CM

Career Summary: Peter Nicholson's varied career of more than 54 years has included positions in academia (University of Minnesota in mathematics and computer science); business (senior executive positions in banking, telecommunications and the fishing industry); government (Canadian federal government and international organizations), and the non-profit sector (Founding President of the Council of Canadian Academies). Dr. Nicholson is currently Chair of the board of the Canadian Climate Institute.

Personal: Born in Halifax, Nova Scotia on 3 May, 1942; attended grade school in Annapolis Royal, N.S.; received degrees (BSc. and MSc. in physics) from Dalhousie and Ph.D. (Operations Research) from Stanford University; currently lives in Annapolis Royal and Austin, Texas; married to Jane Nicholson; father of two grandfather of seven.

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**EDUCATION****Dalhousie University (1960-65): B.Sc., M.Sc., Physics**

Thesis title (M.Sc.): *The Electrodynamics of a Semi-classical Free Electron Gas*—advisor Melvin Calkin. A paper based on this work, and co-authored with Professor Calkin, was published in *Reviews of Modern Physics*. *Rev. Mod. Phys.* 39, 361 (1967).

Stanford University (1965-69): Ph.D., Operations Research (Mathematics)

Thesis title: *The Algebraic Theory of the Fast Fourier Transform*—advisor Rudolf Kalman. The “fast Fourier transform” has broad application in all domains that involve digital signal processing and is the computational algorithm that enables much of medical imaging. The contribution of the thesis was to elucidate the deep structural source of the algorithm's efficiency and to generalize its application beyond the real numbers. *Journal of Computer and System Sciences* October, 1971.

Ecole des Mines, Centre Automatique et Systèmes (1969) : Postdoctoral research

Research undertaken in Fontainebleau, France, on the algebraic structure underlying algorithms related to the control of automated systems.

CAREER POSITIONS

Founding President and CEO: The Council of Canadian Academies (CCA)

February 2006 – January 2010; Ottawa

The [CCA](#) is a not-for-profit organization that convenes independent panels of leading experts to analyze and interpret the best available knowledge on issues of importance to Canadians. Council reports cover a range of policy areas including health and life sciences, technology and innovation, the environment, and public safety, and provide a source of reliable information widely used by decision-makers across governments, industry, academia, and civil society. To date, the CCA has completed 65 authoritative reports and has received four rounds of financial support from successive federal governments.

Deputy Chief of Staff for Policy: Office of the Prime Minister of Canada

December 2003 – January 2006; Ottawa

The position involved a heavy schedule of day-to-day duties and close liaison with the Privy Council Office staff. Highlights included preparation of two Speeches From the Throne (2004) as well as two election platform documents (2004, 2005).

Special Advisor to the Secretary-General: Organization for Economic Co-operation and Development (OECD)

June 2002 – August 2003; Paris, France

Prepared a major study for Secretary-General and OECD ambassadors on the committee structure of the OECD and authored a comprehensive strategic plan to maximize the influence of the organization. (Nicholson report to the Secretary-General [SG(2003)1])

Chief Strategy Officer: Bell Canada Enterprises (BCE Inc)

September 1995 – May 2002; Montreal

BCE is a telecom holding company that controls Bell Canada (and a number of other investments) and at the time was the controlling shareholder of Nortel Networks Inc. Peter Nicholson's role involved advising the senior management and Board of BCE, as well as senior

officials of the federal government, on the implications of the revolutionary developments associated with the Internet and wireless connectivity which at the time were still in their early stages of commercial development.

Clifford Clark Visiting Economist: Finance Canada

March 1994 – August 1995; Ottawa

This is a senior [advisory position](#) to the Minister and Deputy Minister of Finance that is appointed from time to time and filled by a qualified person from outside of government. Peter Nicholson's role was primarily related to preparation of the 1995 federal budget that averted an imminent fiscal crisis in Canada and set the stage for a turnaround in the country's fiscal position that attracted worldwide attention. He authored on behalf of the Minister, *A New Framework for Economic Policy*, that helped establish the objectives of the 1995 budget.

Senior Vice-president and Executive Assistant to the Chairman: Scotiabank

June 1983 – March 1994; Toronto

Peter Nicholson's role involved principal responsibility for strategic planning and advice to the CEO and senior executive team on a broad range of issues. Most significant was formulating and communicating the bank's strategy regarding the resolution of the Latin American debt crisis in the early 1990s. Scotiabank championed an approach—unique among the major creditors—that became the model for the U.S.-led "[Brady Plan](#)" which ultimately resolved a crisis that had threatened the stability of the world banking system. Scotiabank's role in the resolution was widely recognized in Latin America and led in part to the bank's enduring presence in the region.

Member of the Federal Government's Task Force on Atlantic Fisheries

March 1981 – March 1983; Halifax and Ottawa

The Task Force was created to develop recommendations regarding policy and financial restructuring of Canada's east coast fishing industry that had been crippled by the North American recession of 1980-81. Following the [report](#) of the Task Force, Peter Nicholson joined a sub-group of the original members and negotiated a re-organization and financial restructuring of the principal companies in the industry. Viability of the industry was restored.

Senior Vice-president: H B Nickerson & Sons Limited

December 1978 – February 1981; North Sydney, Nova Scotia

At the time, HB Nickerson & Sons was the largest fishing enterprise in Canada. Peter Nicholson's role primarily involved strategic planning as well as government and industry relations. His principal accomplishment was to both conceptualize and lead a process that

achieved agreement among the major fishing companies in Atlantic Canada on a system of [enterprise allocations](#) which, by creating a form of property rights, resolved the "tragedy of the commons" problem that plagued open access fisheries worldwide. The agreement was ratified by the Government of Canada in 1982 and the model was subsequently applied to almost all fisheries in Canada. This was the world's first large-scale implementation of the approach.

Member of the Legislative Assembly (MLA): Legislature of Nova Scotia

October 1978 – June 1980; Baddeck and Halifax, N.S.

Elected MLA for the rural constituency of Victoria and resigned to work full time for the H.B. Nickerson & Sons fisheries company.

Senior Policy Advisor: Government of Canada

June 1973 – August 1978; Ottawa

Peter Nicholson held progressively senior positions:

- Ministry of State for Urban Affairs (June 1973-December 1973)
- Participation Secretariat for the UN Conference on Human Settlements (Jan 1974-July 1976). Authored Canada's [National Report](#) for the conference and assisted UN headquarters' staff in preparation of documentation for the "Habitat Conference".
- Ministry of Transport (August 1976-July 1977). Authored a major report to Cabinet that recommended privatization of CN. Although rejected at the time, the Crown corporation eventually became private in 1995.
- Department of Regional Economic Expansion (August 1977-August 1978). Authored a major report on Canada's regional economic development, post-Confederation, analyzing the role played by public policy compared with the more powerful influence of continental economic forces.

Assistant Professor: Department of Information, Communication and Control Sciences; University of Minnesota

September 1969 – June 1973; Minneapolis, Minnesota, USA

Teaching and research during formative years of computer science as an academic discipline.

EXAMPLES OF ACTIVITIES IN RETIREMENT (2010-present)

2010-11—Special Advisor to the Independent Panel on Federal Support to Research and Development (Chaired by Tom Jenkins) Co-authored, under the Panel's direction, the report—[Innovation Canada: A Call to Action](#).

2012—Chair of an expert panel charged with making recommendations to the Premier of Nova Scotia regarding the potential re-establishment of a ferry service between Yarmouth, NS and the United States. The [recommendations](#) were implemented.

2012-13—Member of a four-person Panel supporting the Special Advisor to the federal Minister of Public Works and Government Services. The work led to the report: [Canada First: Leveraging Defence Procurement Through Key Industrial Capabilities](#)

2013—Lead author of “Paradox Lost: Explaining Canada’s Research Strengths and Innovation Weakness”, a special [publication](#) of the Council of Canadian Academies.

2015—Advisor to the ONE Nova Scotia Commission. The Commission was appointed by the Government of Nova Scotia to advise on a plan to implement the recommendations of the 2014 “Ivany Report” (*Now or Never*) on the economic future of Nova Scotia. Co-authored, on behalf of the Commission, a major report: [We Choose Now: A Playbook for Nova Scotians](#).

2016—Consultant to the Government of Nova Scotia and the Atlantic Canada Opportunities Agency (ACOA). Prepared, with Mr. Jeff Larsen, a major report: [Field Guide for Nova Scotia’s Innovation Ecosystem: An Innovative Growth Strategy for Nova Scotia](#). The comprehensive report includes specific, actionable recommendations and has influenced government thinking and decision-making in several areas particularly related to innovation policy.

2017—Consultant to the Atlantic Growth Advisory Group appointed by the Government of Canada. Prepared, with the assistance of Mr. Jeff Larsen, the report of the Advisory Group: [An Action Agenda for Atlantic Growth](#), submitted in November 2017 to the Leadership Committee of the Atlantic Growth Strategy (federal Atlantic regional ministers and Atlantic Premiers).

2019- present—Founding Chair of the Board: The Canadian Climate Institute. The [CCI](#) is a national, not-for-profit climate policy research and advisory organization, employing about 40 professionals from coast to coast to coast. Although principally funded by the federal government, the work of the Institute is non-partisan and rigorously evidence-based.

2020-22—Chair: NRC Working Group on Horizon Scanning. The Working Group was established to develop and test one or more methodologies for assessing the mid-term technological future in order to better inform strategic planning at the National Research Council. The small Working Group drew extensively on experts from across Canada and in a wide range of fields. Although much of the work was confidential to NRC the top-level findings were made public in 2021 in: [On the horizon: Several perspectives on Canada's technology future - 2030–35](#).

2021—Member of a panel convened by the Public Policy Forum to prepare a report on Canada’s digital infrastructure. Lead author of the report: [Future Proof: Connecting Post-Pandemic Canada](#). The report developed recommendations regarding universal access to high speed Internet connectivity and preparing Canada to take maximum advantage of 5th generation (5G) wireless technology.

2023—Author of: *Catching the Wind: How Atlantic Canada Can Become an Energy Superpower*. This [study](#), undertaken for the Public Policy Forum, makes the case for multi-decade development of offshore wind energy on Canada’s Atlantic coast as potentially a major contributor to the decarbonization of the nation’s energy generation system.

OTHER BOARDS AND RELATED ACTIVITIES (1985 – present)

Campaign Cabinet: United Way of Greater Toronto (1985-91)

Member: National Advisory Board on Science and Technology (1987-95)

The [Advisory Board](#) was created in 1987 to advise Prime Minister Mulroney and in its eight years’ existence produced a wide range of reports that influenced the development of Canadian science policy and its economic implications.

Member of the Research Council: Canadian Institute for Advanced Research (1990-94)

Founded in 1982, [CIFAR](#) has assembled many of the leading academic authorities and talented early-stage researchers in North America and abroad to bring multi-disciplinary perspectives to bear on some of the most significant research issues of our time. Peter Nicholson was involved as a CIFAR volunteer from the mid-1980s and was a member of the review panel for two programs and on the Advisory Committee for the program on economic growth, as well as serving on the CIFAR Research Council and for a short time on the Board.

Founding Chair of the Board: Fields Institute for Research in Mathematics (1992-96)

The [Fields Institute](#), founded in 1992 at the University of Waterloo, re-located in 1995 to the University of Toronto campus (but remains independent from the university). Fields is among the premier mathematics research organizations in the world. Peter Nicholson guided the Institute’s governance through its formative years and stepped down from the board once it was firmly established in its purpose-built quarters in Toronto.

Member: National Research Council (1997-99)

Members of the [Council](#) are appointed by the federal government and serve in effect as an external advisory board to NRC management.

Founding Chair of the Members: Canada Foundation for Innovation (1997-2002)

The [CFI](#) was created by the federal government in 1997 to oversee provision of federal funding for major elements of research equipment in universities, colleges, research hospitals and non-profits. Peter Nicholson chaired the group of “Members” that designed the governance of CFI for which there had been no precedent. The Members—fulfilling a role analogous to shareholders—appointed the first board of directors and continue to perform that function.

Member of the Board: Stelco Ltd. (1997-2002)

This position provided experience on a large public [company](#) board as well as insight regarding Canada’s capability to compete in a mature global industry.

Founding Chair of the Members: Canada Millennium Scholarship Foundation (1998-2001)

Founded in 1998 with 10-year funding totalling \$2.5 billion from the federal government, the [Foundation](#) was a private, independent organization. It distributed bursaries and scholarships in support of post-secondary education and conducted research into post-secondary access. (Funding was terminated in 2008.) Peter Nicholson was asked by the government in 1997 to chair an initial group of “Members” to establish a governance model for the Foundation and appoint its first board—a role similar to that undertaken for the Canada Foundation for Innovation.

Member: Alberta Research and Innovation Authority (2009-16)

Created by the Alberta government in 2009, the [Authority](#) was an external body, primarily comprising international experts, that advised the government on matters related to innovation, research in universities and colleges, and the diversification of the Alberta economy.

Chair: Standing Selection Committee, Networks of Centres of Excellence (2010-15)

[Networks of Centres of Excellence](#) was a program of the Government of Canada that supported groups of researchers and users of research in a selected number of major areas of importance to Canada. The members of a Network were drawn from principal centres of expertise in universities, business and non-profits across Canada. The Standing Selection Committee developed recommendations to the government regarding proposed Networks most deserving of support. (In 2018 funding of the NCE program was rolled into the New Frontiers of Research Fund.)

Board Member: Macdonald Laurier Institute (2010-15)

Created in 2010, the [Institute](#) is an Ottawa-based public policy “think tank” that focuses primarily on social and economic issues in Canada.

Board Member: Centre for Drug Research and Development (2012-18)

Created in 2012 and based on the UBC campus in Vancouver, the [CDRD](#) was a non-profit corporation that (i) identified promising therapeutic drugs developed with the support of publicly-funded research, and (ii) assisted their further development to the point where the private sector might undertake commercialization. (In 2019 CDRD combined with NEOMED to form [adMare BioInnovations](#).)

Board Member: Institute for Ocean Research Enterprise (2012-17)

[IORE](#) (formerly the Halifax Marine Research Institute) is a non-profit corporation created to promote ocean research and its application to business and public policy.

Member of the Selection Jury for the Donner Book Prize, and Chair in 2017 (2017-21)

The annual [Prize](#) goes to the best book on public policy published each year by Canadian author(s)

SELECTED PUBLICATIONS (2009 – present)

[Information-rich and Attention-poor](#) (2009): This link is to an opinion article in the Globe and Mail. The full text of the paper can be found [here](#).

[Canada's Low-innovation Equilibrium: Why it has been sustained and how it will be disrupted](#) (2016): Published in the Canadian Public Policy journal.

[Facing the Facts: Reconsidering business innovation policy in Canada](#) (2018): Published by the Institute for Research in Public Policy.

[How Can Globalization be Governed?](#) (2020): Published by the Max Bell School of Public Policy, McGill University.

[How Joe Biden Can Heal America](#) (2021): Published by the Johnson-Shoyama School of Public Policy (Universities of Saskatchewan and Regina) in the Policy Brief series.

[Will Liberalism Prevail?](#) (2021): Published by the Max Bell School of Public Policy, McGill University.

[The Three Tragedies that Challenge Climate Policy](#) (2022): Published by the Institute for Research in Public Policy in “Policy Options”.

[Repairing Healthcare in Canada: Time to take the first step](#) (2023): Published by the Johnson-Shoyama School of Public Policy in the Policy Brief series.

[Bound by the Laws of Growth: A long-term global perspective on Canada's economic performance](#) (2023): Published by the Johnson-Shoyama School of Public Policy in the Policy Brief series.

Other papers, interviews, and podcasts can be found at [Policy Wonks](#).

PHILANTHROPIC ACTIVITY

Peter and his wife, Jane Nicholson, established a family foundation and continue to actively support a broad range of charitable and community-development initiatives primarily in and around Annapolis Royal, Nova Scotia.

HONORS & AWARDS

- Member of the Order of Canada (2000)
- Member of the Order of Nova Scotia (2017)
- Honorary degrees from: Acadia University (1984), Dalhousie University (1990), University of Quebec at Montreal (2003), McMaster University (2011), Queen's University (2013)
- [Killam Lecturer](#) (2007)
- Frank McKenna Award from the Public Policy Forum (2016)
- Lifetime Achievement Award from the Canadian Science Policy Centre (2021)