

2017–18 Government of Canada fellows' biographies

Steven Alexander, University of Waterloo***Hosted by Fisheries and Oceans Canada***

Steven holds a PhD in social and ecological sustainability from the University of Waterloo and was most recently a postdoctoral fellow dually affiliated with the National Socio-Environmental Synthesis Center in Annapolis, Maryland, and the Stockholm Resilience Centre in Sweden. As an environmental-social scientist, Steven focuses on community-based conservation and natural resource management, environmental governance, and the human dimensions of environmental change. Past projects have examined the role of social networks in the management of marine protected areas in Jamaica and climate change adaptation in coastal communities.

Steven is also an adjunct professor in the School of Environment, Resources and Sustainability at the University of Waterloo. In addition to his research in the Caribbean and Canada, he has over a decade of teaching and facilitation experience through his work with the National Outdoor Leadership School, Teton Science Schools, Wild Rockies Field Institute, and St. Lawrence University.

**Daniel Cortés-Vargas, Université de Montréal*****Hosted by International Development Research Centre***

Daniel has a PhD in sociology from the Université de Montréal and a master's in political and social studies at the Universidad Nacional Autónoma de México (UNAM). His research focuses on scientific actors and networks of scientific collaboration; theories of globalization and internationalization; and public policies in education, science, and technology of Canada and Latin America. He has produced diverse scientific articles, book chapters, and research reports in English, French, and Spanish.

Daniel has collaborated with different research teams at the Université de Montréal and the UNAM. He has also been the academic coordinator of the Citizen Observatory of Education, a Mexican not-for-profit organization. There, he completed a comparative analysis of public policies in Latin America concerning educational agents, social inequalities, and the intercultural factors of education.

**April Killikelly, New York University*****Hosted by Canadian Food Inspection Agency***

April completed her bachelor's in biochemistry at McGill University and a master's and PhD in biophysics from New York University's Sackler School of Biomedical Studies. She completed a postdoctoral fellowship at the Vaccine Research Center of the National Institute of Allergy and Infectious Disease at the National Institutes of Health near Washington, DC. Her current research focus is on enveloped viruses and has spanned molecular interfaces, protein dynamics, disease pathogenesis and human clinical trials.

April has worked with the Smithsonian Museum National Museum of Natural History to develop infectious disease content. She has been asked by the American Society for Microbiology to speak to the public about the history of vaccination and has developed and taught courses on biophysics, science communication, and organic chemistry.



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Kelsey Lucyk, University of Calgary

Hosted by Employment and Social Development Canada

Kelsey Lucyk recently completed her PhD from the University of Calgary's Department of Community Health Sciences, where she has worked as a research associate since 2015. She also holds a master's in community health sciences from the University of Calgary and a bachelor's in anthropology and history from the University of Alberta.

Kelsey's dissertation explored the history of the social determinants of our health approach in Canada since 1910, to inform present and future population health in Canada. Through this work, she developed her interest in public policy, particularly in its potential to serve as a population-level intervention to enhance health equity and social justice.



Catherine Middleton, Ryerson University (faculty)

Hosted by Canadian Radio-television and Telecommunications Commission

Catherine Middleton is a professor at the Ted Rogers School of Management at Ryerson University and a former Canada Research Chair. Her research focuses on understanding what is needed to improve access to digital technologies for all Canadians in order to enable them more fulsome participation in society. Her research has investigated the use of smartphones in organizations, the development of next-generation broadband networks in Australia and Canada, the role of public Wi-Fi networks, competition in the Canadian broadband market, and Canadians' internet use.

Catherine contributes to the policy-making process through engagement in public consultations (e.g., intervening in the development and review of the CRTC's Wireless Code of Conduct and the review of basic telecommunications services). She is a member of the Royal Society of Canada's College of New Scholars, Artists and Scientists, and is the past board chair of CANARIE.



Vivian Nguyen, Carleton University

Hosted by Natural Resources Canada

Vivian completed her bachelor's in environmental science, with minors in business and biology, and continued to a master's and PhD in biology at Carleton University, specializing in human dimensions and knowledge mobilization in fisheries. Her doctoral research focused on the science transfer of biotelemetry research into fisheries management. Vivian has a diverse background in research ranging from understanding fish behaviour to human behaviour, using both biological and sociological approaches. The broad theme of her current research interests lies in understanding and bridging the gap between science and action.

During her PhD, Vivian collaborated broadly with IN FISH, Ocean Tracking Network, Neotropical, Great Lake Fisheries Commission, and other groups. She has contributed to producing syntheses and policy recommendations for inland fisheries research and management, with an aim to raise the profile of inland fisheries in policy discussions. She has also been involved in bringing forward into discussions issues related to science communication, such as peer-review systems, effective communication, and knowledge mobilization and exchange, as well as data sharing and other topics that lie at the intersection of science and policy.



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Mohamed Rhouma, Université de Montréal***Hosted by Canadian Food Inspection Agency***

Mohamed holds a master's in pharmacology and a PhD in microbiology from the Faculty of Veterinary Medicine at the Université de Montréal. His doctoral research focused on the therapeutic efficacy and pharmacokinetics of the antibiotic, colistin sulfate, in animal production and its resistance to bacteria.

In his recent postdoctoral fellowship at the Université de Montréal, Mohamed studied the effect of polymyxins and E. coli infections on the gut microbial diversity of food-producing animals. His research has been published in Veterinary Research, the International Journal of Antimicrobial Agents, BMC Microbiology, and Frontiers in Microbiology. He is also a reviewer for several scientific journals. In parallel with his research activities, Mohamed is teaching the principles of chemical and microbiological risk analysis for graduate and undergraduate students at the Université de Montréal.

**Denys Shumakov, McMaster University*****Hosted by Health Canada***

Denys Shumakov has a master's in radio engineering from National Technical University of Ukraine and a PhD in electrical engineering from McMaster University. From 2009 to 2013, he was a medical engineer with Materialise NV, a company offering 3-D printing software and services in health care. In 2012, Denys completed Allanta's internal auditor training and subsequently worked both as an internal auditor and a medical engineer for Materialise NV.

Denys is the author of 11 journal articles and a book chapter. He received the McMaster International Excellence Award from 2014 to 2016 and is a reviewer for IEEE Transactions on Microwave Theory and Techniques and the IEEE Journal of Electromagnetics, RF, and Microwaves in Medicine and Biology.

**Cary Soares, University of Ottawa*****Hosted by Agriculture and Agri-Food Canada***

Cary recently completed his PhD in neuroscience at the University of Ottawa's Brain and Mind Research Institute. His doctoral research projects focused on understanding the physiology and dynamical function of synapses — the smallest functional units of the brain's architecture — using novel methods in microscopy and single-cell recordings. This work was done in affiliation with the University of Ottawa's Centre for Neural Dynamics. In his role as a graduate researcher, Cary gathered useful experience in data analysis, statistics, and machine learning, and he is now driven to apply this technical experience to issues that more directly impact the lives and well-being of Canadians.



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Sherry Wasilow, Carleton University

Hosted by Defence Research and Development Canada

Sherry received her PhD in communication from Carleton University, where her research addressed Canadian military-media relations through an examination of embedded reporting, using Canada's involvement in the Afghanistan War as a case study. She also holds a master's in journalism from the University of Texas at Austin, where she researched news sources around America's war on drugs.

Sherry's professional background includes communicating addiction science research to non-scientists, health planning and policy, and media and legislative analysis. She has a deep interest in the social impact and ethical implications of science, technology, and innovation, and is always curious about how best to bridge theory, evidence, and practice.

