Impact of the Award

In this, the Award's fifth year, the CSPC followed up with previous winners and runners-up to ask them about the impact that the CSPC Science Policy Awards of Excellence have had on their lives. It is inspiring to see these bright young people continue to pursue their passion for evidence-based policy.

1st CSPC Award Winner (2013)—Ari Cuperfain

Ari Cuperfain was the inaugural recipient of the Canadian Science Policy Awards of Excellence, Young Generation Award in 2013. He has since completed a MSc in Chemistry and a MD, and is currently in his residency in Psychiatry at the University of Toronto. His research interests are in neurogenetics with a focus on both aging and personalized medicine. With respect to science policy, Ari was one of two Canadian delegates selected to attend the Global Biotech Revolution 2016 Leaders of TomorrowGapSummit, where young professionals from over 30 countries met to address the most pressing global challenges in biotechnology expected over the next several decades. Ari is passionate about geriatric medicine, geriatric psychiatry and models of healthcare delivery for older adults.

2nd CSPC Award Winner (2016)—Amani Saini
"Using Genetic Tests to Prevent Adverse Drug Reactions"

Amani Saini received the 2016 Canadian Science Policy Award of Excellence for her policy to prevent adverse drug reactions (ADRs). Afterwards, she started an organization, Adverse Drug Reaction Canada (ADR Canada) (www.adrcanada.org), which raises awareness about preventing ADRs through data collection, pharmacogenomics, genetic testing, and electronic medical records. This year, ADR Canada worked with a political party in the Yukon to write a motion calling on the Canadian government to improve reporting of ADRs. This motion was tabled, then debated in the Yukon Legislative Assembly in April. It passed unanimously and a letter was sent to the federal Minister of Health with the signatures of all three party leaders in the Assembly. In the coming years, ADR Canada will continue to expand its activities to better communicate policies and disseminate knowledge of how ADRs can be prevented. It will connect with Canadians and organizations to build a national network of those wanting to see an end to ADRs, which are Canada's 4th leading cause of death. Amani currently works as the Policy Advisor at Vancouver Coastal Health and can be found on Twitter at @amani_saini

Impact of the Award

3rd CSPC Award Winner (2017)—Sierra Clark
"Residential Woodburning in Canada: Health and Climate Effects and Intervention Strategies"

Sierra Clark is currently a doctoral student in Epidemiology at Imperial College London and works with the Pathways to Equitable Healthy Cities project which aims to improve population health, enhance health equity, and ensure environmental sustainability in cities around the world. "The Award led me to apply for a PhD project which would have a direct impact on health-oriented policies in cities around the world, as well as the Policy Analyst Recruitment and Development Program (PARDP) policy analyst role within the department of Natural Resources Canada. The policy that I proposed for the CSPC Youth Award would have been within the jurisdiction of that department and I could have acted on it within that role. It was a very tough decision for me, though in the end, I chose to accept the PhD. While my actions on this policy proposal are on hold for now, it is likely I will revisit it, or something similar, in the future.

4th CSPC Award Winner (2018)—Jessica Kolopenuk
"An Indigenous Approach to Canada's National Missing Persons DNA Program"

Jessica Kolopenuk is an Assistant Professor in the Faculty of Native Studies at the University of Alberta (UofA). She is a co-founder and co-lead of the Indigenous Science, Technology, and Society Research and Training Program (Indigenous STS) at the UofA; and the Summer internship for INdigenous peoples in Genomics Canada (SING Canada). Her academic work and policy advising is aimed at understanding what scientific knowledge means for Indigenous peoples and, additionally, what Indigenous knowledge can mean for scientific fields. Kolopenuk's program-building goals encompass support for Indigenous students and communities who wish to engage with science, technology, and policy fields; and building the capacities those fields so that they are capable of producing and backing highly interdisciplinary, relational, and Indigenous research and training approaches.

Impact of the Award

2016 Runner-up—Robert Gooding-Townsend
"Using a Modified Lottery to Select Among Meritorious Grant Applications"

My career trajectory has taken me away from the world of science policy, especially after I realized that it was not a good decision for me to pursue a PhD. I'm now working at Copperleaf, a Vancouver software company that provides decision analytics for utilities. My science policy background has been crucial to some of the large initiatives I've been involved with: internally building support to become carbon neutral, and investigating how our solution can help utilities mitigate and adapt to climate change. When I'm not at work, I like to hang out on Science Twitter (@rjgoodin) and write overly contrived fantasy stories.

2016 Runner-up—Jessica Ross
"Rethinking Phosphorus: Contaminant or Commodity?
Securing Food for Our Future"

2018 has seen Canada's phosphorus policy community grow and progress, and Jessica has been thrilled to be part the effort! The year kicked off with the National Nutrient Recycle and Reuse (NNRR) Forum in March, a concerted effort across several government, academic, and industry stakeholders to develop a Canadian phosphorus roadmap and policy. This forum led to the preparation of the "NNRR Forum Report - A Roadmap for Building a Canadian Nutrient Recovery and Reuse Framework," which includes information and recommendations from Jessica's paper published in FACETS, "Canada: Playing Catch-Up on Phosphorus Policy."

Jessica is also the co-founder of www.PhosphorusHub.com, an outreach effort alongside the NNRR Forum. The goal of the Phosphorus Hub is to connect Canadian and North American groups who are interested in the intersection of food, soil, fertilizer, security, water, and the circular economy - in other words, phosphorus. The highlight of the year came in September, when Jessica and her thesis supervisor, Dr. Sidney Omelon (McGill), were selected as Top 10 finalists out of 150 applicants in the MaRS Discovery District's Women in CleanTech challenge. Their technical proposal and vision for the role of phosphorus within a sustainable, clean technology future meant they got to speak about their vision with one of their heroes, writer and innovator Margaret Atwood.

Jessica was recognized as the Valedictorian at the University of Ottawa's Fall 2017 Convocation (Science, Engineering, and Medicine). She continues to work full-time as a Project Manager in the Department of National Defence.

Impact of the Award

2017 Runner-up—Dr. Deena M. Hamza
"A Proactive and Cost-Effective Approach to Reducing Mental Illnesses"

Since the success of her proposal, Deena has undertaken research into the training family medicine residents receive in mental illness. As a key collaborator with the College of Family Physicians of Canada, Deena has provided evidence of the urgent need to enhance training experiences for residents in the treatment of mental illness, as well as providing care to Indigenous peoples and marginalized, disadvantaged and vulnerable populations. In addition, Deena has been invited to speak as an "expert" on mental health in for media and other audiences and received the Audience Award at UAlberta's Falling Walls competition (part TedTalk, part Dragon's Den) for her pitch "Breaking the Wall of Mental Illness". Deena is Evaluation Lead with Postgraduate Medical Education in the Faculty of Medicine & Dentistry at UAlberta where she is evaluating the curriculum change from a time-based system to one where residents are required to demonstrate competencies specific to their area of practice to improve patient care outcomes by ensuring future physicians have skills in patient-centered care, communication, professionalism, critical thinking, and teamwork alongside the attainment of medical knowledge.

2017 Runner-up—Meagan Grabowski
"Modernizing the Yukon Scientists and Explorers Act"

Being part of the Canadian Science Policy Conference Award recipients provided a strong foundation and motivation for me to move my policy recommendations forward. After receiving a congratulatory letter from the Yukon Government Minister of Tourism and Culture, I had a meeting with the Deputy Minister about my recommendations and received news that improvements would be made. In my community, I continue to discuss and push for better relationships between researchers and northerners, particularly First Nations' Governments. I have also been growing my consulting business, and continue to work on relationship building with between levels of government, industry and researchers on behalf of the First Nations. I see a strong future for the Yukon in moving from a field site for international and national researchers, to a driver and leader in all stages of research.

Impact of the Award

2018 Runner-up—Anna Levinsson
"Sex, drugs & cardiovascular disease: cardiovascular drug development needs women"

Originally from Sweden, I arrived in Montreal in summer 2015. I had recently finished my PhD in medical science and came to Montreal for a summer program in cultural psychiatry at McGill University. My background is quite interdisciplinary; I have a master's degree in mathematical statistics with minors in art history and German language. The topic of my doctoral dissertation was interaction effects between genetic susceptibility and air pollution exposure on cardiovascular disease, but during my time as a PhD candidate, I also collaborated with a German research team on a study of sex differences in schizophrenia. Since I arrived in Montreal I have worked as a postdoctoral fellow at McGill University Department of Psychiatry and currently as a postdoctoral fellow at Montreal Heart Institute and Université de Montréal Département de Médicine. I currently hold a Mitacs Accelerate Postdoctoral Fellowship with AstraZeneca as industrial partner.

2018 Runner-up—Claire Velikonja & Samuel Looper
"Wildfire Disaster Monitoring and Management Through the Canadian Space Agency"

Claire Velikonja is an undergraduate in Chemical Engineering at the University of Toronto and member of UTAT Space Policy. Samuel Looper is an undergraduate in Engineering Science at the University of Toronto, and executive director of the University of Toronto Aerospace Team (UTAT) Space Policy Division. UTAT is a student design team, with over 100 members designing and building rockets, microsatellites, and UAV. UTAT has a strong commitment to STEM outreach, and education. The Space Policy Division was founded to promote innovation, and sustainability in applications of space technologies. The division is motivated by our experience building and developing rockets and satellites to find novel applications and study the potential of space based technologies to improve the lives of people on Earth. The division ha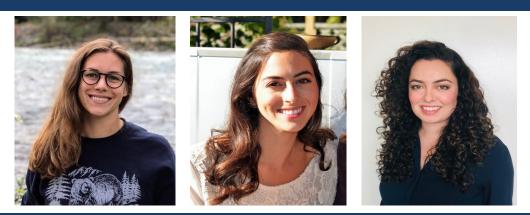s begun a partnership with the United Nations Space Generation Advisory Council to study Space Technology for Disaster Management and continue our advocacy on the international stage.

We look forward to seeing the impact of the Award on this year's winner and runners-up to following up with the 2019 winners to see where their interest and drive takes them.

**We hope that you enjoy the Awards Committee's
2019 selection of top Awards proposals on the following pages.**

HONOURED PARTICIPANTS -
Alana Westwood, Kathlyn Woolfson, and Elnaz Shadabi
An Action Plan for Lasting Science Integrity Policies

BIOGRAPHIES

Alana Westwood, Kathlyn Woolfson, and Elnaz Shadabi are all members of the 2018-2019 cohort of the Mitacs Canadian Science Policy Fellowship. Dr. Westwood took up her fellowship at Natural Resources Canada, and Drs. Woolfson and Shadabi completed their fellowship years at Canadian Food Inspection Agency. This policy proposal arose from a Science Policy Hackathon workshop co-hosted by Mitacs and Evidence for Democracy with support from FACETS, all of who the applicants wish to thank. The applicants also wish to thank the other members of their working group including Dr. Stefanie Haustein, Dr. Claire Austin, Dr. Katie Gibbs, and Peter Severinson.

INSPIRATION

"In these contentious times, Canadian federal science and evidence has a role in public discourse. Policies that ensure the integrity of science (inclusive of social and economic sciences) conducted by federal scientists are one tool to establish and protect the role of evidence in public life. We are members of the Mitacs Science Policy Fellowship, whose objectives include bringing with scientific expertise to support government policy development and allowing Fellows the opportunity to learn about the governance and implementation of science in public policy. As both Fellows and federal public servants, we share an interest in the use of evidence to support public policy. We also wish for federal scientific activities to be seen as credible and trustworthy in the eyes of stakeholders and the public. The federal Scientific Integrity Policies offer a promising tool to achieve these goals, but their potential has not yet been fully realized."