



The Partnership Group for  
**Science and Engineering**

Le Partenariat en faveur des  
**sciences et de la technologie**

## PAGSE Annual Activity Report

1 June 2020 – 30 June 2021

The Partnership Group for Science and Engineering (PAGSE; [www.pagse.org](http://www.pagse.org)) is a non-profit umbrella organization of national societies in Science and Engineering. It was formed in June 1995 at the invitation of the Academy of Science of the Royal Society of Canada. The organizations that comprise PAGSE represent almost 60,000 individual members from industry, academia, and government sectors. We work collectively to represent the Canadian science and engineering community to the Government of Canada, and to advance research and innovation for the benefit of Canadians. PAGSE is not a lobby group. It does not seek an audience to advance the cause of specific science and engineering initiatives. Rather, its intent is to address the broader issues of science and engineering policy at the national level and to inform parliamentarians on topics of science and engineering.

### Organizational Update

Despite the challenges presented by the COVID-19 pandemic, this past year marked several important milestones for PAGSE, including its 25<sup>th</sup> anniversary. Along with a new website and rebrand, PAGSE became officially incorporated as a non-profit organization in July 2020 with the inaugural Board of Directors guiding the process. These behind-the-scenes accomplishments will set PAGSE up for long-term success as a trusted source of non-partisan information on science and engineering research in Canada.

Activities on the programming side were also busy, with a relaunch of the Bacon and Eggheads series following a brief hiatus at the beginning of the pandemic. Response to the virtual format has been overwhelmingly positive with record-high attendance numbers, and requests from across Canada for live streaming of events upon our eventual return to in-person breakfasts on Parliament Hill. New issues of SciEng Pages have also been released, with a goal to publish these on at least a quarterly basis moving forward.



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## Bacon & Eggheads

PAGSE (*in partnership with its supporting organizations, listed in Appendix I below*) presents a monthly breakfast meeting on Parliament Hill, known as “Bacon and Eggheads”. Speakers at the meetings inform parliamentarians about recent advances in science and engineering. Due to the ongoing COVID-19 pandemic, this season’s events have been held virtually:

### [Developing Vaccines for Pandemics – Contrasting the Ebola and COVID-19 experience](#)

Gary Kobinger, Université Laval  
October 29, 2020

### [Seeds of a Better Anthropocene](#)

Elena Bennett, McGill University  
December 3, 2020

### [Better Pandemic Preparedness – How Canadian science can be ready for future threats](#)

Volker Gerds, University of Saskatchewan  
February 18, 2021

### [Energy Systems and Land Reclamation: An Environmental Imperative](#)

M. Anne Naeth, University of Alberta  
March 25, 2021

### [The global race towards quantum technologies: Canada’s contributions and imminent opportunities](#)

Alexandre Blais, Université de Sherbrooke  
April 22, 2021

### [On the path to a net-zero carbon economy: carbon capture, utilization and storage](#)

Donald Lawton, Carbon Management Canada and the University of Calgary  
May 13, 2021

### [Have we entered the sixth mass extinction event? A view from home](#)

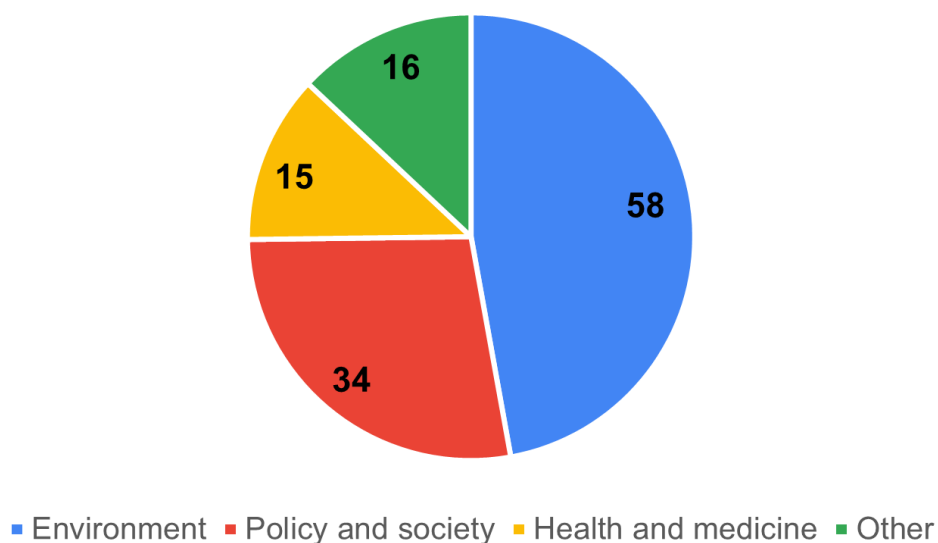
Lenore Fahrig, Carleton University  
Andrew Gonzalez, McGill University  
Mark Vellend, Université de Sherbrooke  
June 2, 2021



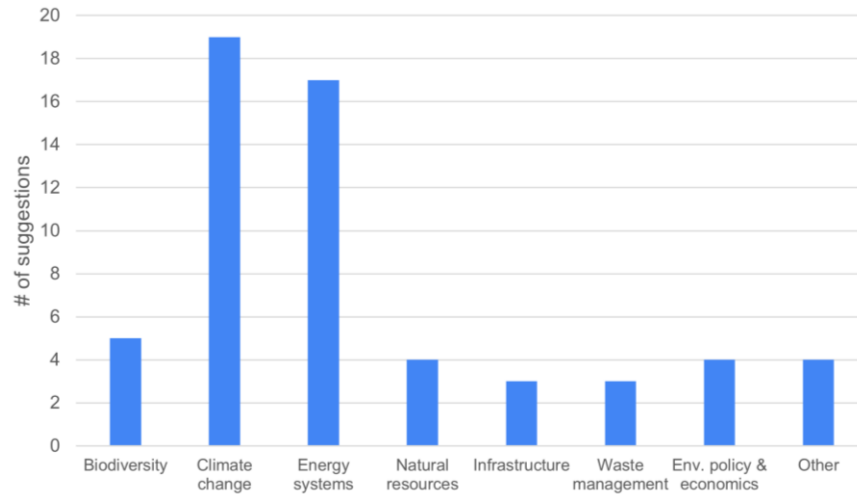
Date	Title	Egghead	Presenting Sponsor	Total - Registered	Total - Attended
29-Oct-20	Developing Vaccines for Pandemics – Contrasting the Ebola and COVID-19 experience	Gary Kobinger, Laval University	IDRC	344	177
03-Dec-20	Seeds of a Better Anthropocene	Elena Bennett, McGill University	NSERC	253	189
18-Feb-21	Better Pandemic Preparedness – How Canadian science can be ready for future threats	Volker Gerdts, University of Saskatchewan	Genome Canada	440	196
25-Mar-21	Energy Systems and Land Reclamation: An Environmental Imperative	M Anne Naeth, University of Alberta	CANARIE	188	108
22-Apr-21	The global race towards quantum technologies: Canada's contributions and imminent opportunities	Alexandre Blais, University of Sherbrooke	CANARIE	250	181
13-May-21	On the path to a net-zero carbon economy: carbon capture, utilization and storage	Don Lawton, University of Calgary	NSERC	457	259
02-Jun-21	Have we entered the sixth mass extinction event? A view from home	Lenore Fahrig, Carleton University Andrew Gonzalez, McGill University Mark Vellend, University of Sherbrooke	Museum of Nature	248	151

**Figure 1: Engagement Data from 2020-2021 Event Season**

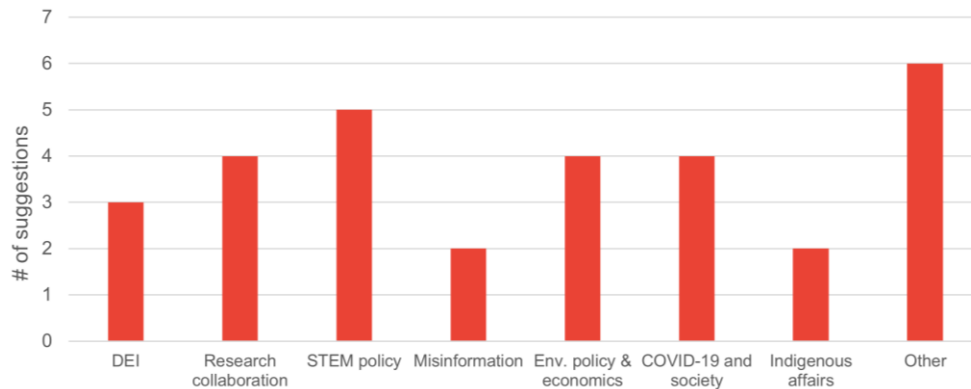
The following data presents a summary of topics requested to be covered in future events/publications, received in post-event surveys and other outreach activities:



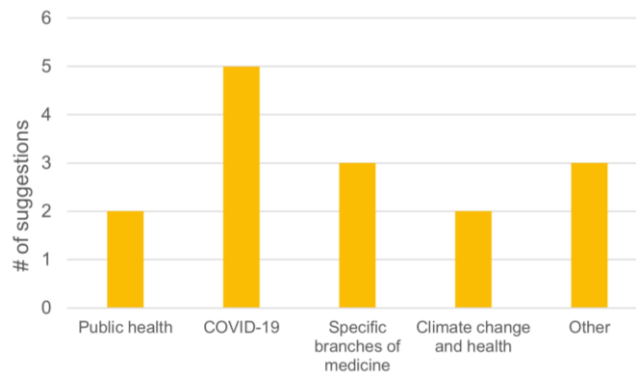
**Figure 2: # of Suggestions Received in Each Overall Category**



**Figure 3: Breakdown of Suggestions within the Environment Category**



**Figure 4: Breakdown of Suggestions within the Policy and Society Category**



**Figure 5: Detailed Breakdown of Suggestions within the Health and Medicine Category**



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Other suggestions included:

- the role and value of Traditional Indigenous Knowledge, food industry innovations and safety, artificial intelligence, space exploration, and Blockchain

## SciEng Pages

SciEng Pages is an initiative undertaken by PAGSE to provide brief, evidence-based assessments of topical science and engineering topics to Parliamentarians and the public. Two new issues have been published this year:

- [5G in Canada](#)
- [Canada's role in the responsible supply of technology metals](#)

Publication Date	Title	Total Downloads (ENG + FR)
09-Feb-21	5G in Canada	N/A
09-Jun-21	Canada's role in the responsible supply of technology metals	430

Figure 6: Engagement Data from 2020-2021 Publications (as of July 19, 2021)

To view all SciEng Pages issues please visit: <https://pagse.org/scieng-pages/>.

## PAGSE Council Meetings

Guests, representing science and engineering in the government and industry sectors, are invited to PAGSE Council meetings to present their perspectives on science and engineering in Canada, on the activities of their organizations, as well as the potential issues and challenges that they would like to see PAGSE address. Members also consider federal activities and reports and how best to promote and sustain Canada's scientific base. During the last year PAGSE has welcomed the following guests:

- October 9, 2020: **Rémi Quirion**, Chief Scientist of Québec
- February 24, 2021: **Alejandro Adem**, President of NSERC
- May 26, 2021: **Mona Nemer**, Chief Science Advisor of Canada



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## Meetings with Other Organizations

- July 2020: NDRIO
- July 2020: CANARIE
- July 2020: TD Bank
- July 2020: NSERC
- August 2020: Canadian Museum of Nature
- September 2020: Genome Canada
- September 2020: International Development Research Centre
- January 2021: Professional Geoscientists Ontario
- January 2021: Natural Resources Canada
- January 2021: National Research Council of Canada
- February 2021: Canadian Federation of Earth Sciences
- June 2021: Canadian Botanical Association

## Submissions to Parliamentary Committees and Consultations

With the support of several member representatives, PAGSE submitted [a brief to House of Commons Standing Committee on Finance](#) in response to the pre-budget consultations in August 2020. All past submissions are available [on the PAGSE website](#).



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## **APPENDIX I**

### **PAGSE Members**

Canadian Academy of Engineering (Representative: *Robert Crawhall*)  
Canadian Aquatic Resources Section of the American Fisheries Society (Representative: *Caleb Hasler*)  
Canadian Association of Physicists (Representative: *Maikel Rheinstadter*)  
Canadian Botanical Association (Representative: *Jana Vamosi*)  
Canadian Conference for Fisheries Research (Representative: *Steven Cooke*)  
Canadian Council of University Biology Chairs (Representative: *Bruce McKay*)  
Canadian Federation of Earth Sciences (Representative: *Mike Hall*)  
Canadian Geophysical Union (Representative: *Rich Petrone*)  
Canadian Meteorological and Oceanographic Society (Representative: *Gordon Griffith*)  
Canadian Physiological Society (Representative: *Graham Collingridge*)  
Canadian Rivers Institute (Representative: *Glenn Benoy*)  
Canadian Society for Ecology and Evolution (Representative: *vacant*)  
Canadian Society for Molecular Biosciences (Representative: *Imogen Coe*)  
Canadian Society of Microbiologists (Representative: *Thien-Fah Mah*)  
Canadian Society of Plant Biologists (Representative: *Gopal Subramaniam*)  
Canadian Society of Zoologists (Representative: *Katie Gilmour*)  
Chemical Institute of Canada (Representative: *Paul Smith*)  
Engineering Institute of Canada (Representative: *Branislav Djokic*)  
IEEE Canada (Representative: *Kexing Liu*)  
International Association for Great Lakes Research (Representative: *Paul Sibley*)  
Society of Canadian Limnologists (Representative: *Bjoern Wissel*)  
Statistical Society of Canada (Representative: *Jack Gambino*)

### **Board of Directors**

Jérôme Marty, *PAGSE Chair*  
Robert Crawhall  
Maria DeRosa  
Natalie Goto, *Bacon and Eggheads Committee Chair*  
Rees Kassen  
Kexing Liu



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## Thank you to this year's Supporting Organizations

Canadian Museum of Nature  
CANARIE Inc.  
CIFAR  
Coherent Advice  
Colleges and Institutes Canada  
Genome Canada  
IMRSV Data Labs  
International Development Research Centre  
McGill University  
National Research Council of Canada  
Natural Resources Canada  
Natural Sciences and Engineering Research Council  
Sustainable Eastern Ontario  
TD Bank  
Université Laval  
University of Alberta  
University of Calgary  
University of Saskatchewan  
Welch LLP