

**Canadian Geoscience Education Network Annual General Meeting**  
**5:00 – 7:00 p.m., Saturday, June 16, 2018**  
**Simon Fraser University (Harbour Centre)**  
**515 West Hastings St., Vancouver**

*Present:* Charly Bank, Katherine Boggs, Kevin Cameron, Beth McLarty Halfkenny, Lesley Hymers, Chris King, Anne Timmermans, Eileen Van der Flier-Keller, Christy Vodden, Miriam Vos-Guenter, Shona Walbury, Andrea Waldie, Janice Williams, Erica Williams, Jane Wynne

**President's report** (Lesley Hymers)

Lesley congratulated Eileen, Chris, and Beth for the successful one-day communications workshop held prior to the AGM as part of Resources for Future Generations 2018 (RFG 2018). There was an excellent, very engaged attendance of about 30 people.

Unfortunately, the teachers' field trip had to be cancelled owing to a range of issues linked to timing, but the teachers' workshop would be going ahead next weekend.

She then reviewed CGEN activities during the past year, including: a key role in planning the RFG 2018 meeting, the launch of the Geoscience Aware Challenge in partnership with the Girl Guides of Canada, and a pilot project planned for implementation at Pukaskwa National Park for the Geoscientists in Canadian National Parks project. She thanked contributors to these projects and other CGEN initiatives. For full details and reports on other projects, the President's report is attached as Appendix 1.

**Report of the Secretary** (Shona van Zijl de Jong by email)

Shona reported that the broader CGEN Communications Strategy is now up and running. However, due to other obligations, she will have limited time to offer to CGEN, but, to support the broader CGEN outreach efforts, she will be putting out another call for social media content creators/volunteers. Full report attached as Appendix 2.

**Report of the Treasurer** (Christy Vodden)

See Appendix 3 for 2017-2018 financial report. Christy reported that as of April 30, 2018, the CGEN bank balance was \$18,317.93 (includes \$624.55 held for the geoheritage project – this is part of a \$750 grant that the CGEN executive approved on November 21, 2017, to cover operating expenses for the geoheritage project over the next five years).

Incoming funding included an annual grant of \$3,500 from our parent body, the Canadian Federation of Earth Sciences, and \$5,000 from the Canadian Geological Foundation (CGF) to reimburse CGEN for the expenses it had covered for Year 2 of a three-year grant (managed by Eileen) to improve and promote the CGEN website.

Outgoing funds covered costs linked to the 2017 annual general meeting and teachers' workshop in Kingston, an audit of the CGEN website, the geoheritage project (using their funds), and bridge funding for Year 3 of the CGF grant (note, our invoices for Year 2 resulted in a credit of \$1,135.77 applied to Year 3, so \$3,864.23 remains available for this

final year of the CGF grant).

### **Report of the CGEN Webmaster (Miriam Vos-Guenter)**

Miriam reported that the English and French versions of the Geoscape and Waterscape Reconstruction Project were now complete. She also noted that she had put in place enhanced security (https) for the archive part of the CGEN website, however, security updates for the CGEN main website and EarthLinks must be done through the original developer, Fleiva Media. This is particularly important as the membership list on the main website is not fully secure even though it is password protected. CGEN members agreed with her recommendations to (1) retire the membership page to avoid any privacy breaches, and (2) add links on our website to our Facebook and LinkedIn pages so that any CGEN blog entries automatically show on them. [*Action: Miriam will send Lesley a list of what is needed to move forward in adding social media buttons to our website*].

Lesley noted that she had recently reactivated the Twitter account as teachers and school boards use Twitter – Facebook is blocked by some school boards, and LinkedIn has professional focus rather than outreach/education.

There was discussion about how to promote the Four Billion Years and Counting (FBY) webpages to increase usage by teachers of this valuable classroom resource. It was agreed that Lesley would have Fleiva Media add it to the CGEN main website, and Miriam will add it to the CGEN archive. Beth offered to send Miriam a sample FBY chapter she set up for EdGEO to help teachers use the book as a resource. [*Action: Lesley, Miriam, Beth*]

Miriam's full report attached as Appendix 4.

### **Member reports**

#### ***Geoscientists Canada* (Andrea Waldie)**

The publication "Geoscience Canada-Understanding our Earth: The Vital Role of Canada's Geoscientists" was launched at RFG 2018. A joint effort of Geoscientists Canada and the Canadian Federation of Earth Sciences, it is aimed at decision makers. The goal is to circulate it widely to this audience. Downloadable at (English) <https://geoscientistscanada.ca>; (French) <https://geoscientistscanada.ca/fr/>.

#### ***Canadian Geological Foundation* (Jane Wynne)**

Jane provided samples of products from recently completed CGF-funded projects, showing the impressive range of education and outreach materials that have been produced by CGF grants. Complete project listings for previous years and details on how to apply for a grant can be found at: <http://www.canadiangeologicalfoundation.org>. A total of \$209,500 was allocated to projects in 2017. The 2018 grant allocations will be posted by year-end.

#### ***EdGEO* (Anne Timmermans)**

Anne reported that Beth was stepping down as EdGEO chair after a transitional year in which Beth had worked with Anne and Janice Williams as co-chairs. As of this meeting,

Anne will take over the position of EdGEO chair. CGEN members thanked Beth for her outstanding work as EdGEO chair.

Anne noted that EdGEO had received another three-year grant from the Canadian Geological Foundation. The past year has focussed on translation of EdGEO resources into French, including the newsletters. Given the number of EdGEO documents and the cost of translation, the challenge is how to decide what level of translation is possible. The decrease in EdGEO applications has continued and is a matter of concern. Promotion of EdGEO is going to be a priority. As a first step, a booth has been developed and the plan is to send it to events across Canada. Major projects for the coming year include a redesign of the website and building an EdGEO presence on social media (a Facebook page is in the works).

***Ottawa-Gatineau Geoheritage Project*** (Christy Vodden for Al Donaldson)

OGGP continues to be very active with displays and presentations at various events (Ottawa Lapsmith Club Mineral Show, Pinhey's Point Riverfest, Explore Geoheritage Day, etc.), as well as guided geotours at some of the region's geoheritage sites. Website: <https://www.ottawagatineaugeoheritage.ca>.

***Simon Fraser University*** (Kevin Cameron)

Kevin reported that SFU's outreach efforts included targeting guidance counsellors using social media, a number of public/student events (of note, Science Spooktacular attracted thousands of people), media work triggered by natural disasters, and a new series of videos featuring SFU research from an enquiry-based viewpoint for the new BC curriculum.

SFU has also added two new courses: "Science Communication – An Introduction" aims to help science students from all faculties to develop the skill sets to effectively communicate science to a range of non-expert audiences. Eileen taught it for the first time in Spring 2018. "The Science Around Us: Science for K-8 Teachers" will run shortly. Kevin's full report is attached as Appendix 5.

***Carleton University*** (Beth McLarty-Halfkenny)

Beth reported that Carleton was running a new education outreach program, a field course for teachers, in July in Perth, Ontario. Eleven teachers will do enquiry-based activities at one or two field sites daily for five days. Jane suggested this might be an idea for next year's teachers' workshop at Quebec City.

***Mount Royal University*** (Katherine Boggs)

Katherine reported that she had received a CGF grant to support the development of education and outreach materials for the multidisciplinary CCArray Project <http://ccarray.org>.

***University of Toronto*** (Charly Bank)

Charly reported that the Department of Earth Sciences participates in several university-wide events. Of note was a summer camp for 50 students hosted by the U of T science

department. Declining enrolment has spurred several initiatives aimed at encouraging high school students to consider earth sciences as a career option. Report attached as Appendix 6.

***Mining Matters*** (Lesley Hymers)

Mining Matters continues to deliver its Earth science and mineral resources education to teachers, students and the public. In the 2017-2018 academic year, Mining Matters launched a new program aimed toward schools located in socioeconomically challenged regions of the greater Toronto area. The Rocks + Kids = Opportunities program will provide complimentary, customized Earth science and mineral resources workshops to grades 4 and 5 students and their teachers. Work on the Geoscience Aware Challenge continues in partnership with Girl Guides of Canada, Manitoba Chapter, CGEN and others. An emphasis on increasing partnerships has led to new collaborations with museums across Canada and the Association of Professional Geoscientists of Ontario Education Foundation. Report attached as Appendix 7.

**Discussion**

***Executive Recruitment*** (Lesley Hymers)

Lesley reported that she had had an excellent response to recruitment efforts to renew the CGEN executive, with many qualified and enthusiastic people expressing interest. The following decisions were unanimously approved.

- Beth McLarty Halfkenny, Outreach Coordinator, Department of Earth Sciences, Carleton University, will become co-president, as of this meeting, becoming president at the 2019 meeting for the term 2019-2021. At this point, Lesley will become Past President.
- Amanda McCallum will become Vice-President immediately. She is a geologist/educator based in St. John's, Newfoundland, who operates a consulting firm Ignite Education.
- A new Secretary-Treasurer will be announced shortly to replace Christy Vodden and Shona van Zijl de Jong who have been sharing the position for the past three years. Three excellent candidates have put their names forward. One was elected at the meeting and Lesley will make the offer, with the other two being asked to take on special projects as members-at-large.
- Shona van Zijl de Jong will continue on as Communications Coordinator.

***Social Media*** (Shona van Zijl de Jong via email)

As noted in Shona's report, volunteers and content creators are needed. [*Action: Lesley to set up a conference call*]

***RFG 2018 Legacy Projects*** (Lesley Hymers)

Lesley reported that several legacy projects are being considered including a Science Communications Manual, an Outreach Workshop Guiding Document, and a Resource Compendium of activities from the teachers' workshop. The RFG 2018 Committee will make a decision shortly. [*Action: Lesley will inform CGEN of their decisions*]

**Timing for 2019 AGM at Quebec City, May 12-15** (all)

Once the dates for the education/outreach activities are set, the CGEN Executive will schedule the AGM. <http://gacmac-quebec2019.ca/en/>

Christy Vodden  
Secretary-Treasurer  
September 20, 2018



**Canadian Geoscience Education Network Annual General Meeting  
June 16, 2018  
President's Report**

**Activity Update**

**Resources For Future Generations 2018**

CGEN Members have been active contributors to the Education, Outreach and Early Career Committee, since it was struck in 2016. The Committee has assembled an Education, Outreach and Early Career Technical Program and developed Education and Outreach programming, associated with the Conference, aimed toward Educators, Students and the Public. These elements include an Educator Workshop, focused on Sustainability and the Conference themes of Earth, Minerals, Water and Energy, an Educators' field trip that includes locations between Vancouver and Whistler, a Science Communications Workshop and an RFG 2018 EarthCache.

Legacy projects are being considered as a follow up to the RFG 2018 Conference, including a Science Communications Manual, an Outreach Workshop Guiding Document, and a Resource Compendium of activities from the RFG Educators' Workshop.

**Geoscience Aware Challenge**

The "Geoscience Aware Challenge" created in partnership for the Girl Guides of Canada, Manitoba Chapter, has been completed. The Challenge explores Geoscience Literacy Principles, through more than 30 hands on learning activities. Guiders earn their Challenge badge by completing a requisite number of activities, associated with each of the Geoscience Literacy Principles. The GAC was debuted at the 2018 Girl Guides of Manitoba, Provincial Annual Convention, in April. At the Conference 40 Guide Leaders participated in a training workshop, to prepare them to implement the Challenge with their Groups. Plans are also underway for a September workshop that will support the first cohort of Guides, to complete the Challenge.

**Geoscientists in Canadian National Parks**

The “Geoscientists in Canadian National Parks” (GNCP) project made significant headway since the concept was forwarded onto the Canadian Federation of Earth Scientists, from geologist Tony Berger, for consideration as an initiative for implementation. CGEN championed the initiative and was successfully able to engage Parks Canada, through Fred Sheppard. Candidate Parks were identified and a Pilot Project was developed for possible implementation in, Pukaskwa National Park, in Ontario. This project could not be delivered however due to a funding shortfall. This issue was discussed at the 2018 CFES AGM in April. A recommendation was made that we approach the Association of Professional Geoscientists of Ontario to seek funding. Our request is currently under consideration. If funding can be secured for this season we will reengage Pukaskwa National Park to request another Pilot Project.

**Geoscience For Canada**

This publication was prepared to provide a comprehensive description of Canadian geoscience and geoscientists, for decision makers. The information presented includes minerals, energy, environment, water, public health, geohazards, engineering and infrastructure, the north, and more. It will be debuted at the RFG 2018 Conference.

**Careers Website**

This project remains in progress. The design phase is complete. Content development work continues, with the intent of input from CFES member societies. CFES will provide upfront funding and a CGF grant will be sought in support.

Lesley Hymers

**Canadian Geoscience Education Network  
Communications Committee Report**

8 July 2018

**Report in Brief: CGEN Communications Strategy 2016-2020**

- Activities of CGEN Digital Strategy Coordinator (2014-2018) working on providing CGEN with some good feedback re: communication initiatives and user metrics and coordinating efforts of volunteers to ensure communication outreach
- Call for Volunteers

**Activities of CGEN Digital Strategy Coordinator (2014-2018)**

- getting communication initiatives up and running
- collecting user metrics and providing some metric analysis
- cross promoting material for best possible results
- providing suggestions on digital marketing for CGEN
- coordinating efforts of volunteers to ensure communication outreach
- learning how to process general incoming social media (see addendum)
- working on providing CGEN with some good feedback re: communication initiatives and user metrics (see details below)
- every week - CGEN social media is getting more followers and uptake by the geoscience community (i.e. PDAC and the Ontario Geological Survey are now re-posting CGEN FB posts).

**Activities of CGEN Geoscience Content Creators**

- Marg Rutka is still on board as a volunteer as a CGEN social media content creator

**What's Working, What's Not**

***What's Working***

- Content and community building to support CGEN
- Branding – strategically
- Social media for collecting metrics (see addendum)
- Volunteers taking on the position of content creation

***What's Not Working***

- Making assumptions about longer term interest
- Getting solid commitment from volunteers
- Commitment from volunteers to assume the responsibilities of the role: Digital Strategy Coordinators

**Action Required**



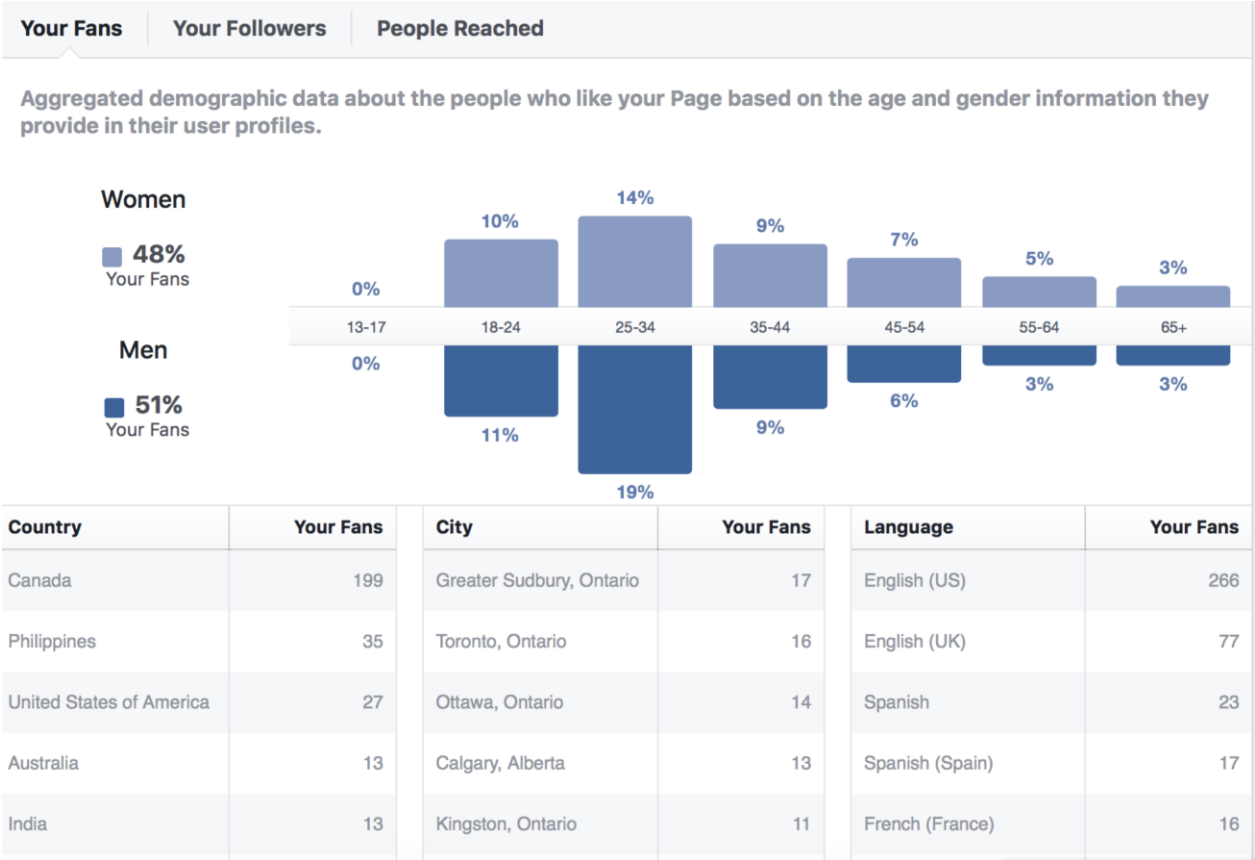
- Put out call for volunteers, focus longer term commitments - roles and responsibilities

## ADDENDUM

**19 Jan 2015 to 8 July 2018: Communication venue, who runs it, and number of members**

<b>Communication Venue and Link</b>	<b>Who runs it (Administrator and owner)</b>	<b>2016 Number of members</b>	<b>2017</b>	<b>2018</b>	<b>Additional notes (CGEN Communication Working Group)</b>
<b>CGEN Webpage</b> <a href="http://earthsciencecanada.com/cgen/">http://earthsciencecanada.com/cgen/</a>	Miriam and? (Partner organization? CFES?)		<b>See Miriam's report</b>		
<b>CGEN Newsletter / Blog</b> <a href="http://www.cgenarchive.org/cgen-newsletter">http://www.cgenarchive.org/cgen-newsletter</a> ).	Christy / Miriam	143 subscribers		150	Members subscribe to newsletter The newsletter/blog allows for comments, but none have ever been made. The email notice of new posts, however, is very effective, so the information is being read on the desktop rather than on the website. Posts that request an action/response to an email address (e.g., RSVP to AGM) do elicit a response.
<b>CGEN membership list</b>	Miriam See below			Miriam See below	Members on list
<b>Twitter</b> <a href="https://twitter.com/CGENNews">https://twitter.com/CGENNews</a>	Miriam  ? CGEN Digital Strategy Coordinator:				Geoscience Content Creators
<b>Linked in Group</b> <a href="https://www.linkedin.com/groups/8247050">https://www.linkedin.com/groups/8247050</a>	Shona  CGEN Digital Strategy Coordinator:	147	158	174	Many are not on the CGEN membership list Geoscience Content Creators: Shona
<b>CGEN Facebook Page</b>	Shona, Lesley,	114	280	449	FB Page provides CGEN good metrics on user engagement

<a href="https://www.facebook.com/CGEN2CanadianGeoscienceEducationNetwork">https://www.facebook.com/CGEN2CanadianGeoscienceEducationNetwork</a>	Christy and Marg  CGEN Digital Strategy Coordinator: Shona				Many are not on the CGEN membership list Geoscience Content Creators: Shona, Marg.
Instagram	CGEN Digital Strategy Coordinator:	TBD			Seeking user engagement (age demographics - 20-35 years) Geoscience Content Creators:



**Canadian Geoscience Education Network  
2017-2018 FINANCIAL REPORT**

Balance at last report (as of April 30, 2018)	\$14,288.62 (1)
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Incoming funds:

CFES grant, April 4, 2018	\$3,500.00
CGF, reimbursement for year 2 of 3, Grant 14-11	<u>\$5,000.00*</u>
Sub-total incoming	+\$8,500 (2)
Total (lines 1 and 2)	<u>+\$22,788.62 (3)</u>

Outgoing payments:CGEN core activities/administration

Queen's University, Kingston workshop lunch for teachers	\$305.25
Juan Leiva, CGEN web site audit/wire frame activity	<u>\$1,050.00</u>
Sub-total	-\$1,355.25

Geoheritage project (from \$772.04\*\* held in CGEN account)

Lafreniere, OGGP website, annual charges for website	<u>\$147.49</u>
Sub-total	-\$147.49

CGEN website, CGF grant, year 2 of 3

Miriam Vos-Guenter, Geoscape Rescue Project and CGEN web fees	<u>\$2,967.95</u>
Sub-total	-\$2,967.95

<u>Sub-total outgoing</u>	<u>-\$4,470.89 (4)</u>
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<b><u>BALANCE as of April 30, 2018 (line 3 minus line 4)</u></b>	<b><u>\$18,317.93</u></b>
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(Includes \$624.55 held for geoheritage project)

\* Expenses submitted were over the \$5000 grant for year 2, and CGF carried forward the excess amount of \$1,135.57 to be claimed with the third and final instalment of the grant.

\*\* 2016-2017 carry over was \$22.04. CGEN executive voted, November 21, 2017, to provide a grant of \$750 to the geoheritage project (managed by Allan Donaldson) to cover expenses for the next five years.

Christy Vodden  
Treasurer  
June 3, 2018

## **2018 AGM - Report of the CGEN Webmaster**

### Updates:

- Both English and French versions of the Geoscape and Waterscape Rescue Project have been completed.
- The Archive website has been updated from http to https. This is the new standard for security, protection and maintaining the integrity of a website whether or not data is collected. HTTPS is also a requirement for many new browser features.
- Security updates for the CGEN main website and EarthLinks must be done through the original developer (Fleiva Media).

### Usage: (for Archive site only)

- English version – 1300-1600 unique visitors per week. 2.5 times as many page views per week;
- French version – 100-120 unique visitors per week. 3 times as many page views
- google.ca/.com are the most frequent referral sites by a factor of 10-20.
- 2017-2018 stats are consistent with previous years

### Maintenance:

The CGEN main website, CGEN's Archive website and EarthLinks continue to be reviewed twice a year for broken links and content.

### Concerns:

- The membership list/registration on the main CGEN website (<http://earthsciencescanada.com/cgen/>) is difficult to maintain and data could be compromised (either maliciously or unintentionally) by users.
- Many existing members are not found on our social media sites and vice versa.
- Newsletter and Twitter underutilized.

### Recommendations:

- Remove member registration page from main CGEN website. Add social media buttons.
- Add social media info to Newsletter Blog page (there are approximately only 150 members registered for blog emails. This would substantially increase the number of members receiving information posted on the blog.)

### Request for Help:

Suggestions for increasing online exposure of FBY (Four Billion Years and Counting) book project (sponsored by CFES/FCST, CGEN members participated in review before publication).

- Archive website – easily done by Miriam
- main CGEN website – requires developer and dollars.

Miriam Vos-Guenter

June 12, 2018



## **Simon Fraser University Report for CGEN Meeting,**

**June 2018**

**Outreach, Recruitment and Community Engagement Events – May 2017-June 2018**

Submitted by Kevin Cameron

### **K-12 Workshops**

Over the past year EASC hosted over 250 students from a combination of school groups, home schoolers and day-care centres mostly from the greater Vancouver region but some from further away. These experiential hands-on workshops were delivered by a core of faculty (Hansen, van der Flier-Keller, Donald) and graduate students (Ma, Chateau, Huang). EASC High School Career Day is held every April and involves a “Rocks to Riches” workshop where the students learn the relationship between raw resources and many of the items they use every day, as well as plate tectonics activities, a fieldtrip and Earth science career panel.

### **Classroom Visits**

In addition to numerous school visits to campus, faculty (Ward, van der Flier-Keller, Gibson) and students went out into the community to talk to students, teachers and guidance counsellors on a variety of topics including rocks and minerals, water resources, petroleum, and careers in Earth Sciences.

### **Science Rendezvous (May) and Science Spooktacular (October)**

Earth Sciences faculty and students participated in these fun, interactive family and community events hosted by SFU’s Faculty of Science.

### **Public Presentations and Media Interviews**

Let’s Talk about Water (van der Flier-Keller) at the Burnaby Festival of Learning; Rotary Club presentation (Flowers); students (Hall, Whistler) presented results of their Honours projects on groundwater to Surrey city council; Sniffing Out Active Volcanoes (Williams-Jones) at SFU Café Scientifique; a video developed by a SFU Community Engagement Initiative Grant, featured EASC grad student Laura Thompson and her research in the Arctic – goal of the video series is to inspire young people in science and inquiry.

Numerous television and radio interviews by faculty on various topics that were currently in the news: landslides and debris flows in California (Ward); volcanic eruptions and monitoring (Williams-Jones); Liquified Natural Gas Canada (Dashtgard).

### **New Courses**

**SCI 301** Science Communication – An Introduction, aims to help students develop the skill sets to effectively communicate Science to a range of non-expert audiences (e.g., government, media, general public, etc.). This course is available to students from all Science faculties (Science, Environmental Science, Applied Science, Health Sciences) and was taught for the first time in Spring 2018 (van der Flier-Keller).

EASC faculty (van der Flier-Keller and Williams-Jones) are currently involved with the development of an interdisciplinary experiential Science course (**SCI 192** “The Science Around Us” Science for K-8 Teachers) for Education students to meet the requirement for a laboratory Science credit. This modular hands-on studio/lab course focusing on Physics, Chemistry, Biology and Earth Sciences will also facilitate professional development for in service teachers and the intent is to scale this up to become a required course for all Education students. It is hoped that this will set the groundwork for a more advanced, domain-specific course (emphasizing Earth Science field trips and skill development) for students interested in teaching grade 9-12.

EASC faculty (van der Flier –Keller and Cameron) are co-researchers with an Education faculty (Zandvliet) to investigate a collaborative design project to connect Earth science, environmental education and First Nations principles in a place based learning setting. The project will address issues such as how to marry Earth science with other (interdisciplinary) environmental perspectives in the context of an environmental education course for both pre-service and in-service teachers; how to navigate between, and integrate, the different frameworks, approaches and pedagogical styles characteristic of Earth science, indigenous and environmental education. The Earth Sciences faculty will design activities that weave together Earth science, aboriginal knowledge and the pedagogical practices of environmental education.

**University of Toronto, Earth Sciences**

Our department has been involved in university-wide outreach including Science Rendezvous, Bring Your Kids to Work day, and a summer camp offered by various science departments to 50 students. This year we will also be involved in a Space Camp. The Spring Reunion event for children and grandchildren of alumni called "Kids Passport to U of T" is a Faculty of Arts and Science initiative to showcase a variety of departments with hands-on activities geared to young families.

Sharon Cowling and several Graduate Students acted as special judges in the Toronto District High School Science Fair to award the Mathew Shawn McConville Prize for best projects in Earth Sciences; winning projects were "Groundwater flow and the use of zero-valent iron in remediation" and "Crash course for impact force".

In an effort to reverse declining enrollments we have initiated a three-pronged approach:

- (1) We offered again a high-school teacher workshop on a board-wide PD day with the assistance of teacher Deryk Jackson and Mining Matters; it included short presentations by graduate students about their research and a test-drive of Mining Matters new teaching activity on metals.
- (2) Pairs of students visit high-school classes to offer hands-on activities in consultation with the teacher, and to talk about studies and job opportunities. Specifically: undergrads visited 12 classes in six High Schools to do hands-on workshops in Mineral ID, Fossils, Groundwater Contamination and Geologic Hazards. We also had a grade 10 girls class visit the department for a petrography lesson. A group of graduate students visited a high school to showcase their research using the same 10-minute format that was used at the High School Teachers Workshop.
- (3) We gave a presentation to the 9 registrars in the Faculty who advise first-year students on selecting a program.

Karyn Gorra, Sharon Cowling, and Charly Bank

## Mining Matters Report

### PDAC Convention Education Program

Fourteen teachers participated in our annual Teachers' Day program. The theme of the program was "Big Data in Mineral Exploration, Mining and Education" and featured hands on learning sessions focused on exploration geophysics, geochemistry, minerals and metals, engaging plenary and panel speakers, and access to the Trade Show. The Junior and Senior Day programs immersed more than 120 Elementary and Secondary students using a series of hands-on Earth science and mineral resources educational activities that focused on minerals, their uses, their optical properties, and the types of careers available in the mineral industry. Students also toured the Trade Show Floor, as part of an Exploration Challenge.

### Geoscience Aware Challenge

A cohort of Manitoba Guide Leaders participated in a Mining Matters Training Workshop to learn how to deliver a subset of the Challenge activities. In October, Sparks, Brownies, Guides, and Pathfinders will participate in a Geoscience Aware Challenge Event where they will complete a series of activities as credit toward earning their Challenge crest.



### Mineral Resources and Mining Education Tours

Three tours have been delivered since the last AGM, including one in North Eastern Ontario for Educators and Mineral Development Advisors and two in North Western Ontario for representatives of the Anishinabek Nation and for participants of the Ontario Youth Apprenticeship Program Provincial Symposium.

### Music from the Earth Poster

This is the newest addition to our *Mining Makes it Happen* original poster series, which highlights the importance of minerals in our everyday lives. Music from the Earth explores the connection between music and the minerals, metals, and elements of the Earth. It looks at what goes into familiar and world instruments and into some of the devices that have brought music to our ears over the last century.

### groundWORK

Our Educators' newsletter is core and has been published for nearly 20 years. Available in the Fall, its content will include Earth science and mineral resources articles, information and hands on learning activities.

### Partnerships

Mining Matters has made progress in cultivating new partnerships. In particular, we have been in discussion with representatives from the Oil Museum of Canada. We will be leveraging this partnering to increase our reach in south western Ontario. We will work with the Museum to deliver a teacher workshop, this academic year. Further discussions included ideas for educational material sharing, public outreach events and additional teacher training opportunities. Discussions with the European Geoscience Federation are underway to consider a pilot program that would implement Mining Matters materials into a select number of English speaking jurisdictions. Mining Matters has also been invited to contribute to an IBMSTEM4 Girls Teen Tech Club workshop, in the Fall.

### Rocks + Kids = Opportunities

This new school program focuses on providing Earth science and mineral resources workshops to students in socioeconomically challenged schools, in the greater Toronto area. The anticipated reach is 30 schools.