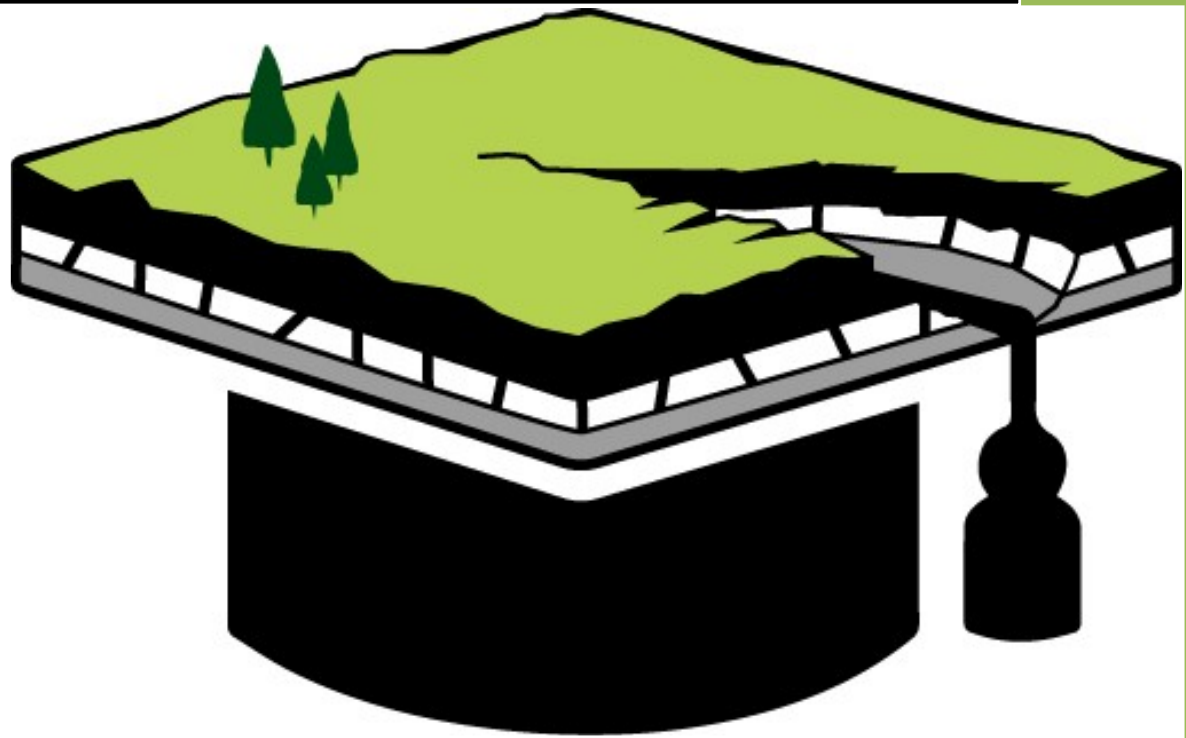


2017

# APGO Education Foundation Annual Report



Prepared by:

The Board of Directors

June 8, 2018



## **OUR MISSION**

*To provide financial and other support to promote a greater understanding of geoscience to the public, support the individuals who study geoscience, and support the practice of professional geoscience.*

Charitable Registration Number 84604 5052 RR0001

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## ABOUT US

The APGO Education Foundation (“**the Foundation**”) is a new charitable Foundation for geoscience registered under the Canada Not-for-profit Corporations Act, registration number 84604 5052 RR0001. The purpose of the Foundation is to **advance the education of the public in the area of geoscience by:**

- i) Providing scholarships to post-secondary students for the study of geoscience in a degree program;
- ii) Providing bursaries to immigrants to Canada who are internationally-trained geoscientists and have demonstrated financial need for completion of licensure procedures for registration as a professional geoscientist in Ontario; and
- iii) Holding lectures, presentations, and conferences on geoscience to enhance the knowledge of the general public.

The Foundation was founded by Dr. Bill Pearson, P.Geo., who was the founding President of the Association of Professional Geoscientists of Ontario (APGO). APGO regulates the practice of professional geoscience in Ontario. As a charity, the Foundation has a separate Board and functions independently from APGO.

### ***Board***



*Back Row L-R – Kristin Hanson, Nancy McInerney-Lacombe Front Row L-R – Neil Westoll, Bill Pearson.*

The Board of the Foundation is greatly saddened by the passing of our friend and Foundation board member **Dr. Robert (Bob) Hodder, P.Geo.** on March 26, 2017. Bob had a long and distinguished career as a geoscience educator, most recently as Professor Emeritus, since 1993, at Western University.

Bob has been a valued member of the Foundation board since its inception in 2014. He was instrumental in the creation of the Foundation scholarships and bursaries. His dedication to education, geoscience, and professionalism, as well as his knowledge, insight, sense of humour, and friendship will be greatly missed.

In honour of Bob Hodder's contributions, the Foundation has established the Robert W. Hodder Memorial Scholarship which will be awarded to a 3rd year student in economic geology. It is expected that the first award of this scholarship will be made in 2019.

**Dr. Bill Pearson, P.Geo., FGC Chair** – has over 44 years of experience in the national and international mining industry and has carried out exploration and development programs in 18 countries around the world. He has held senior positions in a number of public junior mining companies and has served on several boards. He was the founding President of the Association of Professional Geoscientists of Ontario (APGO) from 2000-2003. In 2015 he received the PDAC Distinguished Service Award for his service to Canada's Mineral and Exploration Industry.

**Dr. Neil Westoll, P.Geo., P.Eng., FGC, FCIM Secretary & Treasurer** - is widely experienced in metal exploration and business development internationally, having spent over 40 years with senior and junior Canadian and international mining companies in exploration and business development and as an independent consultant to the mining industry. Since 2001, he has focused on the environmental side of the mining business. He was appointed to the Council of the APGO in 2000, and served from its inception to June 2006, and was Treasurer of the APGO until that time.

**Kristin Hanson, M.Sc., P.Geo, FGC** - is a hydrogeologist with 25 years of experience in the environmental consulting business, where she has developed technical expertise in contaminated site assessment and remediation. Kristin is Senior Vice President – Infrastructure Engineering, Central Canada at SNC-Lavalin. In her management role, Kristin focuses on combining technical skills and people skills to solve problems. Valuable experience was gained through her eight years of volunteer work on APGO Council, including serving as Council President in 2011-2012.

**Dr. Nancy E. McInerney-Lacombe, DM, MBA, BA (Hons)** – is a senior executive with close to 30 years of domestic and international experience in the financial sector. Nancy's career has spanned three distinct areas including: Senior Vice President, Royal Bank of Canada; Director, Office of the Superintendent of Financial Institutions, Federal Government of Canada; and Financial Sector Specialist in East Africa for The World Bank Group. Nancy also performed an Executive in Residence (EIR) role at the Richard Ivey School of Business 2005 - 2014. She returned to Ivey as an EIR in 2016. She also served as a Board member and Chair of the Advancement Committee, Rosseau Lake College, Muskoka, Ontario 2013 - 2015. Previous public board experience includes Chair of the Audit Committee of Desert Sun Mining Corporation prior to the takeover by Yamana Gold Corp. in 2006.

**Dr. Greg Finn, P.Geo., FGC (commencing January 1, 2018)** was Vice-Provost and Associate Vice-President, Academic at Brock University from September 2007 to June 2018 after which he will return to his role as an Associate Professor of Earth Sciences. He joined Brock in 1985 as a lecturer in Geological Sciences, and after completing his PhD at Memorial University in 1989 was appointed Assistant Professor. He has also served Brock as Associate Dean in the Faculty of

Mathematics and Science (2003-2007) and chair of the Department of Earth Sciences (1996-2002). Dr. Finn has also been extensively involved in earth science education at the provincial and national levels. He has served as president of the Science Teachers' Association of Ontario, the Association of Professional Geoscientists of Ontario (APGO), and the Canadian Council of Professional Geoscientists (CCPG, now Geoscientists Canada). He was also chair of the Canadian Geoscience Standards Board (now the Canadian Geoscience Standards Council) for CCPG and was instrumental in developing the Geoscience Knowledge and Experience Requirements for Professional Registration in Canada which has been implemented by all professional associations across Canada.

### ***Management Team***

#### **Dr. Bill Pearson, P.Geo., Chair**

**Andrea Waldie, P.Geo., FGC Business Manager** – is CEO of Geoscientists Canada, the national umbrella organization for self-regulatory organizations registering professional geoscientists in Canada. She has widely consulted on matters of professional geoscience and governance and has acted as a project manager through her company Waldie Geo-Governance. She holds a B.Sc. in Earth Science from the University of Waterloo, is a registered professional geoscientist in Ontario and British Columbia, and a Fellow of Geoscientists Canada. Andrea spent over 20 years in the mineral exploration and mining industry consulting for both major and junior mining exploration companies prior to joining the Association of Professional Geoscientists of Ontario (APGO) as the Executive Director and Registrar from 2007 through 2012. She served as the co-chair of the APGO Registration Committee from 2012 to 2017.

**Deana Schwarz, Ph.D., Manager GeoscienceINFO.com** – received a B.Sc. in biology and a B.Sc. in geology. She also received her M.Sc. and Ph.D. in stable isotope geochemistry at the University of Western Ontario, where she focused on the relationship between living systems and their environment, throughout the geologic past. Deana has developed a deep sense of responsibility in educating others about geology, a sentiment strengthened by her years of teaching to university and college students. She is working hard to continue to make geoscience more accessible, both online and in the field.

**Bernard Kradjian (APGO), Director Marketing & Communications** - has over 10 years of solid experience in communications and marketing including website and social media development. As a consultant, he has developed and branded websites and social media accounts for a number of public and private sector organizations. He has produced and edited videos and has extensive experience on YouTube. Since 2008, he has been the communications manager for APGO and is responsible for their popular "Field Notes" that is distributed to more than 3000 people each week. In addition, he develops APGO presentations, writes and edits reports, including the Annual Report, and designs promotional items for tradeshow and the Annual General Meeting.



**Marcia Meyer (APGO), Bookkeeper** – is a graduate of the University of Western Ontario (1977) (now Western University) and since graduation has been involved in various banking and retail financial administration roles. Since 2003 she has been a contract bookkeeper to over 30 small businesses including the Association of Professional Geoscientists of Ontario. She is the bookkeeper for the Foundation, responsible for managing payables and keeping Foundation books, as well as interfacing with auditors in preparation of yearend financial reports.

## OUR ACTIVITIES

What an exciting 2017! During the year we built on and expanded activities from 2016. Highlights of 2017 include:

- A total of **\$86,634** in donations and grants, including donated services.
- 2 - \$5000 Scholarships awarded to outstanding geoscience students.
- 2 - \$5000 Bursaries awarded to internationally-trained geoscientists on track to becoming P.Geos. These awards included the first recipients of the newly established Past Presidents Bursary and the Arsalan Mohajer Bursary.
- Grant of \$5,300 to the Miller Museum of Geology at Queen's University to install an Augmented Reality Sandbox which was fully operational in June 2017.
- Opening of the Metcalfe Geoheritage Park QR Code Project which the Foundation helped fund.
- Launch of the GeoscienceINFO.com website in June 2017 to provide new and exciting geoscience information for the public.
- Signing a Memorandum of Understanding (MOU) with Mining Matters to work cooperatively on projects to educate the public about geoscience

“2017 was an exciting year particularly with the launch of GeoscienceINFO.com and signing of the MOU with Mining Matters. Through the generous support of our donors, we were able to continue to advance all three of our major target areas.” said Bill Pearson, Chair. “We were delighted with the support of the Past Presidents of APGO in establishing the Past Presidents Bursary and to Arsalan Mohajer for sponsoring a bursary in his name. As an immigrant to Canada himself, Arslan fully understands the challenges that recent immigrants face and the importance of supporting them.”

### *Donations and Grants*

The Foundation continued to raise funds to support scholarships, bursaries, and public education. During 2017, the Past Presidents Bursary was established through the generous support of the APGO Past Presidents. The Arsalan Mohajer Bursary was established through the generous support of Arsalan Mohajer, P.Geo.

The Foundation is grateful to the APGO for continuing to provide office support including, bookkeeping, management, and secretarial services, as well as meeting locations. The value of these in-kind services was booked as \$14,198 which APGO provides at no charge to the Foundation. As the Foundation grows, this will ensure that overhead and administrative costs are kept to a minimum to allow the maximum use of available funds for charitable activities.



## *2017 Scholarships*

Two \$5000 APGO Education Foundation scholarships were awarded to outstanding geoscience students who had completed their third year of geoscience degree studies and were on track to fulfilling the requirements to become a registered professional geoscientist. The Foundation congratulates the 2017 Scholarship recipients **Adrian Oberland** and **Pamela Irhaheta Muniz**.

*Foundation Board members and management with 2017 Scholarship recipients (left to right):*

*Nancy McInerney-Lacombe, Adrian Oberland, Andrea Waldie, Pamela Irhaheta Muniz, Neil Westoll, Kristin Hanson, Bill Pearson*



## *2017 Bursaries*

Two bursaries were awarded to an internationally-trained geoscientist who required financial assistance to complete final requirements to become a registered professional geoscientist in Ontario. The Foundation was pleased to be able to support these deserving geoscientists:



*Prashant Roy – Inaugural Recipient, Past Presidents Bursary receiving his award from Bill Pearson, Chair*

*Clifford Ndiweni – Inaugural Recipient,  
Arslan Mohajer Bursary*



The Foundation wishes the scholarship and bursary recipients every success as they proceed with their careers in geoscience.

### ***Metcalf Geoheritage Park***

In 2016, the Foundation was pleased to provide funding of \$4,166 for an innovative project to establish QR coding of rock samples on display at the new Metcalfe Geoheritage Park in Almonte, Ontario, southeast of Ottawa. The provided funds will allow the Metcalfe Geoheritage Park Committee (MGPC) to develop and implement a QR code system of signage that will enable visitors to the park to digitally access with their mobile devices a wealth of geo-information about the site and the specimens on display. The park officially opened to the public on September 24, 2016 and the QR code system was launched in June 2017. In September 2017 the MGPC held a formal opening featuring the Director General of the Geological Survey of Canada (GSC), Dr. Daniel Lebel, dressed in period costume as Sir William Logan, the first director of the GSC, to mark the launch of the QR code system and the 175<sup>th</sup> anniversary of the founding of the GSC.

It is the Foundation's hope that the QR coding system developed for the park can eventually be used to deliver digital information to the public about all the geoparks in Ontario.



*Left: Dr. Daniel Lebel (left), and Neil Carleton, Chair of the MGPC Committee, both dressed in period costume. Right: Group picture with plaque celebrating the 175<sup>th</sup> anniversary of the founding of the Geological Survey of Canada*

## ***Augmented Reality Sandbox at Miller Museum, Queen's***

In February 2017, the Foundation announced a grant of \$5,300 to the Miller Museum of Geology at Queen's University in Kingston, Ontario for installation of a Permanent Augmented Reality Sandbox Display ("AR Sandbox"). The AR Sandbox was created by a research team at UC Davis in California in 2012 as an offshoot of a project to develop activities and resources to teach people about lake and watershed science. They created an amazing interface between cutting-edge 3D visualization technology and everyone's favourite playtime activity, the age-old but much-loved sandbox.

A 3D sensor maps the topography of the sand in the sandbox, a computer builds a digital elevation model of the surface, and a projector then overlays computed contour lines and colours on the sand surface based on the elevation at each point. Much to the amazement and delight of users of all ages, this all happens in real time. As people dig in the sand to create valleys, or pile the sand up into hills, the map surface is continually updated to show how the sand topography has been changed. The software allows the user to virtually "make it rain" on the landscape they have built in the sandbox. This rain water then flows down the steepest gradients and pools in the lowest areas of the model to form lakes.

Dr. Bill Pearson, commented: "The AR Sandbox is a remarkable teaching tool. The Miller Museum previously has used a portable version with great success. A permanent installation will make this exciting technology more readily available to the public. We are delighted to support this innovative project. This tool shows in real time to users how topography controls watersheds, surface water and runoff, demonstrating some of the basics of geomorphology and environmental geoscience."



*Left: Augmented Reality sandbox at Miller Museum showing digital terrain with simulated water.*

*Right: Students using the A/R sandbox to understand geomorphology of terrains.*

## ***MOU with Mining Matters***

In November 2017, the Foundation was pleased to announce the signing of a memorandum of understanding (MOU) with Mining Matters. Under the MOU, Mining Matters and the Foundation agree to work together to promote a greater understanding of geoscience by the public and to enhance resources available to address the Ontario Earth and space science curriculum.

This partnership is established based on Mining Matters' and the Foundation's respective competencies in education and research. This MOU will strengthen the resources of both parties and will benefit the stakeholders each serves.

Dr. Bill Pearson, commented: "We are delighted to partner with Mining Matters. Our innovative GeoscienceINFO.com website and our recently launched Geovideos will enhance Mining Matters well-developed educational resources while providing us with the opportunity to extend our reach considerably."

Laura Clinton, Executive Director of Mining Matters, commented: "Mining Matters is thrilled to partner with the APGO Education Foundation. This partnership is a natural fit as we strive to continually connect with educators, students and the public to raise awareness of Canada's geology and mineral resource endowment."



## ***GeoscienceInfo.com***

The new and interactive geoscience information website, [GeoscienceInfo.com](http://GeoscienceInfo.com), designed to engage and inform the public about the wonders of geoscience and the work of professional geoscientists was launched at the APGO Annual Meeting on June 8, 2017. This innovative website provides interactive virtual geological field-trips in Ontario, Canada; news on the latest discoveries and items of interest in the world of geoscience; and information on resources to find out more about geoscience and the work done by professional geoscientists.

The Foundation is fortunate to have the website managed by Deana Schwarz, Ph.D., a geoscience graduate of Western University. Deana may be reached at [manager@geoscienceinfo.com](mailto:manager@geoscienceinfo.com).





*Hogs Back Falls, Ottawa.*



*Amethyst crystals at Panorama  
Amethyst Mine, Thunder Bay.*



## ***Marketing and Communications***

Our Director of Marketing and Communications, Bernard Kradjian, is responsible for developing and managing publicity for the APGO Education Foundation and its subsidiary website GeoscienceINFO.com.

**GeoscienceINFO.com** provides reliable information about the geology of Ontario, and the processes that formed the province. The aim of the website is to bring these geological stories to the public's fingertips in an accessible and fun way using virtual field trips, Geovideos and other online resources.

Over the course of 2017, several projects were implemented as planned to advance the Foundation's marketing and communications initiatives. This included the release of the GeoscienceINFO.com website, the development of its social media accounts including Facebook, Instagram, YouTube and Twitter, as well as the production and release of two Geovideos.

The APGO Education Foundation and GeoscienceINFO.com websites took several measures to establish solid online and social media presence for geoscience in 2017. GeoscienceINFO.com published 82 articles about geoscience, 9 virtual field trips and 2 Geovideos. The website received 1487 page visits with the top age bracket being 25 - 34. The APGO Education Foundation website was updated frequently with press releases and important announcements

including news about bursaries and scholarship awards. These announcements were also published on APGO's website and newsletter, Field Notes, which is delivered to all APGO members.

Notably, the @GeoscienceINFO Instagram account had a successful launch with an impressive 1512 followers and an average of 200 - 500 likes on photos by the end of the year. Moreover, two educational Geovideos were produced and released on YouTube about the process of groundwater in Ontario and were well received by the geoscience community and the broader YouTube audience.

## OUTLOOK FOR 2018

We plan to continuing building on success in 2018:

- Content will continue to be added to the web-based and smartphone-friendly **GeoscienceINFO.com** monthly starting in September 2018. These trips include: Manitoulin Island, Bancroft, and three sites along the Niagara escarpment. In addition to these field trips, two in-kind contributors have agreed to create field trips for GeoscienceINFO.com in Pukaskwa National Park and Red Lake.
- A minimum of two new **Geovideos** will be added to GeoscienceINFO.com. These videos are created by the APGO Education Foundation and provide accurate easily-understandable information on geoscientific principles.
- **Scholarships** support post-secondary students in the third year of a geoscience study program at an Ontario university. Two scholarships of \$5,000 each will be awarded to two students of geoscience who, in Spring of 2018, have met the requirements for advancement into a fourth year that will enable completion of the knowledge requirements for professional registration in the APGO. The Foundation hopes to have at least one new annual named scholarships in place by the end of 2018.
- **Bursaries** support immigrants to Canada who are internationally-trained geoscientists and have demonstrated financial need for completion of licensure procedures for registration as a professional geoscientist (P.Geo.) in Ontario. The first Past President's Bursary of up to \$5000 was awarded in 2017 along with the newly established Arsalan Mohajer Bursary of up to \$5,000. Scholarships and bursaries will be awarded at the Annual Meeting of APGO on June 14, 2018.
- APGO Education Foundation participated in the **Mining Matters** workshop at the Prospectors and Developers Association Convention held in March 2018 in Toronto. Opportunities for more joint public activities in 2018 with Mining Matters are being investigated.

## **DONORS**

We want to thank the generosity of all our donors and supporters that have made this year very successful and have allowed us to move strongly forward on the Foundation's purpose to advance the education of the public in the area of geoscience.

### **LIST OF DONORS**

**The APGO Education Foundation is deeply grateful to its Founding Sponsors and all of its donors for their generous support.**

#### **FOUNDING SPONSORS**

APGO  
Bill Pearson  
William Pearson Family Fund

#### **PAST PRESIDENTS' BURSARY**

Kristin Hanson • Deborah McCombe • Ian Macdonald • David Hunt

#### **ARSALAN MOHAJER BURSARY**

Arsalan Mohajer

#### **ROBERT HODDER MEMORIAL SCHOLARSHIP**

Andrea Waldie • Nancy McInerney-Lacombe • Peter Stewart • Anonymous  
Paul Lhotka • Ed van Hees • Donald Robinson • Gord White

#### **INDIVIDUAL CONTRIBUTORS**

##### **Platinum >\$500**

Kristin Hanson

##### **Gold \$100 to \$500**

Christopher Hale • John Gilliat • Geosoft Inc. • Tim Safar • Anonymous • Tracy Albo  
Juliana Muller menschen • Flavia Schiavon • Despina Chabot • Lois Anderson

##### **Friends \$20 to \$99**

Emma Mauti • Tony Matassa • Rosanna Nicolucci

#### **IN-KIND CONTRIBUTORS**

Andrea Waldie • Christopher Hale • Neil Banerjee

#### **VIRTUAL FIELD TRIP CONTRIBUTORS**

##### **Arkona**

Jisuo Jin, Ph.D., UWO • Bob O'Donnell • Cam Tsujita, Ph.D., UWO

##### **Kingston**

Dugald Carmichael, Ph.D., Queen's University • Herb Helmstaedt, Ph.D., Queen's University



## **VIRTUAL FIELD TRIP CONTRIBUTORS CONTINUED**

### **Kirkland Lake**

Juliana Casali Peter Chadwick, P. Geo. • James Suma-Momoh, P. Geo. • Carmen Venier

### **Niagara Falls**

Richard Cheel, Ph.D., Brock University • Wayne Davey • Matt Devereux, M.Sc.  
Sarah Pemberton, Brock University • Guy Plint, Ph.D., UWO

### **Ottawa**

Quentin Gall • Beth McLarty Halfkenny, Carleton University

### **Sudbury**

Juliana Casali • William Church, Ph.D., UWO • Shirley Peloquin, Ph.D., P.Geo.  
Tobias Roth, Laurentian University • Carmen Venier

### **Thunder Bay**

Lesley Hymers, Mining Matters • Bill Steer

### **Timmins**

Pierre Bousquet, Ph.D., OGS • Ed van Hees, Ph.D., OGS • Juliana Casali • Carmen Venier

### **Waterloo**

Corina McDonald, Waterloo University • Peter Russell, Ph.D., Waterloo University  
Jeff Sage, Waterloo University

## **GEOVIDEO CONTRIBUTORS**

Kristin Hanson, P.Geo. • Steve Usher, P.Geo.

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**AUDITED FINANCIAL STATEMENTS**