



SEG Canada Foundation

## SOCIETY OF ECONOMIC GEOLOGISTS CANADA FOUNDATION FONDATION DE LA SOCIÉTÉ DES GÉOLOGUES ÉCONOMIQUES DU CANADA

P.O. Box 48113 • 595 Burrard St., Bentall Centre • Vancouver, BC V7X 1N8 • Tel. (604) 816-3012 • E-mail: segcanadafoundation@gmail.com

# 2020 Annual Report

(All amounts in \$CDN unless otherwise stated)

The SEG Canada Foundation (“SEGCF” or the “Canada Foundation”) was established in 1999 to facilitate charitable contributions by Canadian exploration and mining companies and members of the Society of Economic Geologists (“SEG”) in support of innovative research and education in economic geology. The Canada Foundation is modelled on the SEG Foundation, which, since it was founded in 1966, has provided over US\$6.5 million in support of SEG’s worldwide programs for student research, field trips, SEG Student Chapters and other educational activities.

The Canada Foundation’s objective is to support a broad range of activities that will enhance the qualifications of Canadian geoscientists, improve the quality of professional geoscience work and underpin research with respect to all aspects of economic geology. The core activity of the Canada Foundation is to provide financial support for fourth year undergraduate and graduate university students and SEG Student Chapter activities, including field trips, short courses, symposia and other innovative projects that support education and research in economic geology. Our goal is to help develop skilled economic geology and minerals exploration professionals.

Since its inception, SEGCF has raised \$2.4 million. Of that amount, \$1,320,439 has been awarded to support undergraduate and graduate student thesis research in economic geology and \$176,000 has funded the Hugo Dummett historical *Economic Geology* DVD. The Canada Foundation has also supported the activities of SEG Student Chapters.

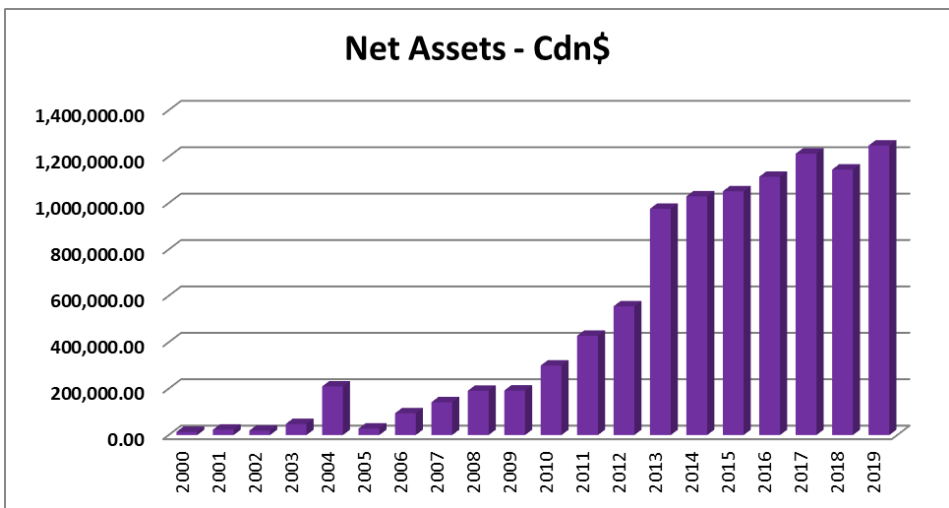
In 2020, overall donations were significantly down, totaling \$64,987 compared with \$120,001 in 2019. Despite this, the Canada Foundation remains on a strong financial footing thanks to the consistent support we have received from mining and exploration companies and individual SEG members over the years. As a result, we have been able to successfully continue our high level of financial support for student programs. This year, we distributed \$65,283 in Student Grants (2019 - \$70,740), \$40,000 in Student Fellowships (2019 - \$40,000) and 7 Undergraduate Senior Thesis Scholarships at \$1,000 each (2019 - \$12,000).

This is the fourth year that we have invested approximately 80% of our financial assets in a conservative portfolio of equities and bonds with Leith Wheeler Investment Counsel Ltd. (“Leith Wheeler”). Our return on this investment averaged 6.9% in 2020, compared with 13.4% in 2019. In the four years of investing with Leith Wheeler our portfolio has realized an annual return of 8.3%.

The 2020 SEG Centenary meeting was scheduled for September 13-19, 2020 in Whistler but was postponed due to COVID-19. Planning is now underway to host the conference in September 2021. The conference is being co-hosted by SEG and the Canada Foundation and modelled after the successful Whistler 2013 meeting.

I would like to express my appreciation to our Board of Directors, who provided a strong level of support during the year. A vote of thanks goes out also to our many volunteers, including our Student Grant, Fellowship and Scholarship volunteer reviewers and our tireless Fundraising Committee led by Gerry Carlson. Thanks also to Kirstie Simpson, our Fundraising and Administrative Manager and to Max Sulimov, our accountant.

**Financial Results:** At December 31, 2020, the Canada Foundation’s unrestricted net assets stood at \$1,228,137 compared with \$1,247,861 a year earlier. Donations totaled \$64,987 (2019 - \$120,001) while expenses reached \$131,791 (2019 - \$144,580). Awards paid of \$112,283 is slightly down compared to \$122,740 in 2019. Excess of expenses over revenue was \$19,724, compared to an excess of revenue over expenses of \$102,691 in 2019, due largely to a \$56,260 decrease in donations and a decrease of investment income. In comparison, investment income of \$48,326 was realized in 2020 versus \$127,270 in 2019.

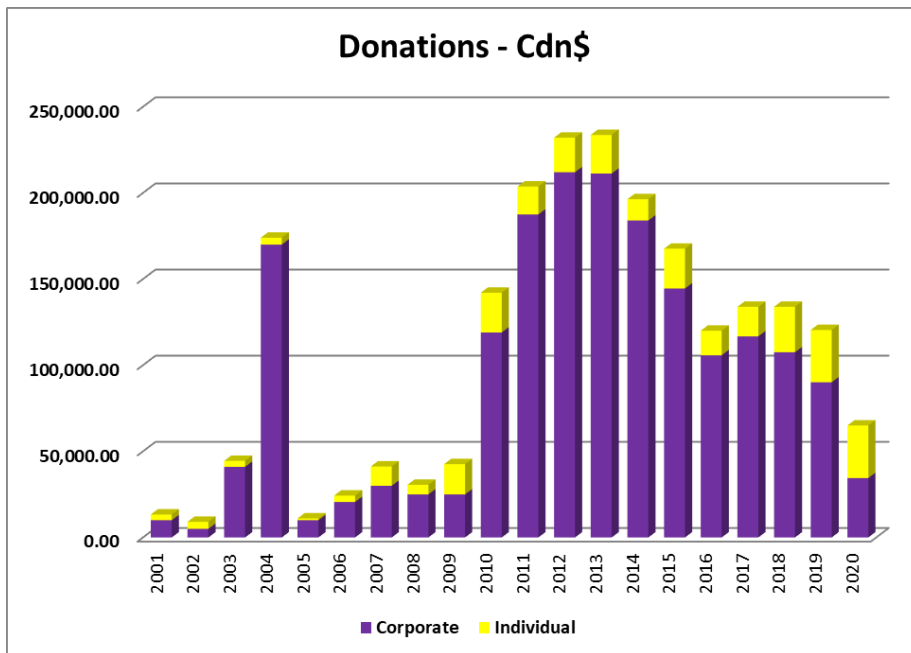


The Canada Foundation invests approximately 80% of its financial assets in a conservative portfolio of equities and bonds with Leith Wheeler Investment Counsel Ltd. (“Leith Wheeler”). The balance of the Canada Foundation’s cash is deposited in its chequing accounts and in GIC’s at minimal interest rates.

- The foundation’s long-term investment strategy with Leith Wheeler rests on the following principals:
- a) Investing in financial instruments that ensure the principal is adequately protected and not at undue risk from general market fluctuations;
  - b) Ensuring the rate of return on long-term investments is not less than the annual adjusted rate of inflation.

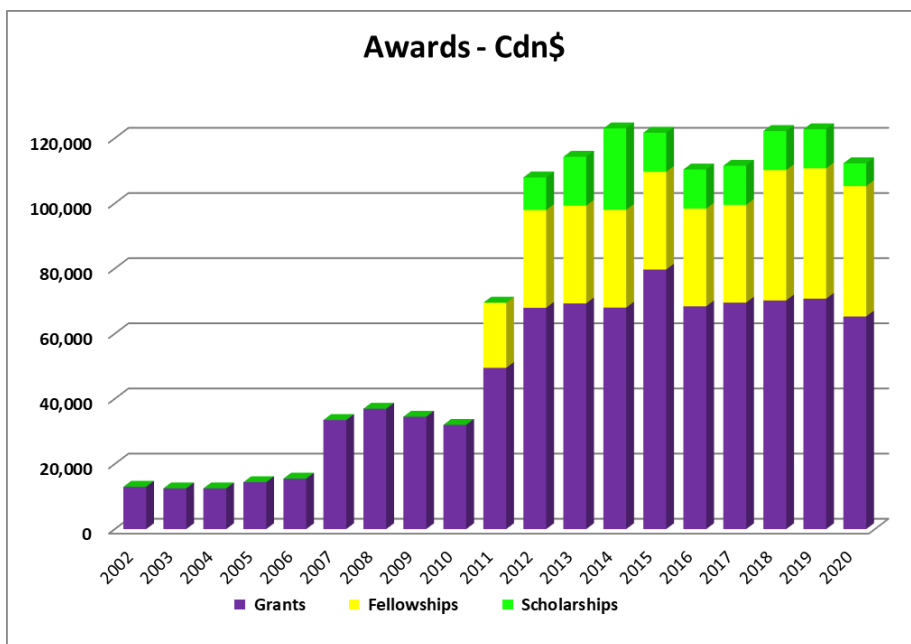
The total amount of the investment with Leith Wheeler at year end was \$1,035,672 with an annualized return of 6.9% (2019 - \$1,077,346, annualized return 13.4%).

**Fundraising:** Gerry Carlson, Fundraising Coordinator, oversaw our fundraising campaign that involved some of our board members. Our overall donation total was significantly down, totaling \$64,987, compared with \$120,001 in 2019. This decrease was entirely due to a drop in corporate donations largely related to the Covid-19 pandemic. Only eight companies contributed to the 2020 campaign, raising \$34,500 (2019: 21 companies - \$90,050). Personal donations were up from 2019, coming in at ~\$30,487 (using an exchange rate of 1.34) and more people donated with 164 individual donors (2019: \$29,976 - 126 donors). Corporate and individual donors are listed in Appendices I and II.



**Awards:** The SEGCF currently supports three separate awards (Appendix III): Student Research Grants, Graduate Student Fellowships and Undergraduate Scholarships. We have distributed \$1,320,439 in awards since inception.

Student Research Grants are available to support graduate student thesis research leading to masters or doctoral degrees in Economic Geology and are typically directed towards field expenses or analytical work related to the thesis project. The SEGCF awarded 13 grants totaling \$70,218, compared to \$70,740 (16 Grants) in 2019. However, one of the awards was not dispersed because the student was unable to continue their project due to COVID-19 so the total SEGCF Grants dispersed in 2020 was \$65,283 (12 Grants).

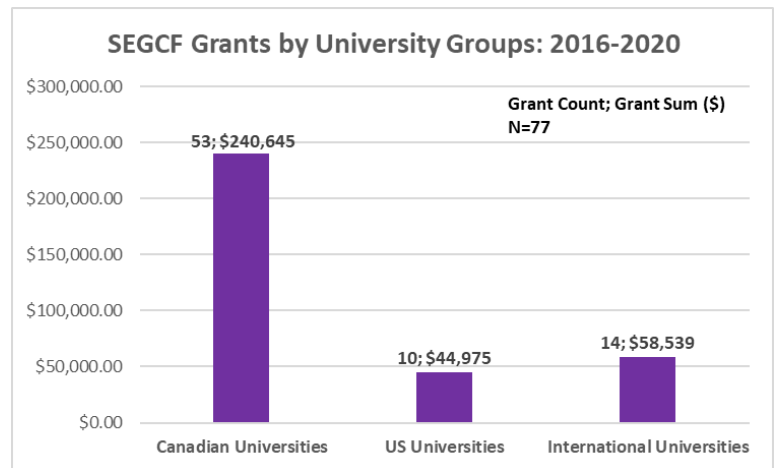


SEGCF Graduate Student Fellowships are available for a one-year term to students who intend to pursue a course of study in economic geology leading to a M.Sc. and/or Ph.D. degree in Economic Geology. Canada Foundation Fellowship awards for 2020 totaled \$40,000 (7 Fellowships) which is the same as in 2019.

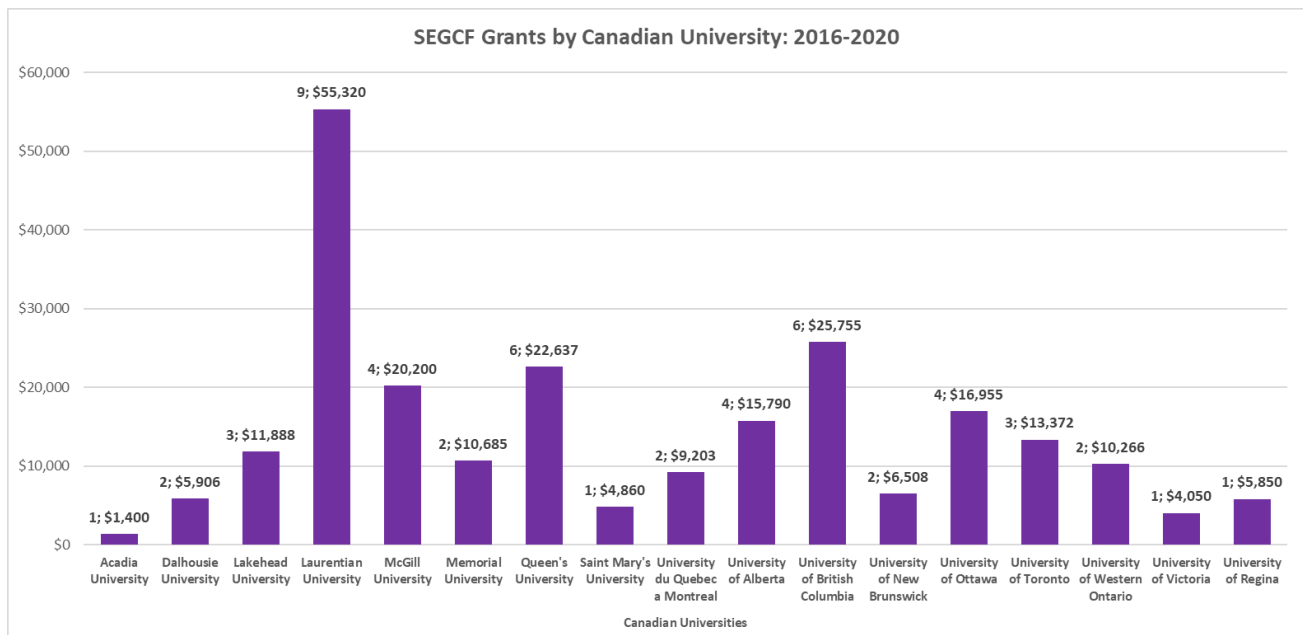
Our SEGCF Undergraduate Thesis Scholarship program supports field or laboratory work related to a senior thesis in Economic Geology at recognized Canadian universities. Normally, 12 scholarships of

\$1000 each are awarded each year. This year we had a significant decline in applications (only 7 applicants). We believe this was due to issues related to COVID-19. After a rigorous review, all 7 students were awarded scholarships of \$1,000 each.

Over the past 5 years, 77 SEGCF grants have been awarded to students at Universities worldwide. Although overwhelmingly the students are studying at Canadian Universities (see bar graph) an estimated 68% of those students are non-Canadian. In 2020, all but two students are studying at a Canadian University (Appendix III) and 33% of the students awarded a grant in 2020 are Canadian. The SEG is making a concerted effort, through its Regional Vice Presidents and local members, to encourage greater participation by foreign students in the SEG Research Grants program.

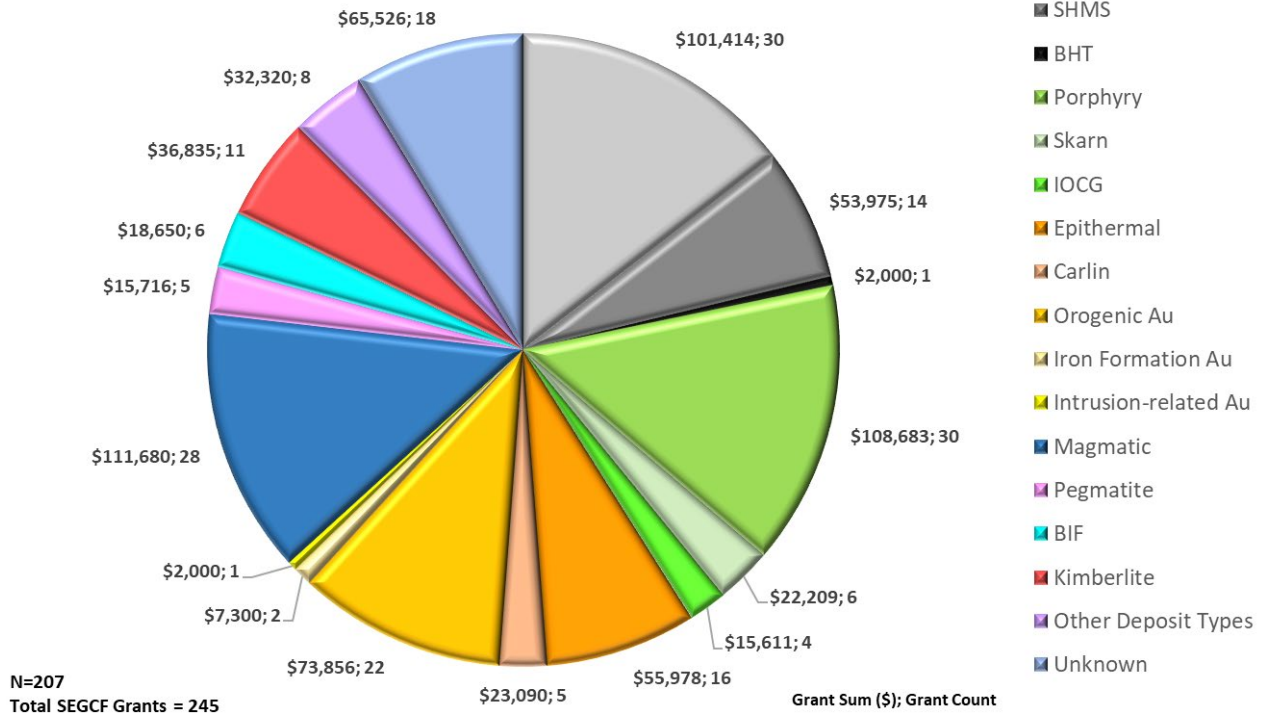


The bar chart below illustrates the number of SEGCF Grants and dollar amount awarded to Canadian Universities over the past 5 years. Students from 17 different Canadian Universities have received SEGCF Grants during the period from 2016 to 2020.

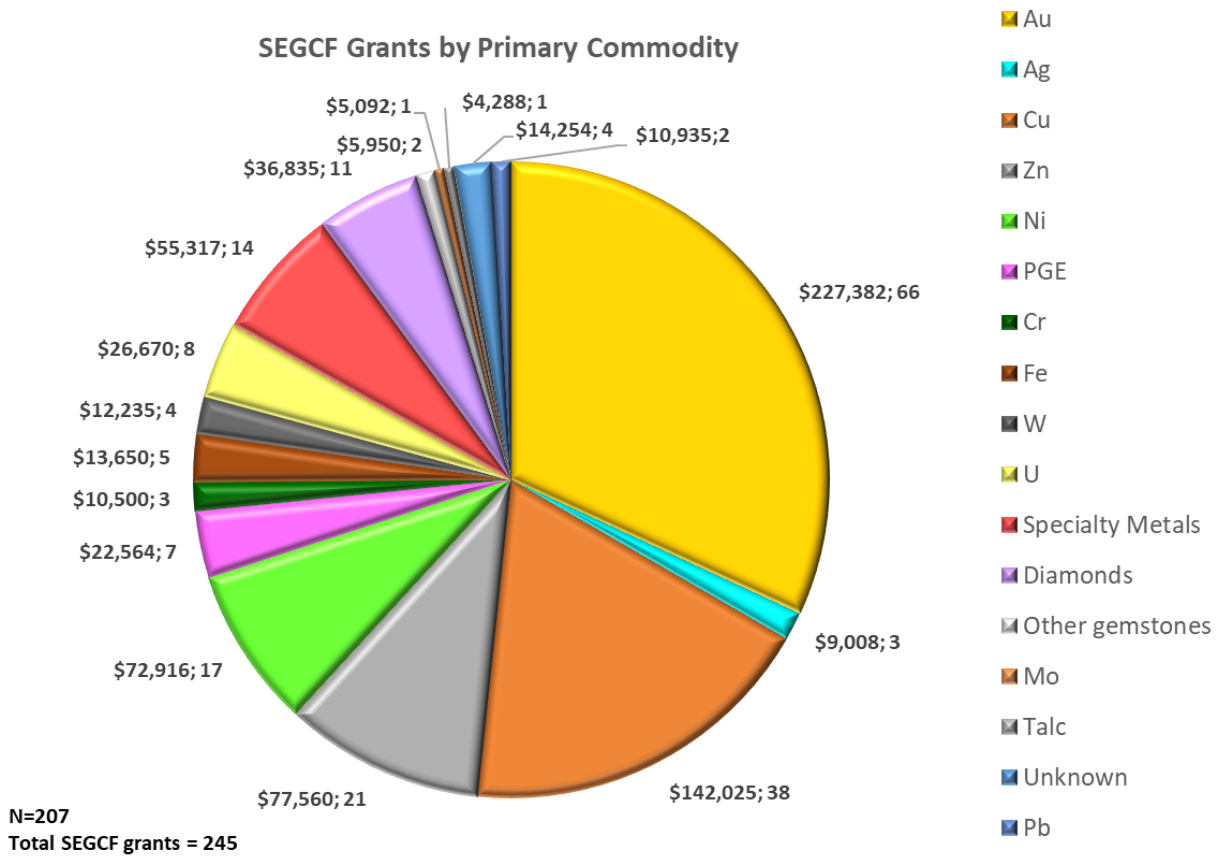


Since 2002, the Canada Foundation has awarded 245 SEG Grants (151 PhD projects, 92 MSc projects and 2 BSc project). Of these, 207 were for deposit-related studies and the balance were split amongst purely lab based, geochemical, structural, regional, environmental or other non-deposit specific studies. The following pie charts illustrate the diversity of the deposit-related studies by deposit type and primary commodity. The charts effectively demonstrate that the Canada Foundation grants have contributed to a broad range of mineral deposit research.

SEGCF Grants by Deposit Type



SEGCF Grants by Primary Commodity



A complete list of student Grants, Fellowships and Scholarships is included as Appendix III. The following Canadian SEG members participated in the review process for the Grants: David Broughton, Stefanie Brueckner, Louise Corriveau, Alan Galley, Kathryn MacWilliam, John Morganti and Ross Sherlock. The Fellowship committee consisted of Sarah Dare, David P. Braxton, Beth McClenaghan and Jan M. Peter and the Undergraduate Scholarship committee consists of Fionnuala Devine, Ross Sherlock and John Morganti.

In closing, I would like to express my personal thanks to the board of directors for their efforts in maintaining a healthy society. I would also like to thank our sponsors and donors, without whom the awards, grants and scholarships the Canada Foundation provides would not be possible.

Sincerely,

**Society of Economic Geologists Canada Foundation**



---

Jason Weber, P.Geo., President

**2020 SEG Canada Foundation**

**Team:**

Board of Directors

Jason Weber, President  
Hugh Stewart, Treasurer  
Brian G. Hoal, Secretary  
Britt Bluemel  
Garth Kirkham  
Jean Cline  
Ross Sherlock  
Lawrence Winter

Undergraduate Scholarship Committee

Fionnuala Devine  
Ross Sherlock  
John Morganti

Fundraising Committee

Gerald Carlson (Chair)  
Britt Bluemel  
Ross Sherlock  
Nawojka Wachowiak  
Jason Weber  
Lawrence Winter

Fundraising and Administrative Manager

Kirstie Simpson

Accounting

Max Sulimov, CPA

Lawyer

C. Michael Kray, LL.B.

Auditor

Manning Elliott LLP

**Appendix I**  
**SEGCF Corporate Donors – 2020**

*Thank you!* **SEG Canada Foundation**  
**Corporate Sponsors**  
**2020**



**Patron Sponsors**

**Teck**

**Gold Sponsors**



**Silver Sponsors**



## **Appendix II**

### **SEGCF Individual Donors – 2020**

Jeffrey Abbott	Fionnuala Devine	Christopher Kelly	Stephane Perrouty
Marcus Adam	David Diekrup	Vaida Kirkliauskaite	Mark Petersen
Luis Arauzo	Claude Dion	Wolfgang Klau	Ian Pirie
Brett Armstrong	Dominique Doucet	Sebastien Lavoie	Howard Poulsen
Edward Balon	Benoit Dube	Pilar Lecumberri Sanchez	Kenneth Pride
Alan Barker	Beth Fischer	David Lefebure	Mark Rebagliati
Fred Barnard	Peter Fischl	Eric Lemieux	Edward Reeve
Christian Beaulieu	Antoine Fournier	Martin Lenters	Brock Riedell
Valerie Becu	James Franklin	Michael Leshar	Francois Robert
Joanie Beland	Andrew French	Robert L'Heureux	Alfonso Rodriguez Madrid
James Berry	Simon Gagne	Leopold Lindinger	Pierre Sauve
Kathryn Bethune	Alan Galley	Robert Linnen	Michael Savell
Steve Beyer	Michel Gauthier	Timothy Liverton	Jon Scoates
Ludovic Bigot	Benjamin Gelber	Chris Lodder	Johan Shearer
David Blann	Philip Geusebroek	Stefanie Lode	Ross Sherlock
Denis Boisvert	Harold Gibson	James Logan	Adam Simmons
Robert Boyd	George Gorzynski	Susan Lomas	Leanne Smar
James Brenan	Alex Gostevskikh	Allan MacTavish	Brayden St. Pierre
Daniel Brisbin	Twila Griffith	Henry Marsden	Mark Staude
David Broughton	Mathieu Guay	Brigette Martini	Peter Stewart
Alexander Brown	Jacob Hanley	Murray McClaren	Howard Stockford
Robert Brown	Mark Hannington	Lindsay McClenaghan	David Thomas
David Burrows	Walter Hanych	Cole McGill	Ian Thompson
Roland Butler	Erik Haroldson	Xuyang Meng	John Thompson
Nadia Caira	Thomas Hart	Patrick Mercier-Langevin	Peter Thompson
Bruce Campbell	Gregory Hawkins	Terry Mersereau	Richard Tosdal
Gerald Carlson	Eric Hebert	Richard Moore	Douglas Turnbull
Peter Cashin	Scott Heffernan	Lyndsay Moore	David Vaughan
Dominic Channer	Michael Hocking	Hamid Mumin	Jeffrey Volk
John Chapman	Peter Holbek	Kevin Neyedley	Stephanie Wafforn
Guoxiang Chi	Peter Hollings	Marco Nieto	Phillip Walford
Andre Ciesielski	Michel Houlé	Gema Olivo	John Watkins
David Copeland	Glen House	Reginald Olson	Jason Weber
Louise Corriveau	William Howard	Luke Ootes	Benn Whistler
Olivier Cote-Mantha	Stephen Hughes	Robert Osborne	Sean Whiteford
Lindsay Craig	Michel Jebrak	Andrejs Panteleyev	Steven Williams
Jack Dann	Charles Jefferson	David Pawliuk	Lawrence Winter
Alex Davidson	Daniel Jiricka	William Pearson	Zoltan Zajacz
Charles Dearn	Murray Jones	Jocelyn Pelletier	Rimant Zalnieriunas
Michele Della Libera	John Keating	Robert Penczak	Dawn Zhou
Marie Desjardins	Halley Keevil	Serge Perreault	Bing Zou



### **Appendix III - SEGCF Student Awards – 2020**

<b>Graduate Student Grants - 2020</b>			
<b>Name</b>	<b>Award (C\$)</b>	<b>University</b>	<b>Subject</b>
Russell Ashton	\$7,050	University of Western Ontario	Mineralogical and Geochemical Study of the Ni-rich magmatic sulfides of the E&L Mineral Zones, Nickel Mountain Gabbro Complex, British Columbia
Talia Moum*	\$4,935	University of Toronto	Geology and geochemistry of the newly-discovered VOLPA seafloor massive sulfide deposit, Niua volcanic arc complex, Tonga, SW Pacific
Stan Roozen	\$7,050	McGill University	Gold partitioning behavior between tourmaline and aqueous fluid
Dustin Shockley	\$3,525	Colorado School of Mines	The Proterozoic History of the Montezuma Shear Zone and Structural Controls on Mineralization of the Oligocene Montezuma Stock
Dustin Peters	\$7,050	Laurentian University	Genesis and Localization of Ni-Cu-PGE Mineralization in the North Range of the Sudbury Structure, Canada
Callum Walter	\$4,512	Queen's University	Augmenting Geological Field Mapping and Mineral Exploration with Real-Time 3D Digital Outcrop Modeling
Sandra Baurier Aymat	\$7,050	Laurentian University	Genesis and Localization of Ni-Cu-PGE Mineralization in the South Range of the Sudbury Structure
Emma Scanlan	\$4,230	Queen's University	Sediment-hosted Pb-Zn mineralization in the Selwyn Basin Yukon and the relationship to alkaline magmatism
Henning Seibel	\$7,050	Laurentian University	Genesis and Localization of Ni-Cu-PGE Mineralization in Offset Dikes in the Sudbury Structure
David Benoit	\$4,653	Université du Québec à Montréal	Exploration for rare earth vein mineralization in the Central Gessiss Belt of the Grenville Province, Maniwaki, Quebec
Ryley Collins	\$5,358	University of Southern California	Cooling and erosion history of a VMS-bearing ophiolite: A multi-chronometer approach to the Bay of Islands ophiolite complex, western Newfoundland
Brandon Chase	\$3,525	University of Alberta	Lithosphere Architecture of the Fort à la Corne Kimberlite Field from Magnetotelluric Data
Justin Jonsson	\$4,230	Lakehead University	Petrogenesis of mineralization horizons within the Offset Zone of the Lac des Iles mine, N. Ontario

**Amount Awarded      \$70,218**

**Amount Dispersed      \$65,283**

**\* Funds not dispersed as student was unable to continue their project due to COVID-19**

### Graduate Student Fellowships - 2020

Name	Award (C\$)	University	Subject
Laurence Guyot-Messier	\$5,000	Universite du Quebec a Montreal	Structural and stratigraphic architecture of a Grenvillian supracrustal sequence (marble and felsic metavolcanics) that host zinc deposits
Jason Hinde	\$5,000	University of Alberta	PGE and REE processes that lead to PGE/REE concentration
Taylor Ledoux	\$5,000	University of British Columbia	Using zircons from Arizona, British Columbia, and Chile to identify regions of high porphyry potential
Liam Maw	\$5,000	University of British Columbia	Stratiform base-metal deposits (VMS, SEDEX) and epithermal Au-Ag systems
Michael Rego	\$5,000	University of Toronto	Defining the extent and potential for mineralization at a skarn deposit in the Selwyn Basin, Yukon, Canada.
John Shmyr	\$7,500	University of Saskatchewan	Metamorphosed Brabant Mckenzie VMS Deposit in northern Saskatchewan.
Miguel St-Denis	\$7,500	Universite du Quebec a Montreal	Provenance of REE-Ti-Zr paleoplacers in Lower Paleozoic rocks of the Quebec Appalachians

### Undergraduate Scholarships - 2020

Name	Award (C\$)	University	Subject
Daryll Bien Concepcion	\$1,000	University of Toronto	A tale of two magnetites: A LA-ICPMS study of massive and blebby disseminated magnetite from the Bushveld Igneous Complex, South Africa
Olivia Dale	\$1,000	University of Ottawa	Fluid flow along fault zones: a geochronology and geochemistry investigation
Nicole Kerbs	\$1,000	University of Regina	Petrological and Geochemical study of the newly Discovered Carbonatites in the Patterson Lake Area, Northwestern Saskatchewan
Katherine Power	\$1,000	University of Ottawa	Tectonic Fabric Analysis of the North Fiji Basin: Regional Controls on Hydrothermal Fluid Flow
Luc Roy	\$1,000	Laurentian University	An analysis of the opaque mineralogy at the Courvan Au system, Val-d'Or, Québec: Evaluating the relationship between oxidation and development of Au mineralization.
Kallie Stone	\$1,000	Memorial University of Newfoundland & Labrador	Hydrothermal Fluxes at the Niua South Vent Field, Tofua-Kermadec Arc
Daniel Thomson	\$1,000	University of Saskatchewan	A Geological, Petrological and Geochemical Study of the Finlay-Mckinlay Outcrop, Southern Lynn Lake Greenstone Belt, Manitoba