



SEG Canada Foundation

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

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2023 Annual Report

(All amounts in \$CDN unless otherwise stated)

Summary

The Society of Economic Geologists Canada Foundation (“SEGCF”) had its strongest fundraising year since 2019. We continue to maintain a strong financial footing thanks to the support from mining and exploration companies and individual SEG members over the past 20+ years. As a result, we have been able to successfully continue our high level of financial support for student programs.

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.

In the coming year, SEGCF will focus on a spring fundraising campaign after a successful fall 2023 campaign that targeted many long-time donors as well as several new companies. We will continue to monitor changes in the exploration and mining landscape (e.g. mergers, new companies entering Canada) and update our sales database accordingly. Some board member turnover (universally acknowledged as healthy) will be achieved for the first time in several years. We will continue to be active on social media (LinkedIn) to acknowledge donations and award winners which will generally raise the profile of the Foundation.

Financial Results

At December 31, 2023, the SEGCF’s unrestricted net assets stood at \$1,245,240 (Figure 1) compared with \$1,190,250 (audited amount) a year earlier. Donations in 2023 totaled \$106,933 (\$29,826 in 2022) while awards paid were \$113,701 (\$113,393 in 2022). Note that one of our 2022 grants (\$5,385) was returned in 2023 as the student was unable to undertake the proposed work. Additional sponsorships by SEGCF totaled \$2,500 (Laurentian Student Minerals Colloquium/SMC) compared with \$3,000 (SMC and Queen’s SEG Student Chapter Field Trip) in 2022.

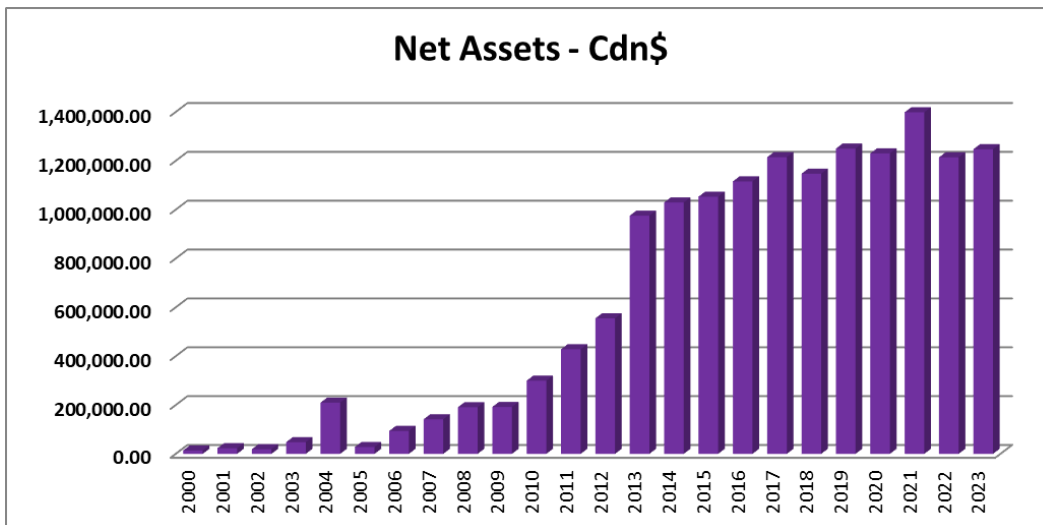


Figure 1: Histogram of the SEGCF's Net Assets since inception in 2000.

The Canada Foundation invests approximately 76% 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. This cash portion of the Leith Wheeler portfolio is grouped with *cash and cash equivalents* in the Society’s statements of financial position.

The foundation’s long-term investment strategy with Leith Wheeler rests on the following principals:

- Investing in financial instruments that ensure the principal is adequately protected and not at undue risk from general market fluctuations;
- 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 \$1,105,335 with a net annualized return of 10.7% (2022: \$1,104,617, annualize loss of 2.7%).

Fundraising

We had a very successful fundraising campaign in 2023 (Figure 2) after being unable to fundraise in 2022 due to the uncertainty in our charitable status for most of the year. Our 2023 donation total was \$106,933 compared with \$29,826 last year. We had 16 corporate sponsors (\$82,100) and personal/individual donations totaled \$24,833 from 148 donors. Corporate and individual donors are listed in Appendices I and II.

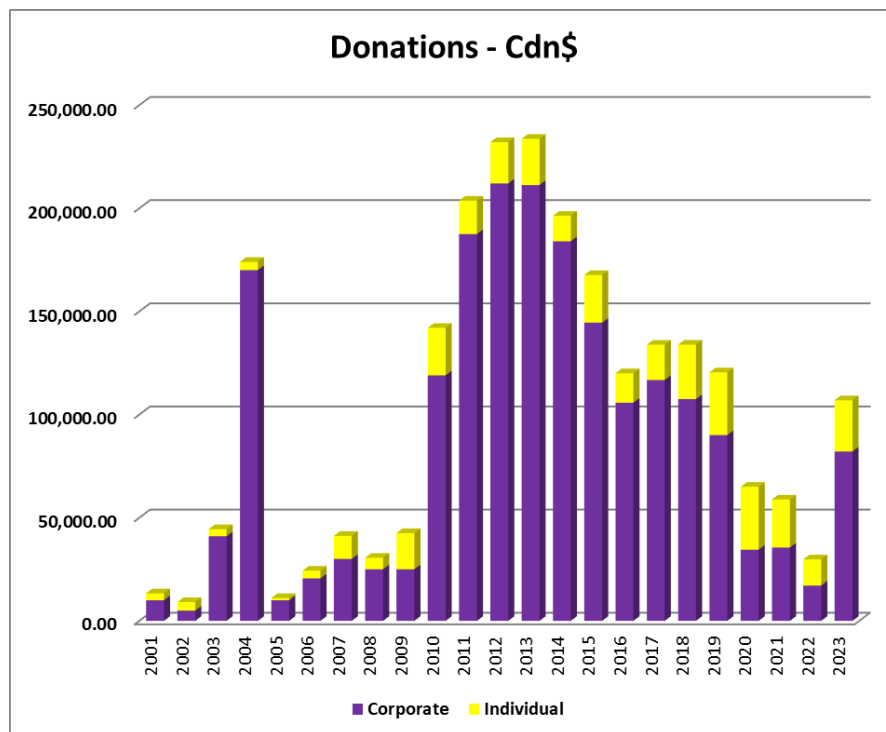


Figure 2: Histogram of the SEGCF’s Corporate (purple) and individual (yellow) donations since inception in 2000. After many years of decreasing donations SEGCF regained fundraising momentum in 2023 with 16 corporate and 148 individual donors.

Awards

The SEGCF currently supports three separate awards (Appendix III): Student Research Grants, Graduate Student Fellowships and Undergraduate Scholarships. We have distributed \$1,669,816 in awards since inception (Figure 3).

Student Research Grants are available to support graduate student thesis research leading to master’s or doctoral degrees in Economic Geology and are typically directed towards field expenses or analytical work related to the thesis project. This year the SEGCF awarded 12 Grants totaling \$65,701, compared to \$65,393 (14 Grants) in 2022.

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 masters or doctoral degrees in Economic Geology. This year the SEGCF Fellowship awards for 2023 totaled \$40,000 (5 Fellowships), compared with 7 Fellowships totaling \$40,000 in 2022.

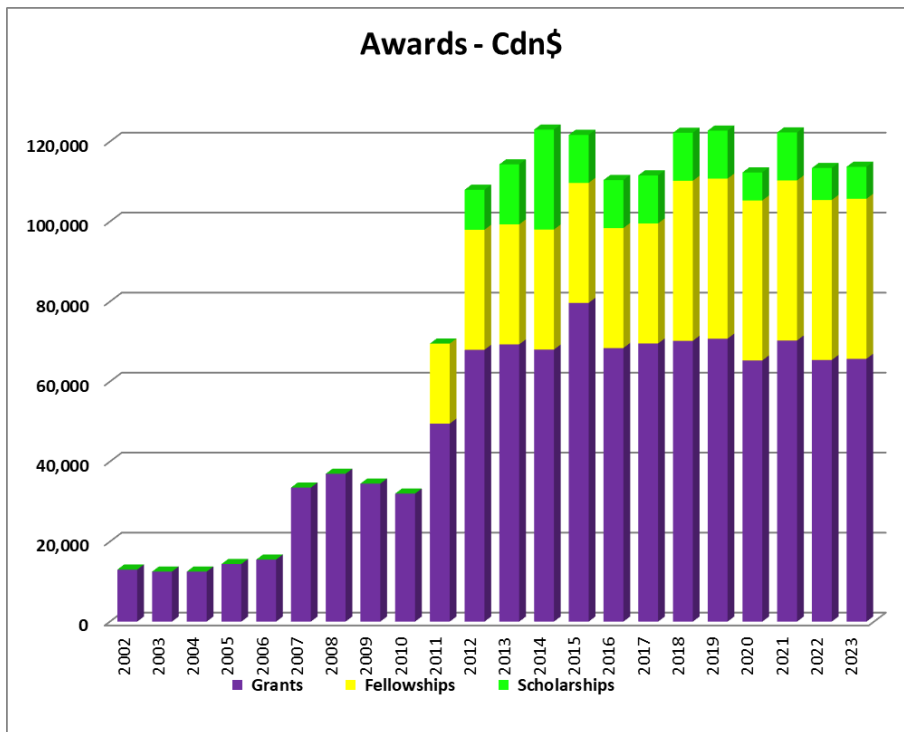


Figure 3: Histogram of the SEGCF's student awards since inception in 2000. Award totals have been consistently between \$110,000 and \$120,000 since 2012.

Our SEGCF Undergraduate Thesis Scholarship program supports field or laboratory work related to a senior thesis in Economic Geology at recognized Canadian universities. Each year, 12 scholarships of \$1,000 each are available. Once again, we received only eight scholarship applications this year and after a thorough review, all eight were awarded scholarships. The trend for the past four years of low scholarship application numbers continues despite sending out reminder notices to all Canadian SEG student members as well as to Canadian Economic Geology professors. The reason for the decline is unclear and may reflect lower enrollment numbers in earth science programs Canada-wide.

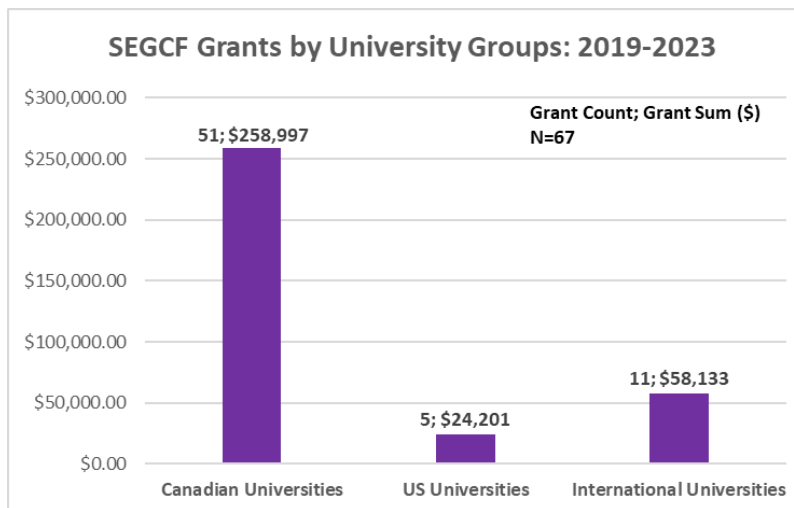


Figure 4: Histogram of the SEGCF's student Grant award totals by university location over the past five years.

Over the past 5 years, 67 SEGCF grants have been awarded to students at universities worldwide. Although overwhelmingly the students are studying at Canadian universities (Figure 4) an estimated 69% of those students are non-Canadian. If we only look at 2023, only two students out of 12 (16%) are Canadian, 11 students are studying at a Canadian University and 11 of the projects are on a Canadian property (Appendix III).

The bar chart below (Figure 5) illustrates the number of SEGCF Grants and dollar amount awarded to Canadian Universities over the past five years. Students from 18 different Canadian Universities have received SEGCF Grants during the period from 2019 to 2023.

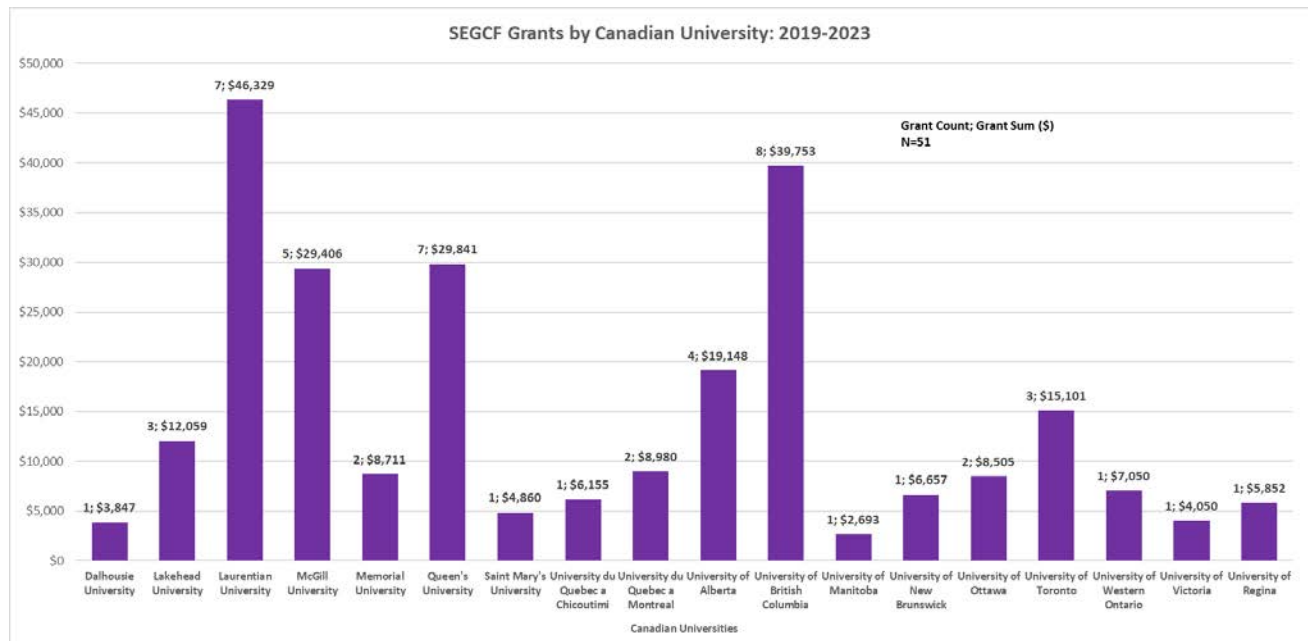


Figure 5: Histograms of the SEGCF's student Grant award totals by Canadian university over the past five years.

Since 2002, the Canada Foundation has awarded 284 SEG Grants (175 PhD projects, 106 MSc projects and three BSc projects). Of these, 225 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 (Figure 6) 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.

A complete list of student Grants, Fellowships and Scholarships is included as Appendix III. The Grant review committee and fellowship review committee are listed on the SEG website. The Undergraduate Scholarship committee consists of Lucy Hollis, Ross Sherlock and John Morganti.

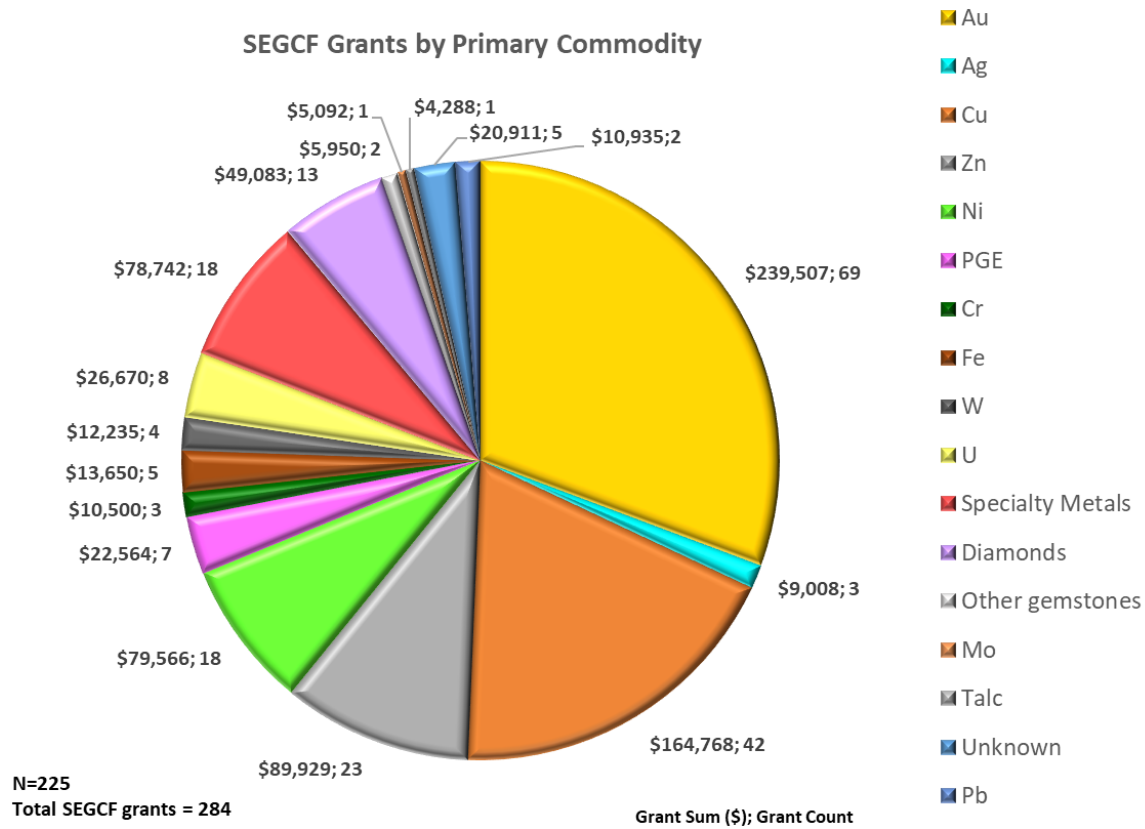
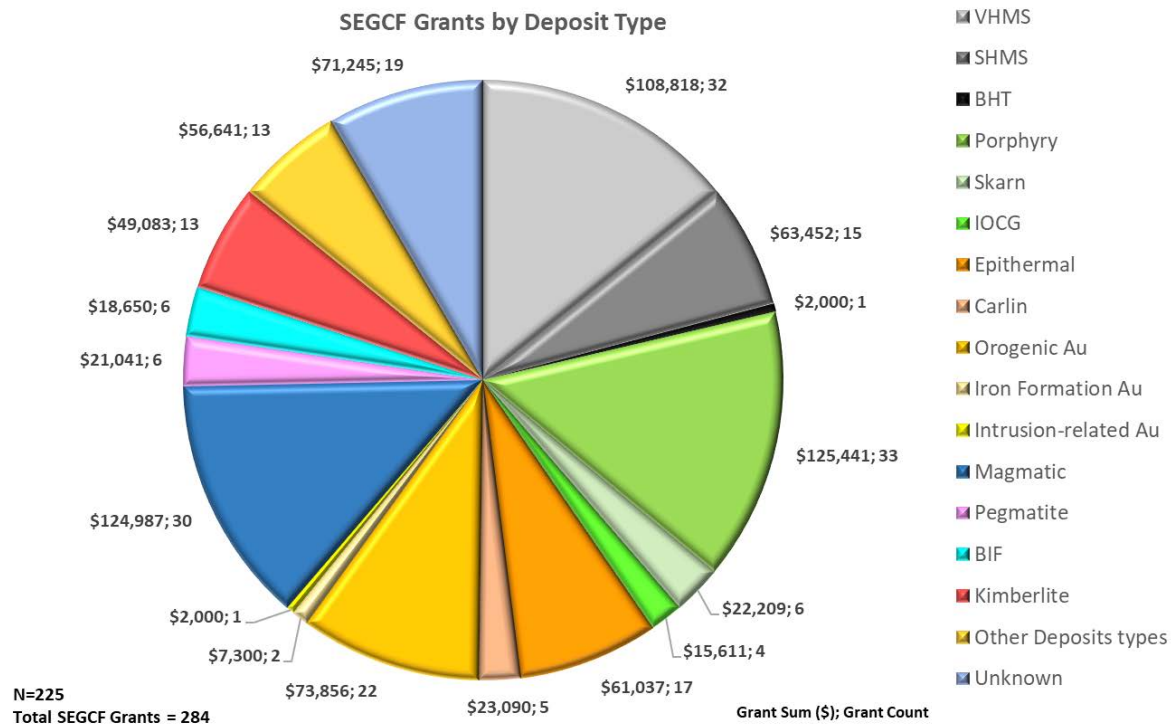


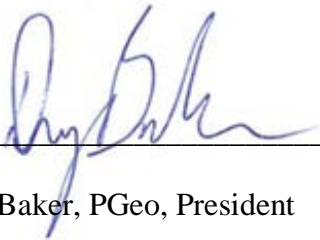
Figure 6: Pie charts of the SEGCF's student Grant award totals by deposit type and main commodity since inception (credit Andrew Davies for codifying these data).

Outlook

The focus of 2024 is to continue to expand the activity of the fundraising committee and solicit new donors to SEGCF. The Board of Directors will see some new additions at our AGM this week after many years without any board turnover. The social media presence of the SEGCF will be continued with regular posts thanking our sponsors and highlighting our award winners.

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



Darcy Baker, PGeo, President

2023 SEG Canada Foundation Team:

Board of Directors

Darcy Baker, President
Hugh Stewart, Treasurer
Jennifer Craig, Secretary
Stuart Simmons
Britt Bluemel
Garth Kirkham
Ross Sherlock
Lawrence Winter
Nawojka Wachowiak

Undergraduate Scholarship Committee

Lucy Hollis
Ross Sherlock
John Morganti

Fundraising Committee

Gerald Carlson (Chair)
Darcy Baker
Britt Bluemel
Ross Sherlock
Nawojka Wachowiak
Lawrence Winter

Manager

Kirstie Simpson

Accounting

Salvador Miranda

Lawyer

C. Michael Kray, LL.B.

Auditor

Manning Elliott LLP

About SEGCF

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 young 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 in the form of Scholarships, Grants and Fellowships for fourth year undergraduate and graduate university students. We also support 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 \$2.62 million. Of that amount, \$1,669,816 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.

Appendix I
SEGCF Corporate Donors - 2023

Patron Sponsors

Teck



Gold Sponsors



Silver Sponsors



Appendix II

SEGCF Individual Donors – 2023

Kevin Ansdell	Michel Houlé	Sarah Reese
Darcy Baker	Glen House	Edward Reeve
Fred Barnard	Christopher Jago	K. Brock Riedell
Joanie Beland	Michel Jebrak	Malcolm Robb
James Berdahl	Charles Jefferson	François Robert
Steve Beyer	Daniel Jiricka	Alfonso Rodriguez Madrid
Ludovic Bigot	Paul Johnston	Benoit Saumur
Gary Billingsley	Murray Jones	Jon Scoates
Denis Boisvert	John Keating	James Scoates
Robert Bowell	Halley Keevil	Johan Shearer
Robert Boyd	Garth Kirkham	Kirstie Simpson
James Brenan	Kevin Kivi	Christiaan Staargaard
Daniel Brisbin	Yury Klyukin	John-Mark Staude
David Broughton	Jonathan Lafontaine	Peter Stewart
Alexander Brown	Bruno Lafrance	Hugh Stewart
Stefanie Brueckner	Nikita Ledenev	Peter Thompson
David Burrows	David Lefebure	John Thompson
Bruce Campbell	Martin Lenters	Anne Thompson
Gerald Carlson	David Lentz	Richard Tosdal
Peter Cashin	Matthew Leybourne	Camilo Trouw
Dominic Channer	Fiona and Paul Lhotka	Rafael Vera Medina
Guoxiang Chi	Robert Linnen	Filippo Maria Vescovi
Andre Ciesielski	Timothy Liverton	Stephanie Wafforn
Michael Collins	Chris Lodder	Roger Wallis
Christopher Cooper	James Logan	Bruce Walsham
Michael Corey	Susan Lomas	Robert Wares
Louise Corriveau	Allan MacTavish	John Watkins
Olivier Cote-Mantha	Henry Marsden	Sean Whiteford
Laurence Curtis	Liam Maw	Steven Williams
Jack Dann	Lindsay McClenaghan	Lawrence Winter
Sarah Dare	Dean McDonald	Selina Wu
Alex Davidson	Sean McKinley	Zoltan Zajacz
Edward Debicki	Brian McNulty	Rimant Zalnieriunas
Nikola Denisova	Xuyang Meng	Marcos Zentilli
Claude Dion	William Mercer	Joe Zhou
Benoit Dube	Patrick Mercier-Langevin	Dawn Zhou
Yuder Espiritu Martinez	Jack Milton	
Neil Fernandes	John Mirko	
Beth Fischer	Richard Moore	
James Franklin	A. Hamid Mumin	
Andrew French	Marco Nieto	
Alan Galley	Jessica Norris	
Harold Gibson	Reginald Olson	
Ralph Gonzalez	J. J. Luke Ootes	
George Gorzynski	Justin Osborne	
Alex Gostevskikh	Robert Osborne	
Twila Griffith	William Pearson	
Lee Groat	Dave Peck	
Mathieu Guay	Mark Petersen	
Jacob Hanley	Nathan Pfiefer	
Mark Hannington	Ian Pirie	
Thomas Hart	K. Howard Poulsen	
Keiko Hattori	Kenneth Pride	
Scott Heffernan	Gustavo Ramirez	
Michael Hocking	C. Mark Rebagliati	
Peter Hollings	Matthew Rees	

Appendix III - SEGCF Student Awards - 2023

*Note: these award amounts were approved by the Board and awarded to students in the currency of their choice. Some of the students received their funds in USD, therefore, the exact Canadian dollar amount of those awards shown in the financial statements may be different than what is listed above due to exchange rate conversion.

Graduate Student Grants - 2023					
Name	Award (US\$)	Award (C\$)	University	Level	Topic
Lindsey Abdale	\$5,000	\$6,657	University of British Columbia	PhD	Feldspar lead isotope data of alkaline rocks from Southeastern BC:
Saeid Baghban Asgharinezhad	\$5,000	\$6,657	University of New Brunswick	PhD	Rare earth element and yttrium (REY) mineralization in the Late Devonian evolved granite-related Mount Pleasant (Sn-Zn-In-Cu) (W-Mo-Bi) deposits, SW New Brunswick
Catriona Breasley	\$4,000	\$5,325	University of British Columbia	PhD	The geochemistry, petrology and mineralogy of the Prof pegmatite, Revelstoke, BC
Gil Pedro Cavalcanti de Albuquerque	\$3,250	\$4,327	Université du Québec à Montréal	MSc	Hydrothermalism and lithological and structural control on the formation of vein-hosted gold mineralization on the Ménarik property, Eeyou Ische James Bay
Ian Coxon	\$3,400	\$4,526	Memorial University, Newfoundland	MSc	A hematite-fraction specific trace-element investigation into oxidative weathering and iron mineralization in the 2.3 Ga Lorrain Formation, Huronian Supergroup
Christopher Emproto	\$4,200	\$5,591	University of Michigan	PhD	Origin of high-grade lithium mineralization in the Thacker Pass sediment-hosted lithium deposit
Allison Howes	\$3,250	\$4,327	Queen's	PhD	Exploring the heterogeneity of in-situ trace element geochemistry in VMS-associated banded iron formations: Reading between the bands
Alex Muller	\$5,000	\$6,657	University of Alberta	MSc	Geochronology, mineral chemistry, and geochemistry of kimberlites from Victoria Island, Nunavut, Canada
Kevin Man Hoi NG	\$3,800	\$5,059	McGill University	PhD	Genesis of bonanza grade epithermal gold-silver deposit in Brucejack, British Columbia, Canada
Nelson Román	\$5,000	\$6,657	University of Toronto	PhD	The trace element composition of gold alloy at the Klondike gold district, Yukon
Jinglin Xu	\$3,250	\$4,327	University of British Columbia	MSc	Defining the geometry of ore horizons at the XY Shale-Hosted Massive Sulfide (SHMS) Pb-Zn deposit using chemostratigraphy and the structural analysis of drill core
Qiwei Zhang	\$4,200	\$5,591	University of Alberta	PhD	Dating super-deep diamonds from the DO27 kimberlite, Slave Craton, Canada
Total	\$49,350	\$65,701			

Graduate Student Fellowships - 2023

Name	Award (C\$)	University	Topic
Ian Coxon	\$10,000	Memorial University of Newfoundland	Primary vs. later hydrothermal signatures in red beds will help develop analytical methods that I am eager to extrapolate to other redox-controlled or sediment-hosted systems (e.g., U, sediment-hosted Cu).
Lillian Glodowski	\$7,500	University of Manitoba	Characterizing mineralization styles in orogenic gold systems of Newfoundland
Danielle McGill	\$8,000	University of Toronto	Performing mineralogical and geochemical analyses on a V-rich metalliferous shale deposit located in the Northwest Territories.
Michael Powell	\$8,500	Dalhousie University	High field strength element behaviour in late stage felsic systems.
Samuel Edem Kodzo Tetteh	\$6,000	University of Manitoba	Machine learning tools to create mineral exploration maps using geochemical data in the Kamiskotia area, a known VMS district in Ontario and close to the world-famous Kidd Creek deposit.
Total	\$40,000		

Undergraduate Scholarship - 2023

Name	Award (C\$)	University	Thesis Topic
Caroline Barnes	\$1,000	Queen's University	Zinc mineralization hosted in Proterozoic Grenville marbles at the Salerno Lake Deposit: insights from sphalerite elemental and isotopic composition.
Maiya Callister	\$1,000	The University of British Columbia	Characterizing and Assessing the Porphyry Fertility of the Telegraph Creek Property Intrusive Suite.
Eve Carrothers	\$1,000	University of Toronto	The pyrite trace element chemistry of the Giant gold deposit, NWT.
Daniel Giannotti	\$1,000	University of Toronto	The depositional conditions of host rocks of the Prairie creek Zn, Ag, Pb, Ge deposit - implications for deposit formation and/or preservation.
Jack Halloran	\$1,000	University of Ottawa	High Sulphidation Cu-Au Overprint of the Porphyry Cu-Au deposit, Filo del Sol, Argentina.
Ingrid Helmke	\$1,000	Dalhousie University	Studying the age and growth history of the calcite amygdules in Devonian basalts from the McArras Brook Formation, Nova Scotia.
Sarah Mills	\$1,000	Western University	Characterizing mafic volcanic rocks and the nature and timing of associated hydrothermal alteration rocks on Parker Island, Wollaston Lake, Saskatchewan.
Hanna Titto	\$1,000	Lakehead University	Structural analysis of the Quetico and Wawa subprovince boundary in relation to shear zone hosted gold.
Total	\$8,000		