

**ELENA FRIE**  
Montreal, QC  
elena.frie@mail.mcgill.ca  
778-999-7179

## **EDUCATION**

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**McGill University** 2018 – 2023E  
*Bachelor of Science, Honours Earth System Science, Minor Anthropology*  
Montreal, QC

- GPA: 3.93/4.0
- Key Courses: Society, Environment, and Sustainability; Environment and Culture; Earth System Modelling; Foundations of Programming; Calculus 1, 2 & 3; Linear Algebra

**Prince of Wales Mini School: Academic Enrichment Program** 2013 – 2018  
Vancouver, BC

## **AWARDS**

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McGill Faculty of Science Best in the West Scholarship 2020  
McGill Osisko Scholarship in Earth and Planetary Sciences 2020  
KEGS (The Canadian Exploration Geophysical Society) Foundation Scholarship 2020  
Natural Sciences and Engineering Research Council of Canada (NSERC) Undergraduate Student Research Award (USRA) 2020  
McGill General Chemistry Tomlinson Engagement Award for Mentoring (TEAM) 2019  
McGill Earth System Science Tomlinson Engagement Award for Mentoring (TEAM) 2019  
British Columbia Academic Excellence Scholarship 2018  
Canada-Wide Science Fair Bronze Medalist May 2015  
Greater Vancouver Regional Science Fair Gold Medalist April 2015  
Prince of Wales Secondary Principal's List 2014, 2015, 2016, 2017, 2018  
Prince of Wales Secondary Science Excellence Award 2015, 2016, 2018  
British Columbia Future Science Leader Award 2017  
Pascal, Cayley, and Fermat National Math Competitions Top 25% 2014, 2015, 2016  
Prince of Wales Secondary Math Excellence Award 2014, 2015, 2016

## **RESEARCH EXPERIENCE**

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**Research Assistant** January 2021 – Present  
Department of Earth and Planetary Sciences, McGill University

- Compiling sources and data as part of a large-scale collaborative human-Earth system model within Professor Eric Galbraith's Integrated Earth System Dynamics Lab

**Undergraduate Student Researcher** Summer 2020

Department of Earth, Ocean, and Atmospheric Sciences, University of British Columbia

- NSERC USRA awardee in Professor Gregory Dipple's lab studying carbon sequestration potential of ultramafic mine tailings
- Carried out preliminary, self-directed experiments on ability of synthetic material to capture carbon dioxide
- Conducted 4-week fieldwork in northern British Columbia to study carbon mineralization of mine tailings in partnership with the private mining industry

**Research Assistant** Summer 2019

Biodiversity Research Centre, University of British Columbia

- Supported project in the Rieseberg Lab that studied genetic biodiversity of extremophile species for crop improvement
- Organized and prepared thousands of crop samples for analysis
- Produced plots and tables of results for future reference

**Research Assistant** 2016 – 2017

TRIUMF (Canada's Particle Accelerator Centre), University of British Columbia

- Supported astrophysics project exploring elemental release from supernovae
- Ran python code that simulated thousands of supernovae explosions
- Generated plots of resulting elemental abundances for future lab use

**ADDITIONAL WORK EXPERIENCE**

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**Departmental Outreach Assistant (Volunteer)** 2020 – Present

Department of Earth and Planetary Science, McGill University

- Work with the outreach head for the EPS department to increase undergraduate enrollment
- Produced infographics for course registration help, FAQ documents, and in process of surveying student body on reasons for their enrollment

**Earth System Science (ESYS 104) TEAM Undergraduate TA** Winter 2020

McGill University

- Organized course material and led assignment and midterm review sessions

**General Chemistry (CHEM 110) TEAM Undergraduate TA** Fall 2019

McGill University

- Prepared review session material and individually tutored students

**Sales Associate** 2019

Running Room, Vancouver, BC

- Opened, sold merchandise, and closed running shop solo

**Windsurfing and Paddle Boarding Instructor** 2016 – 2018

WindSure Watersports, Vancouver, BC

- Managed rentals and taught windsurfing, paddle boarding, and skim boarding to individuals and children's camps

## **EXTRACURRICULARS**

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**Varsity Cross Country and Track Student Athlete** 2018 – Present  
McGill University

- Train daily with distance running team
- Won 2019 Quebec provincial championship, and nominated as 2019 McGill varsity team of the year

**Earth and Planetary Science Vice-President External** 2020 – Present  
McGill Science Undergraduate Society, McGill University

- Attend science undergraduate society meetings and Earth and Planetary science departmental and undergraduate council meetings
- Organize events for within the EPS department

**Earth System Science Representative** 2019 – 2020  
Earth and Planetary Sciences Undergraduate Council, McGill University

- Represented the ESS major at meetings and organized departmental events

**Residence Representative** 2018 – 2019  
McGill University First Year Residence Council

**Science Fair Initiative Lead** 2016 – 2018  
Prince of Wales Mini School, Vancouver, BC

- Organized logistics of high school science fair, personally advised younger students, and matched students with professional mentors

**Future Science Leaders Program** 2016 – 2017  
Youth Science Canada

- Engaged in weekly invitation-only workshops with key scientists in BC

**Whistler Freeride Team Member** 2014 – 2018

- Trained intensively in freeride skiing as part of a nationally ranked team at highest competitive level for the sport

**Vancouver United Football Club Gold Team Member** 2005 – 2018

**Vancouver Rowing Team Member** 2015 – 2017

**Shoreline Clean-Up Initiative Lead** 2015 – 2018  
Prince of Wales Mini School, Vancouver, BC

- Led monthly beach clean-up efforts for 50+ students

## **SKILLS**

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**German** – Conversational (B2 level certificate; Goethe-Institut summer language programs 2016, 2017; German courses 2005 – 2015)

**Programming Languages** – Python, MATLAB, minimal R  
Microsoft Office (Word, Excel, Power Point), Canva