

Casey Engstrom CV

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PhD Candidate, Molecular Biology and Biochemistry

Simon Fraser University in Burnaby BC, Canada. Expected completion April 2023

BA Biology, Physics Minor Middlebury College in Middlebury VT, USA. 2013

Publications

Engstrom CB, Williamson SN, Gamon JA, Quarmby LM. Seasonal development and radiative forcing of red snow algal blooms on two glaciers in British Columbia, Canada, summer 2020. *Remote Sensing of Environment* (*In revision*)

Raymond BB, Engstrom CB, Quarmby LM. The underlying green biciliate morphology of the orange snow alga *Sanguina aurantia*. *Current Biology* 32, R68–R69. <https://doi.org/10.1016/j.cub.2021.12.005> (2022).

Yakimovich KM, Gauthier NP, Engstrom CB, Leya T, Quarmby LM. A Molecular Analysis of Microalgae from Around the Globe to Revise *Raphidonema* (Trebouxiophyceae, Chlorophyta). *Journal of Phycology* 57, 1419–1432. <https://doi.org/10.1111/jpy.13183> (2021).

Yakimovich KM, Engstrom CB, Quarmby LM. Alpine Snow Algae Microbiome Diversity in the Coast Range of British Columbia. *Frontiers in Microbiology* 11. <https://doi.org/10.3389/fmicb.2020.01721> (2020).

Engstrom CB, Yakimovich KM, Quarmby LM. Variation in Snow Algae Blooms in the Coast Range of British Columbia. *Frontiers in Microbiology* 11. <https://doi.org/10.3389/fmicb.2020.00569> (2020)

Presentations

Virtual Student Colloquium, SFU Dept. Molecular Biology and Biochemistry. Short talk, 2021

Virtual International Snow Algae Meeting, Prague, Czech Rep. Short talk, 2020

Student Colloquium, SFU Dept. Molecular Biology and Biochemistry. Short talk, 2019

Monthly Meeting, SFU Omics Group. Short talk, 2019

EcoEvo Retreat, Squamish, BC. Awarded best short talk, 2019

Student Colloquium, SFU Dept. Molecular Biology and Biochemistry. Poster, 2018

Teaching and mentorship

Research programming peer for SFU Library Research Commons from 2020 - present

Developed and led two-day [Intro to Google Earth Engine workshop](#), offered three times

Co-taught two-day Intro to R and 1-hr RMarkdown & web scraping workshops

Provided R consultations for SFU researchers

Teaching assistant for [MBB243 Data Analysis for Molecular Biology](#), Spring 2022

Mentored undergraduate NSERC USRA and honours thesis students:

Anastasia Bogdanovic, Fall 2021 and Spring 2022

Joud Albeitshawish, Fall 2020 and Spring 2021

Teaching assistant while undergraduate at Middlebury College:

BIOL340 Vertebrate Natural History, 2012

PHYS110 Optics, Thermodynamics, and Waves, 2011

BIOL140 Ecology and Evolution, 2010 and 2011

Outreach and service

Elementary science outreach volunteer for [Skype a Scientist](#) (2021)

Hackathon organizer and participant for [HackSeq](#) Vancouver (2020)

Student group organizer for SFU Omics (2019)

Co-authored magazine article describing our research, see [Engstrom CB and Quarmby LM \(2019\).
Watermelon snow: a microscopic serengeti. Alpine Club of Canada State of the Mountains Report
40-41.](#)

Fellowships

Four-time recipient of SFU Molecular Biology and Biochemistry Graduate Fellowship (2018-2022)

Three-time recipient of SFU Weyerhaeuser Molecular Biology Graduate Scholarship (2018-2022)