Wyatt Petryshen

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Education

Master of Science Geology, University of Calgary

2018 - 2021

Evolutionary and computational biology, Conodont paleobiology

Bachelor of Science Honours in Geology (First Class), University of Calgary

2014 - 2018

GPA over last 2 academic years: 3.9

Peer Reviewed Publications

Petryshen W, Henderson CM, De Baets K, Jarochowska E. 2020. Evidence of parallel evolution in the dental elements of *Sweetognathus* conodonts. *Proc. R. Soc. B* 287: 20201922. http://dx.doi.org/10.1098/rspb.2020.1922.

Dolphin, G.R., Benoit, W., Burylo, J., Hurst, E., Petryshen, W., Wiebe, S. 2018. Braiding history, inquiry, and model-based learning: A collection of open-source historical case studies for teaching both geology content and the nature of science. Journal of Geoscience Education. doi: 10.1080/10899995.2018.1475821.

Articles in Preparation

Petryshen W. 2023. Spatial distribution of potentially toxic elements associated with mountaintop coal mining in the Elk Valley, British Columbia, Canada. *In Preparation*.

Non-Refereed Publications and Opinion Pieces

Axworthy T, Petryshen W. 2022. The mining problem Canada wants to ignore. *The Globe and Mail*. https://www.theglobeandmail.com/opinion/article-the-mining-problem-canadawants-to-ignore/

Petryshen W, 2022. Canada-U.S. transborder political dispute looms over water pollution crisis in British Columbia's Elk Valley. *The Hill Times*. https://d1tfm8vclpltjj.cloudfront.net/wp-content/uploads/2022/06/Wyatt-HT-op-ed-Jun27-2022.pdf

Talks and Conference Presentations

Petryshen W, Henderson CM, De Baets K, Jarochowska E. 2022. Parallel Evolution in the Dental Elements of *Sweetognathus* Conodonts [Conference Presentation]. Fifth International Conodont Symposium.

Petryshen W, Henderson CM, De Baets K, Jarochowska E. 2020. Recurrent morphotypes in the dental elements of *Sweetognathus* conodonts revealed by geometric morphometrics [Conference Presentation]. GSA 2020 Connects Online.

Petryshen W, Henderson CM, De Baets K, Jarochowska E. 2020. Evidence of parallel evolution in the dental elements of *Sweetognathus* conodonts [Presentation]. FAU GeoZentrum Nordbayern Seminar Series.

Petryshen W, Henderson C. 2019. Preliminary work on the evolutionary history of *Sweetognathus* through morphometrics [Conference Presentation]. Annual Meeting of the Paleontological Society (Paläontologische Gesellschaft) 2019.

Petryshen W, Dutchak A. 2017. An investigation of sampling bias in the Swift Current Creek Mammalian Fauna of the Cypress Hills Formation, Saskatchewan, Canada [Conference Presentation]. Canadian Paleontology Conference 2017.

Work Experience

Mining Policy and Impacts Researcher, Wildsight

2021 - Present

- Advocate for strong, enforceable mining legislation and regulations to protect our climate, aquatic life, and biodiversity
- Design and carry out environmental monitoring studies and remote sensing
- Participate in public comment periods and engage with stakeholders

Research Assistant, University of Calgary, Department of Geoscience

2021

• Research on conodont evolution and functional adaptions

Solutions Analyst / Data Scientist, PSGeoData

2020 - 2021

 Data mining and predictive modeling in Python and R, data base management in SQL

Lab and Field Assistant, University of Calgary, Department of Geoscience

2017

Processing of microfossil samples

Research Assistant, University of Calgary, Department of Geoscience

2015 - 2016

Writing historical geologic case studies

Certifications

Introduction to Machine Learning Boot Camp, West Texas Data Science Institute

2018

Predicting reservoir properties based on available well data

Technical Skills

Proficient in R Studio, Adobe Creative Suite, Python, and SQL. Completed workshops in RevBayes.

Teaching Experience (University of Calgary)

GLGY 343 3D Geologic Structures and Methods Winter, Teaching Assistant	2019 – 2021
GLGY 493 Evolution of Earth Through Life and Time Fall, Teaching Assistant	2018 – 2020
GLGY 587 Invertebrate Paleobiology, Teaching Assistant	2020
GLGY 202 Applications in Geoscience Summer, Teaching Assistant	2019
GLGY 559 Contemporary Topics in Geology: Modern Carbonates Field School Spring	2019

Awards and Grants	
University of Calgary Graduate Studies Scholarship (\$5000)	2020
Alberta Graduate Excellence Scholarship (\$11,000)	2019
GeoZentrum Nordbayern Friedrich-Alexander Universität Erlangen-Nürnberg (37	700€) 2019
Grant Spratt Graduate Scholarship in Geology (\$1900)	2019
Queen Elizabeth II Graduate (Master's) Scholarship (\$3600)	2018
International Study Travel Grant (\$500)	2018
Best Undergraduate Poster GeoREX (\$250)	2016
Jason Lang Scholarship, Awarded (\$1000 per year)	2014 – 2016
Alexander Rutherford Scholarships (\$1800)	2014
Volunteer Experience	
Graduate Association of Geology and Geophysics Students	2019 – 2021
 President 	
Geoscience Research Exchange (GeoRex) Organization Committee	2016 – 2020
 Fundraising, logistics, and corporate outreach 	
University of Calgary Orientation Week	2016
 Interact and inform prospective students on information 	
relating to geology	
Parkinson Society of Alberta and MS Society of Canada	2014 – 2015