

# Samuel Aucoin

PhD Candidate

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## *Education*

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| <b>Dalhousie University</b><br><i>PhD Physical Oceanography</i><br><i>Turbulence from Oceanic Plumes</i><br><i>With Ruth Musgrave &amp; Alex Hay</i>                           | 09/2022 – Present<br><i>Halifax, Canada</i>  |
| <b>McGill University</b><br><i>BSc First Class Hon. Earth System Science, Min. Physics</i><br><i>Coastal Sea-Ice Break-Up Events in Beringia</i><br><i>With Bruno Tremblay</i> | 09/2019 – 04/2022<br><i>Montreal, Canada</i> |
| <b>CEGEP Heritage College</b><br><i>DEC of Science with Distinction</i>  | 09/2017 – 04/2019<br><i>Gatineau, Canada</i> |

## *Scholarships & Awards*

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| <b>Polar Knowledge Canada NSTP Award</b><br><i>Dalhousie University</i>   | 2025        |
| <b>NSERC Postgraduate Scholarship - Doctoral</b><br><i>Dalhousie University</i>                                   | 2024 – 2027 |
| <b>President's Award</b><br><i>Dalhousie University</i>   | 2024 – 2026 |
| <b>Nova Scotia Graduate Scholarship</b><br><i>Dalhousie University</i>  | 2024 – 2028 |
| <b>JSPS/Mitacs Research Fellowship</b><br><i>Research Institute for Humanity and Nature, Dalhousie University</i> | 2023        |
| <b>Best MSc Talk</b><br><i>Conference of Dalhousie Oceanography Graduate Students</i>                             | 2023        |
| <b>Osisko Scholarship</b><br><i>McGill University</i>   | 2020 – 2022 |
| <b>NSERC USRA</b><br><i>McGill University</i>   | 2021        |

## *Research Experience*

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| <b>JSPS Visiting Fellow</b><br><i>Research Institute for Humanity and Nature</i><br><i>With Makoto Taniguchi</i> | 06/2023 – 09/2023<br><i>Kyoto, Japan</i> |
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- Designed and performed a short-term project as a research fellow on the fluid dynamics of submarine springs.

## *Publications*

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- Aucoin, S., Tremblay, B., & Newton, R. (2022b). Coastal Sea-Ice Break-Up Events in Beringia. *McGill Science Undergraduate Research Journal*, 17(1), 18–22.  
<https://doi.org/10.26443/msurj.v17i1.172>
- Aucoin, S., Briand, A., Duval, B., & Qudsi, Z. (2022). Micro-Urban Heat Islands in the City of Montreal. *McGill Science Undergraduate Research Journal*, 17(1), 58–63.  
<https://doi.org/10.26443/msurj.v17i1.178>

## *Presentations*

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- Aucoin, S., Musgrave, R., & Hay, A. (2024). Turbulent dynamics of a submarine spring plume. *Ocean Mixing Gordon Research Conference 2024, Mt Holyoke, Massachusetts, USA*
- Aucoin, S., Taniguchi, M., Musgrave, R., & Hay, A. (2023). Oceanic mixing from submarine groundwater discharge. *Japan Society for the Promotion of Science Summer Program 2023, Shonan Village, Hayama, Japan*
- Aucoin, S., Musgrave, R., & Hay, A. (2023b). Turbulent plumes from submarine groundwater discharge. *Canadian Meteorological and Oceanography Society Congress 2023, St. John's, Newfoundland & Labrador*
- Aucoin, S., Musgrave, R., & Hay, A. (2023a). Turbulent plumes from submarine groundwater discharge. *Conference of Dalhousie Oceanography Graduate Students 2023, Halifax, Nova Scotia*
- Aucoin, S., Tremblay, B., & Newton, R. (2022a). Coastal sea-ice break-up events in beringia. *McGill University Undergraduate Poster Showcase 2022, Montreal, Quebec*

## *Teaching Experience*

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| <b>TA for OCEA1001/2</b>  | 09/2022 – 05/2023      |
| <i>Dalhousie University</i>   | <i>Halifax, Canada</i> |
| <ul style="list-style-type: none"><li>• Developed and ran weekly tutorial sessions, graded and gave feedback on students' writing ability</li></ul> |                        |

## *Additional Activities & Skills*

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- Communication:** Editor-in-chief for the student-run departmental science communication magazine, [Current Tides](#).
- Languages:** English, French
- Programming Languages:** Julia, MatLab, Python, R
- Recreation:** Music, Hiking, Baking, Kayaking