

Education

University of Toronto, 2022- PhD in Ecology & Evolutionary Biology, University of Toronto
Supervisors: Drs. Matthew Osmond, Nicole Mideo

- **Research interests:** evolution of recombination; viral evolution & emergence; phylogenetic comparative methods; modifier theory; coalescent theory
- **Teaching:** [EEB313: Quantitative Methods in R for Biologists](#) (co-instructor in F23 and F24)

University of Idaho, 2018-2022 BSc in Mathematics *General & Applied Quant. Modeling Options*
BSc in Statistical Science *General Option*

Publications

- **Yuksel, M.**, Yang, Q., Osmond, M.*, Mideo, N.* (2025). Host constraints on viral recombination and emergence. Submitted to *Proceedings of the Royal Society B*.
<https://www.biorxiv.org/content/10.1101/2025.10.01.679867v1>
- Keefer, M., **Yuksel, M. K.**, & Caudill, C. (2025). Assessing the role of juvenile life history diversity and adult translocation on cohort productivity in a Chinook Salmon population. *Fisheries*.
- **Yuksel, M.**, Remien, C., Karki, B., Bull, J., & Krone, S. (2021). Vector dynamics influence spatially imperfect genetic interventions against disease. *Evolution, Medicine, & Public Health*.
<https://academic.oup.com/emph/article/9/1/1/5920238>

Non-peer reviewed:

- Keefer, M., **Yuksel, M.**, & Caudill, C. (2022). Decision Support Modeling for Outplanting Adult Chinook Salmon in the Santiam River Basin (Technical Report 2022-1 for US Army Corps of Engineers).

Selected awards

Awarded >\$150,000 CAD in competitive research funding.

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| 2024-27 | University of Toronto Data Sciences Institute Doctoral Fellowship (\$79,500 CAD) |
| 2023-24 | University of Toronto Institute for Pandemics Graduate Studentship (\$10,000 CAD) |
| 2022-27 | Connaught International Doctoral Scholarship (\$50,000 CAD) |
| 2022-24 | Faculty of Arts & Science Doctoral Recruitment Award (\$10,000 CAD) |
| 2022 | John B. George Award, awarded to the top graduating senior in the College of Science |

Selected presentations

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| 2025 | Evolution; Society for Theory & Modeling in Population Biology |
| 2024 | Evolution; Mathematical Models in Ecology & Evolution |
| 2023 | Ecology & Evolution of Infectious Diseases; University of Toronto Atwood Colloquium in EEB |

Selected service

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| Ongoing | Ad hoc reviewer for <i>Genetics</i> (x4), <i>G3</i> (x6), <i>Proceedings B</i> (x1), <i>Evolution</i> (x1), <i>JEB</i> (x1) |
| 2024-25 | University of Toronto Atwood Colloquium in Ecology & Evolution Organizing Co-Chair |
| 2024- | Member of Society for the Study of Evolution (SSE) Graduate Council |
| 2022-23 | Member of Ecology & Evolutionary Biology Wellness Committee, EDI Subcommittee Co-led development of \$8K research award for BIPOC undergraduates |
| 2022-23 | CUPE 3902 Steward for Dept. Ecology & Evolutionary Biology |