

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

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

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
2022	Workshop in Mathematical and Computational Biology; PIMUC

Selected service

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
2021-22	Member of the University of Idaho COVID Committee
2017-19	Member of the City of Moscow Sustainable Environment Commission