

Curriculum Vitae of Dr. Krystal Nunes

krystalnunes@gmail.com

WORK EXPERIENCE

- January 2022 – present **Assistant Professor**
Department of Chemistry and Biology, Toronto Metropolitan University
- July 2020 – December 2021 **Postdoctoral Research Fellow**
Project title: Undergraduate Educational Resilience and Productive Failure
University of Toronto Mississauga, Co-Supervisors: Dr. Fiona Rawle and Dr. Nicole Laliberté
- June 2018 – June 2020 **Environmental Educator**
Toronto and Region Conservation Authority

EDUCATION

- September 2012 – October 2017 **PhD, Ecology and Evolutionary Biology**
Thesis title: Impacts of aboveground and belowground interactions on the performance of an invasive thistle, *Cirsium arvense*
University of Toronto Mississauga. Supervisor: Dr. Peter Kotanen
- September 2007 – June 2012 **Honours BSc**, Geography (maj.) and Biology (min.)
York University, Toronto ON
Graduated Summa Cum Laude
- September 2007 – June 2012 **Certificate in Geographic Information Systems (GIS) and Remote Sensing**
York University, Toronto ON

COURSE INSTRUCTOR EXPERIENCE

- January 2022 – Present **Toronto Metropolitan University**, Department of Chemistry and Biology
- BLG805 Behavioural Ecology (Fall 2025)
 - BLG144 Biology II (Winter 2024/2025)
 - BLG143 Biology I (Fall 2023/2024)
 - ES8923 Environmental Assessment (Winter 2023/2025)
 - BLG567 Ecology (Winter 2024/2023/2022)
- May 2018 – December 2021 **Sessional Lecturer, University of Toronto Mississauga**, Department of Biology
- BIO152 Intro to Evolution and Evolutionary Genetics (Fall 2021)
 - BIO153 Diversity of Organisms (Summer 2021/2020/2019/2018)
 - BIO205 Ecology (Summer 2021/2020/2019, Fall 2020)
 - BIO331 Ecology of Communities (Winter 2020)
 - BIO330 Plant Ecology (Winter 2019)
 - BIO406 Current Topics in Ecology and Evolution (Fall 2020)
- January 2018 – August 2021 **Academic Professor, Humber College**, Dept. of Liberal Arts and Sciences
- SCIE3100 Extinction (Summer 2021/2020, Winter 2021/2020, Fall 2020)
 - SCIE2005 Intro. to the Environment (Summer 2020/2019, Fall 2019/2018, Winter 2019)
 - SCIE224 Discovering Dinosaurs (Winter 2020, Fall 2019/2018)
 - SCIE3000 Scientific Achievements (Fall 2018, Winter 2018)
- January 2019 – August 2021 **Course Instructor, York University**, Department of Biology
- BIOL1001 Biology II (Summer 2021, Winter 2021)
 - BIOL4700 Current Topics in Environmental Biology (Winter 2019)
-

Curriculum Vitae of Dr. Krystal Nunes

krystalnunes@gmail.com

BOOKS AND BOOK CHAPTERS

1. Nunes, K. A., N. Laliberté, and F. Rawle (eds). 2025. Failure: Learning in Progress. University of Toronto Press, Toronto, ON. (in press) Release date: 2026
 - *Authored chapters include:*
 - *Introduction*
 - *The science of learning from failure*
 - *Failure across the disciplines*
 - *Learning from failure during times of transition*
 - *Conclusion*
2. Freeman, S. Biological Science, 4th Canadian Edition. K. A. Nunes as contributing author on new edition. Release date: 2027
3. Nunes, K. A., A. Gagne, N. Laliberté, and F. Rawle. 2023. Evidence-based practices for fostering self-regulated and resilient learners in Innovations in Higher Education Teaching and Learning. Pandemic Pedagogy – Preparedness in Uncertain Times. Emerald Group Publishing, Somerville, MA.

PEER-REVIEWED JOURNAL AND CASE STUDY PUBLICATIONS

1. Nunes, K. A., A. Counsell, and J. Ge. 2025. Instructor and student experiences with ungrading in graduate courses across multiple disciplines. Canadian Journal for the Scholarship of Teaching and Learning (submitted)
2. Bose, A., L. Grbic, and K. Nunes. 2025. Incorporating failure narratives in the classroom to improve undergraduate students' willingness to seek academic and mental health support. European Journal of Psychology Education (submitted)
3. Grbic, L., A. Bose, and K. Nunes. 2025. Navigating academics post-remote learning: understanding perceptions of failure among first year university students acclimating to in-person education. Teaching in Higher Education (submitted)
4. Ward, M., K. A. Nunes, and F. Rawle. 2024. National Science Teaching Association Case Study Collection <https://www.nsta.org/ncss-case-study/how-failing-science-helped-solve-coho-salmon-mystery>.
5. Nunes, K. A., J. Ross, A. Eastman, D. Guadagnolo, A. Bakaj, L. Crupi, S. Liu, M. Petrei, N. Laliberté, and F. Rawle. 2024. Can instructor feedback and failure dialogues reduce the stigma of failure and encourage help-seeking? An interdisciplinary undergraduate perspective. Collected Essays on Learning and Teaching DOI: <https://doi.org/10.22329/celt.v15i1.8309>
6. Nunes, K. A. 2023. Conservation concerns: investigating threats to native wetland biodiversity. National Science Teaching Association Case Study Collection. <https://www.nsta.org/ncss-case-study/conservation-concerns>
7. Nunes, K. A., N. Laliberté, and F. Rawle. 2022. The case for flexibility in online science courses: strategies and caveats. Biochemistry and Molecular Biology Education. DOI: 10.1002/bmb.21690
8. Nunes, K., S. Du, R. Philip, M. Mourad, Z. Mansoor, N. Laliberté, and F. Rawle. 2021. Science students' perspectives on how to decrease the stigma of failure. FEBS Open Bio. DOI 10.1002/2211-5463.13345
9. Richter, C., C. Lortie, T. Kelly, A. Filazzola, K. Nunes, and R. Sarkar. 2020. Online but not remote: adapting field-based ecology labs for online learning. Ecology and Evolution. DOI 10.1002/ece3.7008
10. Nunes, K. A., C. R. Fitzpatrick, and P. M. Kotanen. 2019. Soil biota composition and the performance of a noxious weed across its invaded range. Ecography. DOI 10.1111/ecog.04562
11. Nunes, K. A. and P. M. Kotanen. 2018. Does local isolation allow an invasive thistle to escape enemy pressure? Oecologia. DOI 10.1007/s00442-018-4175-6
12. Nunes, K. A., and P. M. Kotanen. 2018. Comparative impacts of aboveground and belowground enemies on an invasive thistle. Ecology and Evolution. DOI 10.1002/ECE3.3751

Curriculum Vitae of Dr. Krystal Nunes

krystalnunes@gmail.com

-
13. Anstett, D., K. A. Nunes, C. Baskett, and P. M. Kotanen. 2016. Sources of controversy surrounding latitudinal patterns in herbivory and defense. *Trends in Ecology and Evolution* DOI 10.1016/j.tree.2016.07.011
 14. Nunes, K. A., C. M. Cassin, and P. M. Kotanen. 2016. Variation in herbivory along a latitudinal gradient for native and exotic Asteraceae. *Plant Ecology* DOI 10.1007/s11258-016-0593-x

RESEARCH GRANTS, AWARDS, AND SCHOLARSHIPS

- | | |
|------|---|
| 2024 | <ul style="list-style-type: none">▪ Social Sciences and Humanities Research Council Insight Development Grant, \$57 100▪ Toronto Metropolitan University Learning and Teaching Grant, \$7580▪ Undergraduate Research Opportunity, OVPRI Toronto Metropolitan University, \$11 368 |
| 2023 | <ul style="list-style-type: none">▪ Social Sciences and Humanities Research Council Explore Grant, \$6495▪ STLHE D2L Innovation Award in Teaching and Learning, \$3000 (co-applicants F. Rawle, N. Laliberte, C. Makkar, A. Eastman, J. Ross, D. Guadagnolo, M Dasios, M. Cowan, K. Derry, J. Goodman) |
| 2022 | <ul style="list-style-type: none">▪ Toronto Metropolitan University Learning and Teaching Grant, \$11 500▪ Undergraduate Research Opportunity, OVPRI Toronto Metropolitan University, \$10 491 |
| 2016 | <ul style="list-style-type: none">▪ Ontario Graduate Scholarship, \$15 000 |
| 2015 | <ul style="list-style-type: none">▪ University of Toronto Zimmerman/Weis Award, \$4935▪ Best Oral Presentation, University of Toronto Mississauga Research Colloquium, \$400 |
| 2014 | <ul style="list-style-type: none">▪ Queen Elizabeth II/Pfizer Graduate Scholarship in Science and Technology, \$15 000 |
| 2013 | <ul style="list-style-type: none">▪ NSERC CGS-M Award, \$17 500 |

CERTIFICATIONS, WORKSHOPS, AND PROFESSIONAL DEVELOPMENT (LAST 6 YEARS ONLY)

- | | |
|------|--|
| 2025 | <ul style="list-style-type: none">▪ Crowdmark Certified Expert, Crowdmark Microcredential Course▪ Leading for Equity, Diversity and Inclusion in Higher Education, MOOC offered by the University of Michigan |
| 2023 | <ul style="list-style-type: none">▪ Completion of Excellence in Teaching Program, Toronto Metropolitan University |
| 2022 | <ul style="list-style-type: none">▪ Instructional Skills Workshop (ISW) Certification▪ Toronto Metropolitan University Course Design Retreat▪ Nisitohamowin eLearning: An Introduction to Understanding Indigenous Perspectives in Canada, First Nations University of Canada▪ Unconscious Bias Training Modules, University of Toronto Scarborough |
| 2021 | <ul style="list-style-type: none">▪ Digital Documents Accessibility Training Certification, Humber College▪ Inclusive Curricular Design Certification, Humber College |
| 2020 | <ul style="list-style-type: none">▪ Indigenous Canada, MOOC offered by the University of Alberta |

INVITED PRESENTATIONS

1. University of Turku. 2026. Invited visiting researcher and seminar speaker.
2. University of New Brunswick. 2025. Seminar speaker for the Department of Biology.

Curriculum Vitae of Dr. Krystal Nunes

krystalnunes@gmail.com

-
3. University of Guelph. 2025. Seminar speaker for the Department of Biology.
 4. Crowdmark Annual Conference. 2025. The Thought Lab: Using Crowdmark to foster low-stakes, active learning in large biology classes. Invited Keynote.
 5. STEAM Innovation Challenge Annual Conference. 2025. Invited panelist.
 6. Toronto Metropolitan University CELT Teaching and Learning Conference. 2025. Special session panelist.
 7. Peel Region District School Board. 2024. Mastering the University Journey: Information Session for Families and Students. Panelist.
 8. Dalhousie University. 2023. Implementing ungrading at the graduate level: an instructor's perspective on strategies to reduce students' fear of failure, encourage risk taking, and prioritize mental health. Seminar.
 9. CHY445/MS8106 Materials Chemistry guest lecturer. 2023. Building resilient learners: The role of failure in learning and science. Toronto Metropolitan University.
 10. Academic Integrity Awareness Week. 2022. Fear of failure and academic misconduct: how can we design our undergraduate courses to better support risk-taking and learning from failure? Toronto Metropolitan University. Seminar.
 11. Science at the Interface Symposium. 2022. Let's talk about failure: using failure dialogues and guided reflections to help foster resilient future scientists. Toronto Metropolitan University. Oral Presentation.
 12. Department of Chemistry and Biology Seminar Series. 2022. Fostering resilient scientists: The importance of failure for learning in science. Toronto Metropolitan University. Oral Presentation.
 13. utmONE Scholars 'Reframing Failure' Event. 2021. University of Toronto Mississauga. Invited Panelist.

CONTRIBUTED CONFERENCE PRESENTATIONS, LAST 6 YEARS ONLY (*indicates student as a presenting author)

1. Nunes, K., F. Amanat, and S. McFadden. 2025. Learning through failures: Reimaging virtual science labs to encourage student autonomy and exploration. European Science Education Research Association. Copenhagen, DK. Oral Presentation
2. Lazar, N,* and K. Nunes. 2025. The effect of parental comparison on self-perception and academic motivation among siblings with different academic successes. TMU CELT Teaching and Learning Conference. Toronto, ON. Poster Presentation.
3. Halilovic, G.,* and K. Nunes. 2025. Supporting student learning with evidence-based course study resources. TMU CELT Teaching and Learning Conference. Toronto, ON. Poster Presentation.
4. Amanat, F.,* S. McFadden, and K. Nunes. 2025. Learning by trial: Reimaging virtual science labs to encourage student autonomy and exploration. TMU CELT Teaching and Learning Conference. Toronto, ON. Poster Presentation.
5. Foroughifar, A.,* and K. Nunes. 2025. The role of STEM exposure in post-secondary education: insights into equity, attitudes, and career choices. TMU CELT Teaching and Learning Conference. Toronto, ON. Poster Presentation.
6. Nunes, K., S. Alam, and N. George. 2024. How can we foster a sense of belonging in a large, undergraduate science course? McMaster Macpherson. Hamilton, ON. Oral Presentation.
7. Loizides, K.,* and K. Nunes. 2024. The impact of evidence-based study strategies on academic performance. Ontario Biology Day. Toronto, ON. Oral Presentation.
8. Tershana, E.,* and K. Nunes. 2024. The effects of grade inflation on self-esteem and academic performance. Ontario Biology Day. Toronto, ON. Oral Presentation.
9. Johnson, A. E., K. Nunes, and J. Massad. 2023. Using case studies in biochemistry lectures: effects on student learning and attitude. American Chemical Society. San Francisco, CA. Oral Presentation.

Curriculum Vitae of Dr. Krystal Nunes

krystalnunes@gmail.com

-
10. Johnson, A. E., K. Nunes, and J. Massad. 2023. Using case studies in biochemistry lectures: effects on student learning and attitude. Canadian Chemistry Conference and Exhibition. Vancouver, BC. Oral Presentation.
 11. Nunes, K., A. Counsell, and J. Ge. 2023. Ungrading in a science graduate course: Strategies to reduce fear of failure, encourage risk-taking, and prioritize mental health. Society for Teaching and Learning in Higher Education. Charlottetown, PEI. Oral Presentation.
 12. Gopaul, A.* and K. Nunes. 2023. Designing evidence-informed case studies to foster resilient scientists. Toronto Metropolitan University Learning and Teaching Conference. Toronto, ON. Poster Presentation.
 13. Nunes, K., K. Jegatheswaran, and A. Gopaul. 2023. Fostering resilient learners: developing evidence-informed classroom interventions to help students embrace and bounce back from failure. Toronto Metropolitan University Learning and Teaching Conference. Toronto, ON. Oral Presentation.
 14. Nunes, K., A. Counsell, and J. Ge. 2023. An interdisciplinary exploration of graduate student and instructor experiences with ungrading. Toronto Metropolitan University Learning and Teaching Conference. Toronto, ON. Oral Presentation.
 15. Gopaul, A.* and K. Nunes. 2023. Designing evidence-informed interventions to foster resilient scientists and inclusive science education. University of Waterloo Teaching and Learning Conference. Waterloo, ON. Poster Presentation.
 16. Nunes, K., A. Counsell, and J. Ge. 2023. Student and instructor experiences with ungrading in a science graduate course. University of Waterloo Teaching and Learning Conference. Waterloo, ON. Oral Presentation.
 17. Massad, J.*, A. Johnson, and K. Nunes. 2023. Using guided reflections and active learning to reduce the fear of failure in an undergraduate biochemistry course. Ontario Biology Day. St. Catharines ON. Poster Presentation.
 18. Nunes, K., D. Ghaderi, N. Parikh, and H. Yee. 2022. How can we design undergraduate courses and assessments to better support risk-taking and learning from failure? McMaster MacPherson Institute Innovations in Education Conference. Hamilton, ON. Oral Presentation
 19. Yee, H.* and K. Nunes. 2022. Undergraduate science students' perspectives on failure and help-seeking. McMaster MacPherson Institute Innovations in Education Conference. Hamilton, ON. Poster Presentation
 20. Nunes, K., J. Ross, D. Guadagnolo, A. Bakaj, L. Crupi, S. Liu, M. Petrei, N. Laliberté, and F. Rawle. 2022. Fostering resilient learners: using failure dialogues to minimize the stigma of failure and encourage help-seeking. Society for Teaching and Learning in Higher Education Annual Conference. Ottawa, ON. Oral Presentation.
 21. Nunes, K. N. Laliberté, and F. Rawle. 2022. Using failure narratives in the classroom to foster resilient learners and encourage help-seeking. Toronto Metropolitan University Learning and Teaching Conference. Toronto, ON. Oral Presentation.
 22. Ross, J., K. Nunes, M. Cowan, K. Derry, J. Goodman, N. Laliberté, and F. Rawle. 2022. Failure across disciplines: modeling productive failure in post-secondary course designs. University of Toronto Teaching and Learning Symposium. Online. Oral Presentation.
 23. Nunes, K., J. Ross, D. Guadagnolo, A. Bakaj, L. Crupi, S. Liu, M. Petrei, N. Laliberté, and F. Rawle. 2022. Undergraduate student perspectives of failure: how can instructors foster resilience and encourage help-seeking? University of Waterloo Teaching and Learning Conference. Online. Oral Presentation.
 24. Ross, J., K. Nunes, Y. Abdellatiff, E. Baffour, P. Dey, N. Laliberté and F. Rawle. 2022. Partners in failure, partners in learning: modeling failure intervention pedagogy in the university classroom. University of Waterloo Teaching and Learning Conference. Online. Symposium.
 25. Nunes, K. A., S. Du, R. Philip, M. Mourad, N. Laliberté and F. Rawle. 2021. Undergraduate science students' perspectives on reducing the stigma of failure. University of Waterloo Teaching and Learning Conference. Online. Oral Presentation.
-

Curriculum Vitae of Dr. Krystal Nunes

krystalnunes@gmail.com

PEER REVIEWER

- | | |
|------|---|
| 2025 | <ul style="list-style-type: none">▪ Pearson Biology Advisory Board and Content Expert<ul style="list-style-type: none">○ <i>Review AI content produced for online supplementary textbook resources for Biological Science by S. Freeman</i>▪ Canadian Journal for the Scholarship of Teaching and Learning (Works Reviewed: 2) |
| 2024 | <ul style="list-style-type: none">▪ Canadian Journal for the Scholarship of Teaching and Learning (Works Reviewed: 3) |
| 2023 | <ul style="list-style-type: none">▪ Frontiers in Education (Works Reviewed: 1)▪ Canadian Journal for the Scholarship of Teaching and Learning (Works Reviewed: 2)▪ Society for Teaching and Learning in Higher Education, conference abstract reviewer |
| 2022 | <ul style="list-style-type: none">▪ Macmillian Publishing (Textbooks Reviewed: 1)▪ Journal of Ecology (Works Reviewed: 1)▪ Biological Invasions (Works Reviewed: 1) |
| 2019 | <ul style="list-style-type: none">▪ Plant Ecology and Diversity (Works Reviewed: 1) |
| 2018 | <ul style="list-style-type: none">▪ American Journal of Botany (Works Reviewed: 2)▪ Oikos (Works Reviewed: 1) |
| 2015 | <ul style="list-style-type: none">▪ Acta Oecologia (Works Reviewed: 1) |