

René S. Shahmohamadloo

Last updated: April 14, 2025

Liber Ero Postdoctoral Fellow & NSERC Postdoctoral Fellow

School of Biological Sciences, Washington State University

rene.shahmohamadloo@wsu.edu | [personal website](#) | [google scholar](#)

PROFESSIONAL APPOINTMENTS

- 2022-2025 **Liber Ero Postdoctoral Fellow**
School of Biological Sciences, Washington State University, WA, USA
Supervisors: Seth Rudman, John Fryxell
- 2022-2024 **NSERC Postdoctoral Fellow**
School of Biological Sciences, Washington State University, WA, USA
Supervisor: Seth Rudman
- 2021-2022 **Postdoctoral Researcher**
Department of Integrative Biology, University of Guelph, ON, Canada
Supervisor: John Fryxell

EDUCATION

- 2021 **Ph.D. Environmental Toxicology**
School of Environmental Sciences, University of Guelph, ON, Canada
Supervisor: Paul Sibley
- 2016 **M.Sc. Environmental Toxicology**
School of Environmental Sciences, University of Guelph, ON, Canada
Supervisor: Paul Sibley
- 2014 **B.Sc. Hon. Toxicology**
College of Physical and Engineering Sciences, University of Guelph, ON, Canada

PUBLICATIONS (‡ co-first authors | † undergraduate or graduate mentee)

Manuscripts in Review and Revision

24. **Shahmohamadloo, R.S.**, Gabidulin, A.R.†, Andrews, E.R.†, Rudman, S.M. (2025). Standing genetic variation, not microbiomes underlie rapid adaptation.

Peer-reviewed

23. Tissier, M.L.‡, **Shahmohamadloo, R.S.**‡, Guzman, L.M.‡ (2025). Pesticide risk assessment in a changing world. *Glob. Change Biol.*, 31: e70203. doi: [10.1111/gcb.70203](https://doi.org/10.1111/gcb.70203)
22. **Shahmohamadloo, R.S.**, Gabidulin, A.R.†, Andrews, E.R.†, Fryxell, J.M., Rudman, S.M. (2025). A test of the contribution of microbiome plasticity to host phenotypic plasticity in *Daphnia*. *Proc. R. Soc. B.*, 292: 20250365. doi: [10.1098/rspb.2025.0365](https://doi.org/10.1098/rspb.2025.0365)
21. **Shahmohamadloo, R.S.**, Fryxell, J.M., Rudman, S.M. (2025). Transgenerational epigenetic inheritance increases trait variation but is not adaptive. *Evolution*, qpaf050. doi: [10.1093/evolut/qpaf050](https://doi.org/10.1093/evolut/qpaf050)
20. Schiller, L., Tissier, M.L., Davis, A.C.D., Lamb, C.T., Mayer, S.O., Menzies, A.K., **Shahmohamadloo, R.S.**, Vanderwolf, K.J. (2025) Hopeful insights from wildlife recoveries in Canada, *FACETS*, 10: 1-17. doi: [10.1139/facets-2024-0084](https://doi.org/10.1139/facets-2024-0084)
Media coverage: [The Narwhal](#), [The Canadian Press](#)
19. **Shahmohamadloo, R.S.**‡, Rudman, S.M.‡, Clare, C.I., Westrick, J.A., De Meester, L., Fryxell, J.M. (2024). Intraspecific diversity is critical to population-level risk assessments. *Sci. Rep.*, 25883. doi: [10.1038/s41598-024-76734-x](https://doi.org/10.1038/s41598-024-76734-x)
18. **Shahmohamadloo, R.S.**‡, Tissier, M.L.‡, Guzman, L.M.‡ (2024). Risk assessments underestimate threat of pesticides to wild bees. *Conserv. Letters*, e13022. doi: [10.1111/conl.13022](https://doi.org/10.1111/conl.13022)

Media coverage: [The CNRS](#), [USC Dornsife](#)

17. **Shahmohammadloo, R.S.**, Frenken, T., Rudman, S.M., Van West, P., Ibelings, B.W., Trainer, V.L. (2023). Diseases and Disorders in Fish due to Harmful Algal Blooms. *Climate Change on Diseases and Disorders of Finfish in Cage Culture* (3rd Ed). CABI, Oxfordshire, UK. doi: [10.1079/9781800621640.0010](#)
16. **Shahmohammadloo, R.S.**, Bhavsar, S.P., Ortiz Almirall, X., Marklevitz, S.A.C., Rudman, S.M., Sibley, P.K. (2023). Cyanotoxins accumulate in Lake St. Clair fish yet their fillets are safe to eat. *Sci. Total. Environ.*, 874, 162381. doi: [10.1016/j.scitotenv.2023.162381](#)
Media coverage: [CBC News](#), [CBC Listen](#), [The Globe and Mail](#), [CBC News](#), [The Weather Network](#)
15. **Shahmohammadloo, R.S.**, Bhavsar, S.P., Ortiz Almirall, X., Marklevitz, S.A.C., Rudman, S.M., Sibley, P.K. (2023). Lake Erie fish safe to eat yet afflicted by algal hepatotoxins. *Sci. Total. Environ.*, 861, 160474. doi: [10.1016/j.scitotenv.2022.160474](#)
Media coverage: [CBC News](#), [CBC Listen](#), [The Globe and Mail](#), [CBC News](#), [The Weather Network](#)
14. Hataley, E.K.†, **Shahmohammadloo, R.S.**, Ortiz Almirall, X., Harrison, A.L., Rochman, C.M., Zou, S., Orihel, D.M. (2022). Experimental evidence from the field that naturally weathered microplastics accumulate cyanobacterial toxins in eutrophic lakes. *Environ. Toxicol. Chem.*, 41(12), 3017-3028. doi: [10.1002/etc.5485](#)
13. **Shahmohammadloo, R.S.**, Febria, C.M., Fraser, E.D.G., Sibley, P.K. (2022). The Sustainable Agriculture Imperative: The need for an Agrosystem Approach to Meet the United Nations Sustainable Development Goals by 2030. *Integr. Environ. Assess. Manag.*, 18(5), 1199-1205. doi: [10.1002/ieam.4558](#)
Media coverage: [The Rockefeller Foundation](#), [Farmtario](#), [U of G News](#)
12. **Shahmohammadloo, R.S.**, Ortiz Almirall, X., Simmons, D.B.D., Bhavsar, S.P., Poirier, D.G., Sibley, P.K. (2022). Fish tissue accumulation and proteomic response to microcystins is species-dependent. *Chemosphere*, 287, 132028. doi: [10.1016/j.chemosphere.2021.132028](#)
11. **Shahmohammadloo, R.S.**, Ortiz Almirall, X., Simmons, D.B.D., Lumsden, J.S., Bhavsar, S.P., Watson-Leung, T., Vander Eyken, A.†, Hankins, G.†, Hubbs, K.†, Konopelko, P.†, Sanarcki, M.†, Strong, D.†, Sibley, P.K. (2021). Cyanotoxins within and outside of *Microcystis aeruginosa* cause adverse effects in Rainbow Trout (*Oncorhynchus mykiss*). *Environ. Sci. Technol.*, 55(15), 10422-10431. doi: [10.1021/acs.est.1c01501](#)
Award: [2022 IFHAB Best Paper Award](#)
10. Guo, Y., O'Brien, A.M., Lins, T.F., **Shahmohammadloo, R.S.**, Ortiz Almirall, X., Rochman, C.M., Sinton, D. (2021). The Effects of Hydrogen Peroxide on Cyanobacterium *Microcystis aeruginosa* in the Presence of Nanoplastics. *ACS ES&T Water*, 1(7), 1596-1607. doi: [10.1021/acsestwater.1c00090](#)
Award: [2021 ACS ES&T Water Best Paper Award](#)
9. **Shahmohammadloo, R.S.** (2020). Mentoring with trust. *Science*, 369(6508), 1270. doi: [10.1126/science.369.6508.1270](#)
8. Anaraki, M.T., **Shahmohammadloo, R.S.**, Sibley, P.K., MacPherson, K.A., Bhavsar, S.P., Simpson, A.J., Ortiz Almirall, X. (2020). Optimization of an MMPB Lemieux Oxidation method for the quantitative analysis of microcystins in fish tissue by LC-QTOF MS. *Sci. Total Environ.*, 737, 140209. doi: [10.1016/j.scitotenv.2020.140209](#)
7. **Shahmohammadloo, R.S.**, Simmons, D.B.D., Sibley, P.K. (2020). Shotgun proteomics analysis reveals sub-lethal effects in *Daphnia magna* exposed to cell-bound microcystins produced by *Microcystis aeruginosa*. *Comp. Biochem. Phys. D.*, 33, 100656. doi: [10.1016/j.cbd.2020.100656](#)
6. **Shahmohammadloo, R.S.**, Ortiz Almirall, X., Bhavsar, S.P., Poirier, D.G., Sibley, P.K. (2020). Assessing the toxicity of cell-bound microcystins on freshwater pelagic and benthic invertebrates. *Ecotox. Environ. Safe.*, 188, 109945. doi: [10.1016/j.ecoenv.2019.109945](#)
5. **Shahmohammadloo, R.S.**, Ortiz Almirall, X., Holeyton, C., Bhavsar, S.P., Poirier, D.G., Sibley, P.K. (2019). Adopting a culture technique to produce and sustain high concentrations of microcystins by *Microcystis aeruginosa* in laboratory. *MethodsX*, 6, 2521-2535. doi: [10.1016/j.mex.2019.10.024](#)
4. Gene, S.M.†, **Shahmohammadloo, R.S.**, Ortiz, X., Prosser, R.S. (2019). Effect of *Microcystis aeruginosa*-associated microcystin-LR on the survival of 2 life stages of freshwater mussel (*Lampsilis siliquoidea*). *Environ. Toxicol. Chem.*, 38(10), 2137-2144. doi: [10.1002/etc.4527](#)

3. **Shahmohammadloo, R.S.**, Lissemore, L., Prosser, R.S., Sibley, P.K. (2017). Comparative evaluation of four biosolids formulations on the effects of triclosan on plant-arbuscular mycorrhizal fungal interactions in three crop species. *Sci. Total. Environ.*, 583, 292-299. doi: [10.1016/j.scitotenv.2017.01.067](https://doi.org/10.1016/j.scitotenv.2017.01.067)
2. **Shahmohammadloo, R.S.**, Lissemore, L., Prosser, R.S., Sibley, P.K. (2016). Evaluating the effects of triclosan on three field crops grown in four formulations of biosolids. *Environ. Toxicol. Chem.*, 36(7), 1896-1908. doi: [10.1002/etc.3712](https://doi.org/10.1002/etc.3712)
1. Prosser, R.S., Lissemore, L., **Shahmohammadloo, R.S.**, Sibley, P.K. (2015). Effect of biosolids-derived triclosan and triclocarban on the colonization of plant roots by arbuscular mycorrhizal fungi. *Sci. Total. Environ.*, 508, 427-434. doi: [10.1016/j.scitotenv.2014.12.014](https://doi.org/10.1016/j.scitotenv.2014.12.014)

Manuscripts in Preparation

- P1. Rudman, S.M., Faber-Hammond, J., **Shahmohammadloo, R.S.**, Sherman, R.E., MacMillan, H., Jeyasingh, P.D., Schmidt, P. (2025). Predictable rapid evolution of temporal trade-offs in life history and ecological stoichiometry.

AWARDS

Grants & Fellowships Awarded

(Total: \$454,000 CAD, \$5,000 USD)

| | | |
|-----------|---|---------------|
| 2022-2025 | Liber Ero Postdoctoral Fellowship | \$190,000 CAD |
| 2022-2024 | NSERC Postdoctoral Fellowship* | \$90,000 CAD |
| 2022 | NSF ADVANCE ACCESS+ DEI Mini-Grant | \$2,000 USD |
| 2022 | Mitacs Globalink Research Award | \$6,000 CAD |
| 2020 | IAGLR Scholarship | \$2,000 USD |
| 2018-2020 | Ontario Graduate Scholarship (×2) | \$30,000 CAD |
| 2016-2020 | NSERC CREATE Doctoral Scholarship | \$84,000 CAD |
| 2018 | OFAH Fisheries Research Grant | \$4,000 CAD |
| 2016-2018 | University Graduate Scholarship (×3) | \$9,000 CAD |
| 2016-2018 | SETAC North America Student Travel Grant (×2) | \$1,000 USD |
| 2016 | Graduate Excellence Entrance Scholarship | \$30,000 CAD |
| 2015 | Dean's Scholarship | \$500 CAD |
| 2014 | OSCIA Research Scholarship | \$1,000 CAD |
| 2011 | URA Award in Department of Chemistry | \$6,500 CAD |

*Ranked 'Outstanding' (above 80th percentile) in all NSERC selection criteria (i.e., research ability and potential, communication, interpersonal, and leadership abilities, and overall relative standing out of 74 applications in Selection Committee for Evolution and Ecology)

Grants Pending

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| 2024- | USDA NIFA AFRI A1112 (Pest and Beneficial Species in Agricultural Production Systems) – “Field Evolved-and-Resequencing Experiments to Improve Identification and Management of Insecticide Resistance Evolution” | \$630,000 USD |
| 2024- | OMAFRA Alliance Tier 1 Research Program – “Field experiments and genomic tools to improve identification and management of insecticide resistance evolution in <i>Drosophila suzukii</i> (Spotted Wing <i>Drosophila</i>)” | \$240,000 CAD |
| 2024- | Niagara Peninsula Fruit and Vegetable Growers Association Small Grant – “Insecticide Resistance Management in Spotted Wing <i>Drosophila</i> ” | \$10,000 CAD |

Honors & Prizes

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| 2022 | IFHAB Best Student Paper Award | \$750 CAD |
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| 2021 | ACS ES&T Water Best Paper Award | |
| 2020 | Rockefeller Foundation Food System Vision Prize (Semi-Finalist) [†] | |
| 2016 | SETAC North America Best Presenter Award (2 nd Place) | \$500 USD |
| 2013 | André Auger Citizenship Award | |
| 2011 | International Film Contest Winner, Tony Blair Institute for Global Change | |

[†]Co-PI. Selected as one of 75 semi-finalists from 1,300 applicants worldwide

TEACHING EXPERIENCE

Mentorship (* authored publication during mentorship | † research presented at a conference)

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| 2024– | Brynne Ruotsalainen | HHMI RAISE paid undergraduate researcher (WSU) |
| 2024– | Cristian Zetina | Paid undergraduate researcher (WSU) |
| 2024– | Amir Gabidulin*† | Postbaccalaureate researcher (WSU) |
| 2023– | Timur Gabidulin | Paid undergraduate science illustrator (WSU) |
| 2023–2024 | Lily Jonas | Undergraduate research for credit program (WSU) |
| 2023–2024 | Ellie Andrews*† | Paid undergraduate researcher (WSU) |
| 2023–2024 | Kayley Breslin | Undergraduate honors thesis (U. Guelph) |
| 2022–2023 | William Smith† | Undergraduate co-op term (U. Guelph) |
| 2021–2023 | Megan Braun† | Undergraduate honors thesis & lab volunteer (U. Guelph) |
| 2021–2022 | Julia Bourdeau† | Lab volunteer (U. Guelph) |
| 2021–2022 | Mathew Mervyn† | Undergraduate honors thesis & lab volunteer (U. Guelph) |
| 2019–2020 | Gabrielle Hankins*† | Undergraduate research for credit program (U. Guelph) |
| 2019–2020 | Kate Hubbs*† | Undergraduate research for credit program (U. Guelph) |
| 2019–2020 | Polina Konopelko*† | Undergraduate research for credit program (U. Guelph) |
| 2019–2020 | Michael Sanarcki*† | Undergraduate research for credit program (U. Guelph) |
| 2019–2020 | Damn Strong*† | Undergraduate research for credit program (U. Guelph) |
| 2019–2020 | Angela Vander Eyken*† | Undergraduate research for credit program (U. Guelph) |
| 2018–2019 | Samantha Gene*† | Undergraduate volunteer (U. Guelph) |

Courses Taught

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| 2018–2019 | Teaching Assistant | Capstone Project in Environmental Sciences (U. Guelph) Evaluation: 4.8/5.0 (<i>n</i> = 88 students) |
| 2017–2018 | Teaching Assistant | Capstone Project in Environmental Sciences (U. Guelph) Evaluation: 4.7/5.0 (<i>n</i> = 70 students) |
| 2016 | Teaching Assistant | Pesticides and the Environment (U. Guelph) Evaluation: 4.5/5.0 (<i>n</i> = 120 students) |
| 2015–2016 | Teacher | Youth Empowerment STEM Course, grades 7 & 8 (Westwood Public School) Evaluation: 4.2/5.0 (<i>n</i> = 43 students) |
| 2013–2014 | Teacher | Youth Empowerment STEM Course, grades 7 & 8 (Gateway Drive Public School) Evaluation: 4.0/5.0 (<i>n</i> = 45 students) |

Guest Lectures

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| 2024 | Evolution of pesticide resistance | Pesticides and the Environment ENVS3020 (U. Guelph) |
| 2024 | Health risks of algae blooms | Human Health and the Environment ENVS6882 (U. Guelph) |
| 2021 | Microcystin toxicology | Multiple Stressors in the Great Lakes ENVS6470 (U. Guelph) |

Professional Training

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| 2019 | Graduate Research and Project Management | Certificate course (U. Guelph) |
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2018 University Teaching: Theory and Practice Credit course (U. Guelph)

INVITED TALKS

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|------|---|---------------|
| 2022 | Department of Biology, University of Waterloo | Canada |
| 2022 | School of Biological Sciences, Washington State University | United States |
| 2022 | Department of Biology, University of New Brunswick Saint John | Canada |
| 2022 | Department of Integrative Biology, University of Windsor | Canada |
| 2022 | Department of Biology, Mount Allison University, Canada | Canada |
| 2021 | Lake Erie Management Fisheries Zone 19, Canada | Canada |
| 2021 | Lake Erie Partnership Working Group, Canada | Canada |
| 2021 | Ontario Ministry of Natural Resources and Forestry, Canada | Canada |
| 2021 | Department of Biology, Queen's University, Canada | Canada |
| 2020 | Rockefeller Foundation and EAT Foundation, Norway | Norway |
| 2018 | Ontario Federation of Anglers and Hunters, Canada | Canada |

SERVICE TO PROFESSION & SOCIETY

Contributions to Diversity, Equity, and Inclusion

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| 2021– | Co-Chair , DEI Committee (International Association for Great Lakes Research) Successfully funded an NSF ADVANCE ACCESS+ DEI Mini-Grant (\$2,000) to create two new DEI student scholarships (\$1,000 ea.) to support underrepresented minority/equity-seeking groups, awarded annually at the IAGLR conference |
| 2022– | Member , DEI Committee (Dept. Integrative Biology, U. Guelph) Co-developed a departmental Terms of Reference document to systematize the committee's operations, expectations, and goals upon appointment each year Revised DEI guidelines for hiring, tenure and promotion in the department Advocated to the department on behalf of underrepresented minority/equity-seeking students to financially support field research experiences (e.g., FREED Program) Revising departmental URA/USRA hiring guidelines, encouraging faculty to incorporate DEI principles into student recruitment |
| 2012–2016 | Founder , Youth Empowerment STEM Course (Upper Grand District School Board) Developed and taught a weekly course, offered annually, in two under-resourced primary schools (Gateway Drive Public School and Westwood Public School, ON, Canada) using STEM course materials from the Junior Youth Empowerment Program, which engaged 103 seventh and eighth grade students from diverse ethnic and socioeconomic backgrounds Awarded U. Guelph's André Auger Citizenship Award (2013) for service to society |
| 2007–2016 | Co-Founder , Junior Youth Empowerment Program (Guelph, ON, Canada) Co-founded a neighbourhood-based program engaging 11-15 year-olds from diverse ethnic and socioeconomic backgrounds using STEM course materials designed to help to develop their capacities to: read, write, and speak; articulate complex thoughts; serve their communities; and reflect on their patterns of thought and action |
| 2017– | Professional Training |
| 2023 | Training workshops on DEI, anti-oppression, microaggression, & anti-bias (U. Guelph) |
| 2022 | Community & Equity Certificate Program (WSU) |
| 2022 | Principles of Belonging: Anti-Oppression & Anti-Racism Training (U. Guelph) |
| 2017 | Diversity and Human Rights Faculty Recruitment Training (U. Guelph) |

Departmental

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| 2022– | Member , DEI Committee | (Dept. Integrative Biology, U. Guelph) |
| 2018–2020 | Member , Undergraduate Curriculum Committee | (School of Env. Sciences, U. Guelph) |
| 2016–2020 | Member , Communications and Outreach Committee | (School of Env. Sciences, U. Guelph) |
| 2016–2020 | Organizing Committee , Kenneth Hammond Lecture | (School of Env. Sciences, U. Guelph) |
| 2017–2018 | Search Committee , Assistant Professor in Soil Science | (School of Env. Sciences, U. Guelph) |

External

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| 2017– | Founding Member | (Interdisciplinary Freshwater Harmful Algal Blooms Workshop) |
| 2021–2024 | Board of Directors | (International Association for Great Lakes Research) |

Ad-hoc Reviewer (number of papers reviewed per journal)

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| 2017– | Aquatic Toxicology (4), Bioinformatics Advances (1), Biology (1), Biology Letters (1), Chemosphere (6), Comprehensive Reviews in Food Science and Food Safety (1), Ecological Informatics (1), Ecology and Evolution (1), Ecotoxicology and Environmental Safety (22), Environmental Chemistry and Ecotoxicology (1), Environmental Pollution (5), Environmental Quality Management (1), Environmental Science and Pollution Research (7), Environmental Science & Technology (1), Environmental Toxicology and Chemistry (2), Freshwater Biology (1), Frontiers in Microbiology (1), Harmful Algae (4), Journal of Environmental Management (3), Journal of Hazardous Materials (6), Journal of Industrial and Engineering Chemistry (1), Marine and Freshwater Behaviour Physiology (1), Marine Pollution Bulletin (2), Neurotoxicity Research (1), Pest Management Science (1), Reviews of Environmental Contamination and Toxicology (1), Science of the Total Environment (36), Toxicon (4), Water Research (1) |
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Ad-hoc Grant Reviewer

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| 2021– | BiodivERsA (1), French National Research Agency (1), Water JPI (1) |
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CONFERENCE ACTIVITY/PARTICIPATION**Conferences/Symposia Organized**

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| 2024 | 6 th IFHAB Workshop, 100-150 participants | (ON, Canada) |
| 2023 | 5 th IFHAB Workshop, 100-150 participants | (QC, Canada) |
| 2022 | 12 th International Conference on Toxic Cyanobacteria, 300-400 participants | (OH, USA) |
| 2021 | IFHAB Webinar: The Future of Freshwater HABs Research, 200 participants | (QC, Canada) |
| 2020 | 4 th IFHAB Workshop – <i>cancelled due to Covid-19</i> | |
| 2019 | 3 rd IFHAB Workshop, 100-150 participants | (ON, Canada) |
| 2018 | 2 nd IFHAB Workshop, 100-150 participants | (ON, Canada) |
| 2018 | Kenneth Hammond Lecture & Spring Sustainability Symposium, 90 participants | (U. Guelph) |
| 2017 | 1 st IFHAB Workshop, 100 participants | (ON, Canada) |
| 2017 | Kenneth Hammond Lecture & Spring Sustainability Symposium, 75 participants | (U. Guelph) |

Panels Organized

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| 2022 | Current and future issues in HAB detection, monitoring, mitigation and management 12 th International Conference on Toxic Cyanobacteria | (OH, USA) |
| 2017 | Harmful algal bloom toxins in biota of the Great Lakes Canadian Ecotoxicity Workshop | (ON, Canada) |
| 2017 | The Science and Policy of Multiple Stressors and Cumulative Effects in the Great Lakes 60 th IAGLR Conference | (MI, USA) |

Invited Panelist

- 2022 Experts in the hot seat: Greatest challenges facing the management and reduction of HABs
12th International Conference on Toxic Cyanobacteria (OH, USA)
- 2020 The state of Great Lakes research in the face of COVID-19
IAGLR 63rd Conference (MB, Canada)

Conference Presentations (* presenting author | Total: 29 presentations)

- Shahmohamadloo, R.S.***, Fryxell, J.M., Rudman, S.M. (2024) Transgenerational epigenetic inheritance increases trait variation but is not adaptive. 3rd Joint Congress on Evolutionary Biology. Montréal, QC, Canada. International Conference. Oral Presentation (PDF work).
- Shahmohamadloo, R.S.***, Fryxell, J.M., Rudman, S.M. (2024) Transgenerational epigenetic inheritance increases trait variation but is not adaptive. CSEE 2024. Vancouver, BC, Canada. National Conference. Oral Presentation (PDF work).
- Rudman, S.M.*, Greenblum, S.I., **Shahmohamadloo, R.S.**, Petrov, D.A., Schmidt, P. (2023) The eco-evolutionary consequences of rapid adaptation. EVO-WIBO 2023. Port Townsend, WA, USA. Regional Conference. Oral Presentation (PDF work).
- Shahmohamadloo, R.S.***, Ortiz Almirall, X., Simmons, D.B.D., Bhavsar, S.P., Rudman, S.M., Fryxell, J.M., and Sibley, P.K. (2022) Harmful algal blooms of the cyanobacterium *Microcystis* cause deleterious effects in aquatic organisms: Implications for freshwater biodiversity conservation. 12th International Conference on Toxic Cyanobacteria, Toledo, OH, USA. International Conference. Poster Presentation (PDF work).
- Shahmohamadloo, R.S.**, Ortiz Almirall, X., Simmons, D.B.D., Bhavsar, S.P., and Sibley, P.K.* (2022) Harmful algal blooms of the cyanobacterium *Microcystis* cause deleterious effects in aquatic organisms: Implications for freshwater biodiversity conservation. JASM, Grand Rapids, MI, USA. International Conference. Oral Presentation (PDF work).
- Shahmohamadloo, R.S.***, Rudman, S.M., and Fryxell, J.M. (2021) From genes to populations: intraspecific genetic variation in the sublethal effects of harmful algae. SETAC North America 42nd Annual Meeting, Portland, OR, USA. International Conference. Oral Presentation (PDF work).
- Shahmohamadloo, R.S.***, Rudman, S.M., and Fryxell, J.M. (2021) Intraspecific genetic variation in the sublethal effects of harmful algae. Canadian Society of Ecology and Evolution, University of British Columbia, BC, Canada. National Conference. Oral Presentation (PDF work).
- Sibley, P.K.*, **Shahmohamadloo, R.S.**, Knight, A., Simmons, D.B.D., Bhavsar, S.P., Ortiz Almirall, X., Rudman, S.M., Fryxell, J.M., Holeton, C., and Poirier, D.G. (2021) The ecotoxicology of microcystins in freshwater environments: prospects for future research. Interdisciplinary Freshwater Harmful Algal Blooms Webinar: The Future of Freshwater Harmful Algal Blooms Research, University of Montréal, QC, Canada. International Conference. Oral Presentation (PDF work).
- Shahmohamadloo, R.S.***, Ortiz Almirall, X., Simmons, D.B.D., Lumsden, J.S., Bhavsar, S.P., Watson-Leung, T., Vander Eyken, A., Hankins, G., Hubbs, K., Konopolko, P., Sanarcki, M., Strong, D., and Sibley, P.K. (2021) Microcystins in both intracellular and extracellular states can cause disease-related effects in Rainbow Trout (*Oncorhynchus mykiss*). IAGLR 64th Conference (Virtual), Michigan Technological University, MI, USA. International Conference. Oral Presentation (PhD work).
- Shahmohamadloo, R.S.***, Ortiz Almirall, X., Simmons, D.B.D., Lumsden, J.S., Bhavsar, S.P., Watson-Leung, T., Vander Eyken, A., Hankins, G., Hubbs, K., Konopolko, P., Sanarcki, M., Strong, D., and Sibley, P.K. (2020) Distinguishing the toxicokinetics between intracellular and extracellular microcystin exposure to Rainbow Trout (*Oncorhynchus mykiss*). SETAC North America 41st Annual Meeting, SciCon2, Waco, TX, USA. International Conference. Oral Presentation (PhD work).
- Hataley, E.*, Ortiz Almirall, X., Rochman, C.M., **Shahmohamadloo, R.S.**, Orihel, D.M. (2020) Sorption of Microcystins to Microplastics in Freshwater Ecosystems. SETAC North America 41st Annual Meeting, SciCon2, Waco, TX, USA. International Conference. Oral Presentation (PhD work).
- Shahmohamadloo, R.S.***, Simmons, D.B.D., and Sibley, P.K. (2020) Shotgun proteomics analysis reveals sub-lethal effects in *Daphnia magna* exposed to cell-bound microcystins produced by *Microcystis aeruginosa*. IAGLR 63rd Conference (Virtual), Winnipeg, MB, Canada. International Conference. Poster Presentation (PhD work).

- Knight, A.*, Ortiz Almirall, X., Bhavsar, S.P., **Shahmohammadloo, R.S.**, Sibley, P.K. (2020) Transgenerational development of microcystin toxin tolerance in *Daphnia magna*. IAGLR 63rd Conference (Virtual), Winnipeg, MB, Canada. International Conference. Oral Presentation (PhD work).
- Hataley, E.*, Ortiz Almirall, X., Rochman, C.M., **Shahmohammadloo, R.S.**, Orihel, D.M. (2020) Assessing the sorption of the cyanotoxins microcystins to microplastics. Platform presentation. The LEADERS and PEOPLE 2020 Virtual Symposium: Water Management in a Changing Climate. Regional Conference. Oral Presentation (PhD Work).
- Sibley, P.K.*, **Shahmohammadloo, R.S.** (2020) Building Resiliency in Agricultural Landscapes: A Conceptual Framework Focused on Risk Management. SETAC Europe 28th Annual Meeting, Dublin, IRE, Ireland. International Conference. Poster Presentation (PhD work).
- Gene, S.M.*, **Shahmohammadloo, R.S.**, Ortiz Almirall, X., Prosser, R.S. (2019) Effect of *Microcystis aeruginosa*-associated microcystin-LR on the survival of 2 life stages of freshwater mussel (*Lampsilis siliquoidea*). Canadian Freshwater Mollusc Research Meeting, Burlington, ON, Canada. Regional Conference. Oral Presentation (PhD work).
- Shahmohammadloo, R.S.***, Ortiz Almirall, X., Holeyton, C., Bhavsar, S.P., Poirier, D.G., Sibley, P.K. (2019) Assessing the differences in uptake and depuration potential of intra- and extracellular microcystins in *Salvelinus namaycush* and *Oncorhynchus mykiss*. SETAC North America 40th Annual Meeting, Toronto, ON, Canada. International Conference. Poster Presentation (PhD work).
- Shahmohammadloo, R.S.***, Ortiz Almirall, X., Holeyton, C., Bhavsar, S.P., Poirier, D.G., Sibley, P.K. (2019) An efficient and affordable laboratory method to produce and sustain high concentrations of microcystins by *Microcystis aeruginosa*. SETAC North America 40th Annual Meeting, Toronto, ON, Canada. International Conference. Poster Presentation (PhD work).
- Hataley, E.*, Ortiz Almirall, X., Rochman, C.M., **Shahmohammadloo, R.S.**, Orihel, D.M. (2019) Can microplastics act as a medium to concentrate waterborne microcystin? SETAC North America 40th Annual Meeting, Toronto, ON, Canada. International Conference. Poster Presentation (PhD work).
- Hataley, E.*, Ortiz Almirall, X., Rochman, C.M., **Shahmohammadloo, R.S.**, Orihel, D.M. (2019) Can microplastics act as a medium to concentrate waterborne microcystin? Interdisciplinary Freshwater Harmful Algal Blooms Workshop 3rd Annual Meeting, Toronto, ON, Canada. International Conference. Poster Presentation (PhD work).
- Shahmohammadloo, R.S.***, Poirier, D.G., Ortiz Almirall, X., Simmons, D.B.D., Stevack, K., Bhavsar, S.P., Sibley, P.K. (2018) *Microcystis aeruginosa* adversely impacts *Daphnia* spp.: Posing risks to food webs of the Great Lakes. SETAC North America 39th Annual Meeting, Sacramento, CA, USA. International Conference. Poster Presentation (PhD work).
- Shahmohammadloo, R.S.***, Poirier, D.G., Ortiz Almirall, X., Holeyton, C., Bhavsar, S.P., Sibley, P.K. (2018) *Microcystis aeruginosa* adversely impacts *Daphnia* spp.: Posing risks to food webs of the Great Lakes. IAGLR 61st Conference, Toronto, ON, Canada. International Conference. Oral Presentation (PhD work).
- Karakolis, E.G.*, Bguyen, B., **Shahmohammadloo, R.S.**, Sibley, P.K., Sinton, D. (2018) Microplastics can adsorb microcystins. Interdisciplinary Freshwater Harmful Algal Blooms Workshop 2nd Annual Meeting, Toronto, ON, Canada. International Conference. Oral Presentation (PhD work).
- Simmons, D.B.D.*, **Shahmohammadloo, R.S.**, Tabatabaie Anaraki, M., Chong-Kit, R., Poirier, D., Ortiz Almirall, X., Jobst, K., Reiner, E., Simpson, A., Simpson, M. (2018) Proteome responses of microcystin-exposed *Daphnia magna*. Interdisciplinary Freshwater Harmful Algal Blooms Workshop 2nd Annual Meeting, Toronto, ON, Canada. International Conference. Oral Presentation (PhD work).
- Simmons, D.B.D.*, **Shahmohammadloo, R.S.**, Tabatabaie Anaraki, M., Chong-Kit, R., Poirier, D.G., Ortiz Almirall, X., Jobst, K., Reiner, E., Simpson, A., Simpson, M. (2017) Proteome responses of microcystin-exposed *Daphnia magna*. Canadian Ecotoxicity Workshop, Guelph, ON, Canada. Regional Conference. Oral Presentation (PhD work).
- Shahmohammadloo, R.S.*** (2017) A resourceful approach to managing sewage sludge: An effects-based look at the micro-constituents in land-applied biosolids. FarmSmart Conference: Municipal Biosolids Beneficial Use Education Day, Milton, ON, Canada. Regional Conference. Oral Presentation (MSc work).

Shahmohamadloo, R.S.*, Sibley, P.K. (2016) Evaluating the effects of triclosan on field crops and arbuscular mycorrhizal fungi in biosolids-amended soil. Water Environment Association of Ontario Annual Residuals and Biosolids Conference, Calgary, AB, Canada. Regional Conference. Oral Presentation (MSc work).

Shahmohamadloo, R.S.*, Sibley, P.K. (2015) Evaluating the effects of triclosan on field crops and arbuscular mycorrhizal fungi in biosolids-amended soil. SETAC North America 36th Annual Meeting, Salt Lake City, UT, USA. International Conference. Oral Presentation (MSc work).

Shahmohamadloo, R.S.*, Sibley, P.K. (2014) Evaluating the effects of triclosan on field crops and arbuscular mycorrhizal fungi in biosolids-amended soil. Canadian Ecotoxicity Workshop 41st Annual Meeting, Ottawa, ON, Canada. National Conference. Oral Presentation (MSc work).

LANGUAGES

English (Native proficiency), French (Limited working proficiency), Persian (Limited working proficiency)

PROFESSIONAL MEMBERSHIPS

Society for the Study of Evolution (SSE), Canadian Society for Ecology and Evolution (CSEE), International Association for Great Lakes Research (IAGLR), Society of Environmental Toxicology and Chemistry for North America (SETAC NA), Laurentian Chapter for the Society of Environmental Toxicology and Chemistry (L-SETAC)