# René S. Shahmohamadloo

School of Biological Sciences, Washington State University

Last updated: September 5, 2024 Liber Ero Postdoctoral Fellow & NSERC Postdoctoral Fellow

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#### 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

Postdoctoral Researcher 2021-2022 Department of Integrative Biology, University of Guelph, ON, Canada Supervisor: John Fryxell

## **EDUCATION**

2021	<b>Ph.D. Environmental Toxicology</b> 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>B.Sc. Hon. Toxicology</b> College of Physical and Engineering Sciences, University of Guelph, ON, Canada

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

#### Manuscripts in Review and Revision

- 23. Shahmohamadloo, R.S., Gabidulin, A.R.†, Andrews, E.R.†, Fryxell, J.M., Rudman, S.M. (2024). A test of the contribution of microbiome plasticity to host phenotypic plasticity in *Daphnia*. doi: 10.1101/2024.08.14.607994 (In review with *Molecular Ecology*)
- 22. Tissier, M.L., Shahmohamadloo, R.S., Guzman, L.M. (2024). Pesticide risk assessment in a changing world. (In review with *Trends in Ecology and Evolution*)
- 21. Schiller, L., Davis, A., Lamb, C., Menzies, A., Shahmohamadloo, R., Tissier, M., Vanderwolf, K. (2024) Hopeful insights from wildlife recoveries in Canada. (In revision with FACETS)
- 20. Shahmohamadloo, R.S., Fryxell, J.M., Rudman, S.M. (2024). Transgenerational epigenetic inheritance increases trait variation but is not adaptive. doi: 10.1101/2024.04.15.589575 (In revision with Evolution)
- 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. doi: 10.1101/2023.06.06.543817 (In review with Scientific Reports)

#### Peer-reviewed

- 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 Media coverage: The CNRS, USC Dornsife
- 17. Shahmohamadloo, 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. **Shahmohamadloo, 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: The Globe and Mail, CBC News, The Weather Network
- 15. **Shahmohamadloo, 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: The Globe and Mail, CBC News, The Weather Network
- 14. Hataley, E.K.†, **Shahmohamadloo, 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. **Shahmohamadloo, 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. **Shahmohamadloo, 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. 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.†, 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
- 10. Guo, Y., O'Brien, A.M., Lins, T.F., **Shahmohamadloo, 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
- 9. **Shahmohamadloo, R.S**. (2020). Mentoring with trust. *Science*, 369(6508), 1270. doi: 10.1126/science.369.6508.1270
- 8. Anaraki, M.T., **Shahmohamadloo, 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. **Shahmohamadloo, R.S.**, Simmons, D.B.D., Sibley, P.K. (2020). Shotgun proteomics analysis reveals sublethal 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
- Shahmohamadloo, 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. **Shahmohamadloo, R.S.,** Ortiz Almirall, X., Holeton, 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.†, **Shahmohamadloo, 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. **Shahmohamadloo, 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
- Shahmohamadloo, 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

1. Prosser, R.S., Lissemore, L., **Shahmohamadloo, 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

# Manuscripts in Preparation

P1. Coming soon.

## **AWARDS**

Grants & Fellowships		(Total: \$454,000 CAD, \$5,000 USD)	
2022 2025	Libor Erro Dostdostoral Followship	\$100,000,CAD	

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 80<sup>th</sup> 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)

# **Honors & Prizes**

2022	IFHAB Best Student Paper Award	\$750 CAD
2020	Rockefeller Foundation Food System Vision Prize (Semi-Finalist)†	
2016	SETAC North America Best Presenter Award (2 <sup>nd</sup> Place)	\$500 USD
2013	André Auger Citizenship Award	
2011	International Film Contest Winner, Tony Blair Institute for Global	Change
	<sup>†</sup> Co-PI. Selected as one of 75 semi-finalists from 1,300 applicants w	orldwide

## **TEACHING EXPERIENCE**

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

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	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**

2018–2019	Teaching 2	Assistant	Capstone Project in Environmental Sciences (U. Guelph) Evaluation: $4.8/5.0$ ( $n = 88$ students)
2017–2018	Teaching .	Assistant	Capstone Project in Environmental Sciences (U. Guelph)
2016	Teaching .	Assistant	Evaluation: $4.7/5.0$ ( $n = 70$ students) Pesticides and the Environment (U. Guelph)
2015–2016	Teacher	Youth E	Evaluation: $4.5/5.0$ ( $n = 120$ students) mpowerment STEM Course, grades 7 & 8 (Westwood Public School)
2013–2014	Teacher	Youth Empo	Evaluation: $4.2/5.0$ ( $n = 43$ students) werment STEM Course, grades 7 & 8 (Gateway Drive Public School) Evaluation: $4.0/5.0$ ( $n = 45$ students)

# **Guest Lectures**

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**

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

# **INVITED TALKS**

2022	Department of Biological Sciences, University of Memphis	United States
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

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**

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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**

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

2017—	Founding Member	(Interdisciplinary Freshwater Harm	ful Algal Blooms Workshop)
2021-2024	<b>Board of Directors</b>	(International Association	on for Great Lakes Research)

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

2017-

Aquatic Toxicology (4), Biology (1), Biology Letters (1), Chemosphere (5), Comprehensive Reviews in Food Science and Food Safety (1), Ecology and Evolution (1), Ecotoxicology and Environmental Safety (19), Environmental Pollution (5), Environmental Science and Pollution Research (7), Environmental Toxicology and Chemistry (2), Freshwater Biology (1), Frontiers in Microbiology (1), Harmful Algae (4), Journal of Environmental Management (1), Journal of Hazardous Materials (5), Journal of Industrial and Engineering Chemistry (1), Marine and Freshwater Behaviour Physiology (1), Marine Pollution Bulletin (1), Neurotoxicity Research

- (1), Pest Management Science (1), Reviews of Environmental Contamination and Toxicology
- (1), Science of the Total Environment (32), Toxicon (3), Toxins (3), Water Research (1)

#### Ad-hoc Grant Reviewer

2021 – BiodivERsA (1), Water JPI (1)

### CONFERENCE ACTIVITY/PARTICIPATION

# Conferences/Symposia Organized

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

## **Panels Organized**

2022	Eurrent and future issues in HAB detection, monitoring, mitigation and management	
	12 <sup>th</sup> 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
	60th IAGLR Conference	(MI, USA)

# **Invited Panelist**

2022	22 Experts in the hot seat: Greatest challenges facing the management and reducti		
	12 <sup>th</sup> International Conference on Toxic Cyanobacteria	(OH, USA)	
2020	The state of Great Lakes research in the face of COVID-19		
	IAGLR 63 <sup>rd</sup> 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. 3<sup>rd</sup> 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 ecoevolutionary 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. 12<sup>th</sup> 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 42<sup>nd</sup> 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., Konopelko, 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., Konopelko, 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 41<sup>st</sup> 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 41<sup>st</sup> 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 63<sup>rd</sup> Conference (Virtual), Winnipeg, MB, Canada. International Conference. Poster Presentation (PhD work).
- Knight, A.\*, Ortiz Almirall, X., Bhavsar, S.P., **Shahmohamadloo, R.S.**, Sibley, P.K. (2020) Transgenerational development of microcystin toxin tolerance in Daphnia magna. IAGLR 63<sup>rd</sup> Conference (Virtual), Winnipeg, MB, Canada. International Conference. Oral Presentation (PhD work).
- Hataley, E.\*, Ortiz Almirall, X., Rochman, C.M., **Shahmohamadloo, 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.\*, **Shahmohamadloo**, R.S. (2020) Building Resiliency in Agricultural Landscapes: A Conceptual Framework Focused on Risk Management. SETAC Europe 28<sup>th</sup> Annual Meeting, Dublin, LEN, Ireland. International Conference. Poster Presentation (PhD work).
- Gene, S.M.\*, **Shahmohamadloo, 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).
- Shahmohamadloo, R.S.\*, Ortiz Almirall, X., Holeton, 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 40<sup>th</sup> Annual Meeting, Toronto, ON, Canada. International Conference. Poster Presentation (PhD work).
- **Shahmohamadloo, R.S.\***, Ortiz Almirall, X., Holeton, 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 40<sup>th</sup> Annual Meeting, Toronto, ON, Canada. International Conference. Poster Presentation (PhD work).

- Hataley, E.\*, Ortiz Almirall, X., Rochman, C.M., **Shahmohamadloo, R.S.**, Orihel, D.M. (2019) Can microplastics act as a medium to concentrate waterborne microcystin? SETAC North America 40<sup>th</sup> Annual Meeting, Toronto, ON, Canada. International Conference. Poster Presentation (PhD work).
- Hataley, E.\*, Ortiz Almirall, X., Rochman, C.M., **Shahmohamadloo, R.S.**, Orihel, D.M. (2019) Can microplastics act as a medium to concentrate waterborne microcystin? Interdisciplinary Freshwater Harmful Algal Blooms Workshop 3<sup>rd</sup> Annual Meeting, Toronto, ON, Canada. International Conference. Poster Presentation (PhD work).
- Shahmohamadloo, 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 39<sup>th</sup> Annual Meeting, Sacramento, CA, USA. International Conference. Poster Presentation (PhD work).
- Shahmohamadloo, R.S.\*, Poirier, D.G., Ortiz Almirall, X., Holeton, 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., **Shahmohamadloo, R.S.**, Sibley, P.K., Sinton, D. (2018) Microplastics can adsorb microcystins. Interdisciplinary Freshwater Harmful Algal Blooms Workshop 2<sup>nd</sup> Annual Meeting, Toronto, ON, Canada. International Conference. Oral Presentation (PhD work).
- Simmons, D.B.D.\*, **Shahmohamadloo, 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 2<sup>nd</sup> Annual Meeting, Toronto, ON, Canada. International Conference. Oral Presentation (PhD work).
- Simmons, D.B.D.\*, **Shahmohamadloo, R.S.**, Tabatabaei 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).
- **Shahmohamadloo, 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 36<sup>th</sup> 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 41<sup>st</sup> 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)