

Garland Xie

Urban Ecologist

Curriculum Vitae

August 2019

📍 Department of Biology,
Saint Mary's University, B3H 2N8, Canada
🏠 garlandxie.netlify.com
☎ +1 647 330 8154
✉ garland.xie@smu.ca
🐦 @garlandxie
🌐 garlandxie
🌐 garlandxie

Education

2017 Honours Bachelor of Science University of Toronto
2019 Master of Applied Science Saint Mary's University

Publications

1. Xie, G, JT Lundholm, and J Scott MacIvor (2018). Phylogenetic diversity and plant trait composition predict multiple ecosystem functions in green roofs. *Science of The Total Environment* **628-629**, 1017–1026.
2. MacIvor, JS, N Sookhan, CA Arnillas, A Bhatt, S Das, SLE Yasui, G Xie, and MW Cadotte (2018). Manipulating plant phylogenetic diversity for green roof ecosystem service delivery. *Evolutionary Applications* **11**(10), 2014–2024.

Grants and Fellowships

2018-2019	Nova Scotia Graduate Scholarship (Renewal)	\$ 10,000
2018	Clean Foundation Scholarship	\$ 2,000
2017-2018	NSERC CGS-M Alexander Graham Bell Canada Graduate Scholarship	\$ 17,500
2017	Nova Scotia Graduate Scholarship	\$ 2,500
2017	TD Undergraduate Research Opportunity Scholarship	\$ 5,000

Honours and awards

2018	3MT Competition (Runner-Up)	\$ 500
2017	ESA Real Brown Travel Award	\$ 75
2012	DAREarts Leadership Award	\$ 500

Conference Presentations

Invited Talks

- MacIvor JS, Xie G. 2017. Functional and phylogenetic filtering of an urban wild bee community. Protecting Pollinators in Urban Landscapes Conference. Traverse City, MI, USA.
- Lundholm JT, Heim A, Williams N, Xie G, MacIvor JS. 2017. Engineering improved ecosystem function using plant traits and environmental heterogeneity. INTERCOL Beijing. Beijing, China

Contributed Talks

- Xie G, MacIvor JS, Carscadden K, Sookhan N, Cadotte MW. 2017. Functional and phylogenetic structure of urban wild bee communities. 102th Meeting of the Ecological Society of America. Portland, OR, USA
- MacIvor JS, Arnillas CA, Sookhan N, Xie G, Cadotte MW. 2017. Phylogenetic diversity and the functioning of green roofs. INTERCOL Beijing. Beijing, China
- MacIvor JS, Xie G, Carscadden K, Sookhan N. 2017. Functional and phylogenetic diversity – but not species richness - increases with urbanization in a wild bee community. Ecology Across Borders: Joint Annual Meeting 2017. Ghent, Belgium

Teaching Experience

Saint Mary's University

2019	Teaching Assistant	Ecosystems
2019	Teaching Assistant	Plant Ecology
2019	Workshop Host	Introduction to R Programming
2019	Workshop Host	Exploratory Data Analysis
2019	Workshop Host	Introduction to Statistical Modelling
2019	Workshop Host	What they forgot to teach you in R
2018	Teaching Assistant	Ecology
2018	Teaching Assistant	Organismal and Ecological Biology
2017	Teaching Assistant	Biostatistics
2017	Teaching Assistant	Plant Taxonomy and Identification

University of Toronto

2017 Teaching Assistant GGRA30H3S (Geographic Information Systems and Empirical Reasoning)
2017 Teaching Assistant GGRB32H3S (Fundamentals of GIS II)

Professional Experience

2019 Graduate Statistics Mentor Saint Mary's University
2017 Field Research Technician University of Toronto Scarborough
2017 Lab Research Assistant University of Toronto Scarborough
2015 Field Research Assistant University of Toronto Scarborough

Reviewer History

2019 Applied Soil Ecology
2019 Urban Ecosystems

Media Coverage

- "These tiny green islands are designed to help Toronto's aging stormwater system", U of T News, Aug 17, 2017
- "Connecting undergrads with research opportunities at U of T and beyond". U of T News, March 7, 2016

Professional Development

2018 STEMfest 2018: Science Communication Workshop Halifax, Canada
2019 Non-linear Modeling in R with GAMs DataCamp
2019 Hiearchial and Mixed Effects Models DataCamp
2018 Introduction to Git for Data Science DataCamp