Garland Xie
Urban Ecologist

Curriculum Vitae
August 2019

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Education

2011 - 2017	Honours Bachelor of Science	University of Toronto
2017 - 2019	Master of Applied Science	Saint Mary's University

Research Interests

➤ green roofs, ecosystem services, biodiversity, pollinators

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 beencommunity. 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