

Meng Yuan

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EDUCATION

University of Toronto, Toronto Canada

2019 - Present

Ph.D. in Evolutionary genomics

Thesis: Evolutionary Genomics of Plant Gametophytic Selection

Supervisors: Drs. Stephen Wright, John Stinchcombe

Sichuan University, Chengdu China

2015 - 2019

Honours B.Sc. in Biological Sciences (major), B.E. in Software Engineering (minor)

Thesis: Identification of Meiotic Drivers in *Rumex hastatulus*

Thesis supervisor: Dr. Stephen I. Wright

PUBLICATIONS

Hibbins MS, Rifkin JL, Choudhury BI, Voznesenka O, Sacchi BM, **Yuan M**, Gong Y, Barrett SC, Wright SI. Phylogenomics resolves key relationships in *Rumex* and uncovers a dynamic history of independently evolving sex chromosomes. bioRxiv. 2023:2023-12.

Rifkin JL, Hnatovska S, **Yuan M**, Sacchi BM, Choudhury BI, Gong Y, Rastas P, Barrett SC, Wright SI. 2022. Recombination landscape dimorphism and sex chromosome evolution in the dioecious plant *Rumex hastatulus*. Philos Trans R Soc Lond B Biol Sci. 377(1850):20210226.

Yuan M, Stinchcombe JR. 2020. Population genomics of parallel adaptation. Mol Ecol. 29(21): 4033-4036.

Zhang Z, Dong H, **Yuan M**, Yu Y. 2020. The complete chloroplast genome of *Oenanthе javanica*. Mitochondrial DNA Part B. 5(3):3151-3153.

SCHOLARSHIPS AND AWARDS

SGS Conference Travel Grant, U of T. \$910

2023

EEB Rustom H. Dastur Graduate Scholarship, U of T. \$3,200

2022, 2023

EEB Harold H. Harvey Travel Award, U of T. \$800

2022, 2023

Mitacs Globalink Graduate Fellowship, Mitacs Canada. \$15,000

2019 – 2020

Outstanding Undergraduate International Exchange Scholarship,
China Scholarship Council. \$6,500

2018

PRESENTATIONS AND INVITED TALKS

Talks

Yuan M, Sacchi BM, Choudhury BI, Barrett SCH, Stinchcombe JR & Wright SI. 2024. *Testing for genetic trade-offs in expression between sexes and life stages*. Evolution, Montreal, QC, Canada.

- Yuan M**, Kollar LM, Sacchi BM, Carey SB, Choudhury BI, Barrett SCH, McDaniel SF, Wright SI & Stinchcombe JR. 2024. *Evolutionary genomics of plant gametophytic selection*. Dept of Evolution, Ecology & Paleontology, University of Lille, online. **Invited**
- Yuan M**, Kollar LM, Sacchi BM, Carey SB, Choudhury BI, Barrett SCH, McDaniel SF, Wright SI & Stinchcombe JR. 2023. *Evolutionary genomics of plant gametophytic selection in an angiosperm and a moss species*. Evolution, Albuquerque, NM, US.
- Yuan M**, Kollar LM, Sacchi BM, Carey SB, Choudhury BI, Barrett SCH, McDaniel SF, Wright SI & Stinchcombe JR. 2023. *Evolutionary genomics of plant gametophytic selection in an angiosperm and a moss species*. European Meeting for PhD Students in Evolutionary Biology (EMPSEB28), Scotland, UK. **Best oral presentation runner-up**
- Yuan M**, Kollar LM, Sacchi BM, Carey SB, Choudhury BI, Barrett SCH, McDaniel SF, Wright SI & Stinchcombe JR. 2023. *Evolutionary genomics of plant gametophytic selection in an angiosperm and a moss species*. Atwood Colloquium, University of Toronto, Toronto, ON, Canada.
- Yuan M**, Rifkin JL, Kim D, Jarvis-Cross M, Barrett SCH, Wright SI & Stinchcombe JR. 2021. *Testing for genome-wide balancing selection due to antagonistic pleiotropy between life-stages*. Evolution, online.

Posters

- Yuan M**, Sacchi BM, Choudhury BI, Rifkin JL, Barrett SCH, Stinchcombe JR & Wright SI. 2022. *Genome-wide characterization of genetic variation for pollen expression in Rumex hastatulus*. Congress of the European Society for Evolutionary Biology (ESEB), Prague, Czech Republic.
- Yuan M**, Rifkin JL, Kim D, Jarvis-Cross M, Barrett SCH, Wright SI & Stinchcombe JR. 2021. *Testing for genome-wide balancing selection due to antagonistic pleiotropy between life-stages*. Society for Molecular Biology and Evolution (SMBE), online.

TEACHING AND MENTORING

Teaching Assistant, University of Toronto

Intro Computation & Data Science for Life & Physical Sciences (EEB125)	Winter 2023
Biostatistics for Biological Science (EEB225)	Fall 2021, 2022, 2023
Adaptation and Biodiversity (BIO120)	Fall 2019, 2020, 2021
From Genomes to Ecosystems in a Changing World (BIO220)	Winter 2021

Undergrad and Grad Mentoring

Undergrad Thesis Project Supervision (Bioinformatics): Mykhailo Sukmaniuk (2022-23)
 Undergrad Thesis Project Supervision (Greenhouse work): Olena Voznesenska (2022-23)
 EEB Grad Peer Mentorship Program: Hatena Osawa (2020-21), Xiaozhuo Tang (2021-22)
 Undergrad Work-Study Program Supervision: Kieran Guimond, Katie Monat, Anya Gopaul

WORK EXPERIENCE

Simon Fraser University, Burnaby Canada Summer 2018
 Mitacs Globalink Research Intern, Supervisor: Jim Mattsson
 Project: RNA Sequencing-based Analysis of Economical Traits in Tree Species

COMMUNITY OUTREACH

Preprint Editorial Team, Proceedings of the Royal Society B Bioinformatics Section	<i>2020 - Present</i>
EEB Mental Health Committee Co-Chair, U of T	<i>2022 - 2023</i>
EEB Student Journal Club Co-Chair, U of T	<i>2021 - 2022</i>
Executive Committee, Chinese Genomics Online Meet-up	<i>2020</i>
Peer Review of Academic Journals	
- Co-reviewed a manuscript for Evolution Letters in 2021 with Dr. John Stinchcombe	
Founder and President, Botany Association at Sichuan University	<i>2016 - 2018</i>