

# KEN A. THOMPSON

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## EDUCATION

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### Ph.D.

University of British Columbia  
Department of Zoology

*September 2016 - Present*  
Supervisor: Dolph Schluter

### M.Sc.

University of Toronto  
Department of Ecology & Evolutionary Biology

*September 2014 - July 2018*  
Supervisor: Marc T.J. Johnson

### B.Sc. Hon.

University of Guelph  
Department of Integrative Biology

*September 2010 - April 2014*  
Supervisors: Brian C. Husband & Hafiz Maherali

## PUBLICATIONS

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### Pre-prints

1. Santangelo JS, Avenard C, Rivkin LR, and **Thompson KA**. Multivariate phenotypic divergence along an urbanization gradient. *bioRxiv*, 699017.
2. Santangelo JS, **Thompson KA**, Cohan, B, Syed J, Ness, RW, and MTJ Johnson. Predicting the strength of urban-rural clines in a Mendelian polymorphism along a latitudinal gradient. *bioRxiv*, 635763.
3. **Thompson KA**. Evidence that pleiotropic alleles underlie adaptive divergence between natural populations. *bioRxiv*, 718916.

### Peer-reviewed

13. **Thompson KA**, Osmond MM, Schluter D. 2019. Parallel genetic evolution and speciation from standing variation. *Evolution Letters* 3(2):129-141. doi: 10.1002/evl3.106
12. Rivkin LR, Santangelo JS, Alberti M, Aronson MFJ, de Keyser CW, Diamond SE, Fortin M-J, Frazee LD, Gorton AJ, Hendry AP, Liu Y, Losos JB, MacIvor JS, Martin RA, McDonnell MJ, Miles LS, Munshi-South J, Ness RW, Newman AEM, Stothart M, Theodorou P, **Thompson KA**, Verrelli BC, Whitehead A, Winchell KM and MTJ Johnson. 2019. A roadmap for urban evolutionary ecology. *Evolutionary Applications* 12(3): 384398. doi: 10.1111/eva.12734.
11. Santangelo JS, **Thompson KA** and MTJ Johnson. 2019. Herbivores and plant defenses affect selection on plant reproductive traits more strongly than pollinators. *Journal of Evolutionary Biology* 32: 418. doi: 10.5061/dryad.h6qg003.  
(ESEB Stearns Prize winner for best graduate student paper [to JSS])
10. **Thompson KA**, Rieseberg LH and D Schluter. 2018. Speciation and the city. *Trends in Ecology & Evolution* 33(11): 815826. doi: 10.1016/j.tree.2018.08.007

9. **Thompson KA**, KA Cory and MTJ Johnson. 2017. Induced defenses alter the strength and direction of natural selection on plant reproductive traits in common milkweed. *Journal of Evolutionary Biology*. 30(6): 12191228. doi: 10.1111/jeb.13045.
8. **Thompson KA**, M Renaudin and MTJ Johnson. 2016. Urbanization drives the evolution of parallel clines in plant populations. *Proceedings of the Royal Society of London B: Biological Sciences*. 20162180. doi: 10.1098/rspb.2016.2180.
7. **Thompson KA** and MTJ Johnson. 2016. Antiherbivore defenses alter natural selection on plant reproductive traits. *Evolution* 70(4): 796810. doi: 10.1111/evo.12900.
6. Johnson MTJ, **Thompson KA** and HS Saini. 2015. Plant evolution in the urban jungle. *American Journal of Botany* 102(12): 13. doi: 10.3732/ajb.1500386
5. Oke OA and KA Thompson. 2015. Distribution models for mountain plant species: the value of elevation. *Ecological Modelling* 301, 7277. doi:10.1016/j.ecolmodel.2015.01.019
4. **Thompson KA**, BC Husband and H Maherali. 2015. No influence of water limitation on the outcome of competition between diploid and tetraploid *Chamerion angustifolium* (Onagraceae). *Journal of Ecology* 103(3), 733741. doi: 10.1111/1365-2745.12384
3. **Thompson KA**, BC Husband and H Maherali. 2014. Climatic niche differences between diploid and tetraploid cytotypes of *Chamerion angustifolium* (Onagraceae). *American Journal of Botany* 101(11) 18681875. doi: 10.3732/ajb.1400184
2. **Thompson KA** and SG Newmaster. 2014. Molecular taxonomic tools provide more accurate estimates of species richness at less cost than traditional morphology-based taxonomic practices in a vegetation survey. *Biodiversity and Conservation* 23(6): 14111424. doi: 10.1007/s10531-014-0672-z
1. **Thompson KA**, DS Sora, KA Cross, JM St. Germain and K Cottenie. 2014. Mucilage reduces leaf herbivory in Schrebers water shield, *Brasenia schreberi* J. F. Gmel. (Cabombaceae). *Botany* 92(5): 412416. doi: 10.1139/cjb-2013-0296  
(Editor's Choice)

## AWARDS

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### Selected scholarships

2017-2019	Killam Doctoral Scholarship (declined)	\$60,000 CAD
2016-2019	NSERC CGS D	\$105 000 CAD
2016-2020	UBC Four-Year Fellowship ( $\frac{3}{4}$ declined)	\$72 800 CAD
2015	QE-II Graduate Scholarship	\$15 000 CAD
2014-2016	NSERC CGS M	\$17 500 CAD

### Research grants

2019	Sigma Xi Grant-in-aid of research	\$1 000 USD
2019	Student Research Award. American Society of Naturalists	\$2 000 USD
2018	RC Lewontin Award. Society for the Study of Evolution	\$2 500 USD

### Travel awards

2017-2019	Killam Doctoral Travel Award	\$2,000 CAD
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## TEACHING EXPERIENCE

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**Mentorship**

2019	Aslı Munzur	The effect of genetic architecture on speciation
2019	Avneet Chhina	Genetics of adaptive divergence in stickleback
2015	Marie Renaudin	Selection on cyanogenesis in white clover

**Courses taught**

2019	Teaching assistant	Quantitative methods in EEB (U British Columbia; Graduate)
2018	Guest Lecture	Evolutionary Ecology (U British Columbia)
2017 & 2018	Teaching assistant	Evolutionary Ecology (U British Columbia)
2015 & 2016	Teaching Assistant	Evolutionary Biology (U Toronto Mississauga)
2015	Teaching Assistant	Plant Morphology and Physiology (U Toronto Mississauga)
2013 & 2014	Tutorial Assistant	Discovering Biodiversity (U Guelph)

**CONFERENCE PRESENTATIONS**

‡Talk †Poster \*Presentation award

2019	(Upcoming) Canadian Society for Ecology & Evolution‡	Fredericton, NB, Canada
2019	Hybridization Symposium†*	Hamburg, Germany
2019	Speciation Gordon Research Conference & Seminar†‡	Ventura, California, USA
2019	Zoology Graduate Research Symposium†*	Vancouver, BC, Canada
2018	EvoWIBO‡	Port Townsend, WA, USA.
2017	Evolution†‡	Portland, OR, USA
2016	Canadian Society for Ecology & Evolution†*	St. Johns, NL, Canada
2016	Evolution†	Austin, TX, USA
2016	Ontario Ecology, Ethology & Evolution Colloquium‡	Toronto, ON, Canada
2016	Atwood Colloquium†*	University of Toronto
2015	Three Minute Thesis‡	Mississauga, ON, Canada
2015	Evolution‡	Guarujá, Brazil
2015	U Toronto Mississauga Graduate Research Colloquium‡	Mississauga, ON, Canada
2015	Atwood Colloquium‡	Toronto, ON, Canada
2014	Canadian Society for Ecology & Evolution‡	Montreal, QC, Canada
2014	Ontario Ecology, Ethology & Evolution Colloquium†*	Guelph, ON, Canada
2014	Ontario Biology Day†*.	Mississauga, ON, Canada

**PROFESSIONAL DEVELOPMENT****Workshops**

2017	UBC Positive Space Workshop	Vancouver, BC, Canada
2017	Synthesis in the City (New Phytologist Trust Workshop)	Toronto, ON, Canada
2017	Instructional Skills Teaching Workshop	Vancouver, BC, Canada
2016	NIMBioS Evolutionary Quantitative Genetics Workshop	Knoxville, TN, USA

**COMMUNITY INVOLVEMENT & SERVICE****Positions held**

2017-2019	Student Councillor (Elected)	Canadian Society for Ecology & Evolution
2015-2016	Lead Program Organizer	Ontario Ecology, Ethology & Evolution Colloquium
2015	Research & Infrastructure Committee	U Toronto Mississauga (Biology)

## Reviewer history

2019 Ecology Letters, Evolution, Journal of Urban Ecology, Proceedings B (2)  
2018 American Journal of Botany, The American Naturalist, Annals of Botany Biology Letters,  
Molecular Ecology, New Phytologist, Plant Ecology, Proceedings B, Scientific Reports  
2017 Plant Biology, Plant Ecology & Evolution  
2016 Annals of Botany, Madroño