

KEN A. THOMPSON

Ph.D. Candidate
Zoology Dept. & Biodiversity Research Centre
University of British Columbia
ken.thompson@zoology.ubc.ca
hybrid-ecology.com

EMPLOYMENT

Post-doctoral fellow

Stanford University
Biology Department

Starting 2021
Supervisor: Molly Schumer

EDUCATION

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 2016
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

Submitted manuscripts available as pre-prints

1. Santangelo JS, Avenard C, Rivkin LR, and **Thompson KA**. Multivariate phenotypic divergence along an urbanization gradient. [bioRxiv](#), 699017. Revision submitted to *Biology Letters*

Peer-reviewed

16. **Thompson KA**, Urquhart-Cronish M, Whitney KD, Rieseberg LH, and Schluter D. Patterns, predictors, and consequences of dominance in hybrids. In press, *The American Naturalist*. [bioRxiv](#), 818658.
15. 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. *Evolution Letters* 4(3): 212–225
14. **Thompson KA**. Experimental hybridization studies suggest that pleiotropic alleles commonly underlie adaptive divergence between natural populations. *The American Naturalist* 196(1): E16–22
13. **Thompson KA**, Osmond MM, Schluter D. 2019. Parallel genetic evolution and speciation from standing variation. *Evolution Letters* 3(2):129–141.
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): 384-398.
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: 4-18. (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): 815-826.
 9. **Thompson KA**, KA Cory and MTJ Johnson. 2017. Induced defenses alter the strength and direction of natural selection on reproductive traits in common milkweed. *Journal of Evolutionary Biology*. 30(6): 1219-1228.
 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*. 283(1845): 20162180.
 7. **Thompson KA** and MTJ Johnson. 2016. Antiherbivore defenses alter natural selection on plant reproductive traits. *Evolution* 70(4): 796-810.
 6. Johnson MTJ, **Thompson KA** and HS Saini. 2015. Plant evolution in the urban jungle. *American Journal of Botany* 102(12): 1-3.
 5. Oke OA and KA Thompson. 2015. Distribution models for mountain plant species: the value of elevation. *Ecological Modelling* 301, 72-77.
 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), 733-741.
 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) 1868-1875.
 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): 1411-1424.
 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): 412-416. (Editor's Choice)

AWARDS

Selected scholarships & fellowships

2020–2021	British Columbia Graduate Scholarship	\$15 000 CAD
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

Academic awards

2020 Excellence in Doctoral Research Award Canadian Society for Ecology & Evolution

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

TEACHING EXPERIENCE

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)

INVITED PRESENTATIONS

2020 CSEE Doctoral Award Symposium Online
 2020 University of Montana (CHALK seminar) Missoula, MT, USA

PRESENTATIONS

‡Talk †Poster *Presentation award

2020 American Society of Naturalists‡ Asilomar, CA, USA
 2019 BC EcoEvo Retreat‡* Squamish, BC, Canada
 2019 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 Canadian Society for Ecology & Evolution‡ Guelph, ON, Canada
 2018 EvoWIBO‡ Port Townsend, WA, USA.
 2018 BC EcoEvo Retreat* Squamish, BC, Canada
 2017 BC EcoEvo Retreat Squamish, BC, Canada
 2017 Evolution‡† Portland, OR, USA
 2016 BC EcoEvo Retreat* Squamish, BC, Canada
 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

2019	Advanced R Workshop	Vancouver, BC, Canada
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

2019–2020	Co-president	UBC Zoology Graduate Students' Association
2017–2019	Student Councillor	Canadian Society for Ecology & Evolution
2015–2016	Lead Program Organizer	Ontario Ecology, Ethology & Evolution Colloquium
2015	Research & Infrastructure Committee	U Toronto Mississauga (Biology)
2015	Graduate Student Union Representative	UTM Association of Graduate Students

Reviewer history

Academic journals

2020	<i>Evolution</i>
2019	<i>Biological Journal of the Linnean Society</i> , <i>Ecology Letters</i> (×2), <i>Evolution</i> , <i>Evolution Letters</i> (×3), <i>Journal of Urban Ecology</i> , <i>Molecular Ecology</i> , <i>Proceedings B</i> (×2)
2018	<i>American Journal of Botany</i> , <i>The American Naturalist</i> , <i>Annals of Botany</i> , <i>Biology Letters</i> , <i>Molecular Ecology</i> , <i>New Phytologist</i> , <i>Plant Ecology</i> , <i>Proceedings B</i> , <i>Scientific Reports</i>
2017	<i>Plant Biology</i> , <i>Plant Ecology</i> , <i>Evolution</i>
2016	<i>Annals of Botany</i> , <i>Madroño</i>
2015	<i>Flora</i>
2014	<i>American Journal of Botany</i> , <i>Evolution</i>

Scholarship & grant applications

2020	Norwegian Research School in Biosystematics (ForBio)
	Marie Skłodowska-Curie Actions Individual Fellowship Application Training Course