## KENNETH (KEN) ADAM THOMPSON

Ph.D. Candidate

Zoology Dept. & Biodiversity Research Centre University of British Columbia email—ken.thompson@zoology.ubc.ca; phone—1 (647) 458-0836; website—hybrid-ecology.com

#### **EMPLOYMENT**

Post-doctoral fellow Starting 2021

Stanford University Supervisor: Molly Schumer

Biology Department

#### **EDUCATION**

Ph.D.

September 2016 - Present
University of British Columbia
Supervisor: Dolph Schluter

Department of Zoology

M.Sc. September 2014 – July 2016 University of Toronto Supervisor: Marc T.J. Johnson

Department of Ecology & Evolutionary Biology

B.Sc. Hon. September 2010 - April 2014

University of Guelph Supervisors: Brian C. Husband & Hafiz Maherali

Department of Integrative Biology

#### **PUBLICATIONS**

#### Submitted manuscripts available as pre-prints

- Bontrager M, Muir CD, Mahony CR, Gamble DE, Germain RM, Hargreaves AL, Kleynhans EJ, Thompson KA, Angert AL. Climate warming weakens local adaptation. bioRχiv, 364349. doi: 10.1101/2020.11.01.364349
- 2. Chhina AK<sup>\*†</sup>, **Thompson KA**<sup>†</sup>, and D Schluter. Adaptive divergence and the evolution of hybrid phenotypes in threespine stickleback. bioR<sub>χ</sub>iv, 400440. doi: 10.1101/2020.11.26.400440

#### Peer-reviewed

- 17. **Thompson KA**, Urquhart-Cronish M, Whitney KD, Rieseberg LH, and Schluter D. 2021. Patterns, predictors, and consequences of dominance in hybrids. In press, *The American Naturalist*. doi: 10.1086/712603
- 16. Santangelo JS, Avenard C, Rivkin LR, and **KA Thompson**. Multivariate phenotypic divergence along an urbanization gradient. *Biology Letters* 16(9): 20200511. doi: 10.1098/rsbl.2020.0511
- 15. Santangelo JS, **Thompson KA**, Cohan, B, Syed J, Ness, RW, and MTJ Johnson. 2020. Predicting the strength of urban-rural clines in a Mendelian polymorphism along a latitudinal gradient. *Evolution Letters* 4(3): 212–225 doi: 10.1002/evl3.163

<sup>\*</sup>undergraduate mentee; †equal contribution

- 14. **Thompson KA**. 2020. Experimental hybridization studies suggest that pleiotropic alleles commonly underlie adaptive divergence between natural populations. *The American Naturalist* 196(1): E16–22 doi: 10.1086/708722
- 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 Keyzer 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. 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: 4-18. doi: 10.1111/jeb.13392
  (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. doi: 10.1016/j.tree.2018.08.007
- 9. **Thompson KA**, Cory KA, 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. doi: 10.1111/jeb.13045
- 8. **Thompson KA**, Renaudin M, 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. 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): 796-810. 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): 1-3. 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, 72-77. 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) 1868-1875. 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): 1411-1424. 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): 412-416. doi: 10.1139/cjb-2013-0296 (Editor's Choice)

## AWARDS

### Selected scholarships & fellowships

2021 - 2023	NSERC PDF	\$90 000 CAD
2020	Craig Sandercock Memorial Scholarship	\$1 100 CAD
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
2018	Samantha Hicks Memorial Prize	\$1 000 CAD
2016 – 2020	UBC Four-Year Fellowship $(\frac{3}{4} \text{ declined})$	\$72 800 CAD
2016	L. Butler Graduate Scholarship	\$1 400
2015	McCuaig-Throop Bursary	\$3 000 CAD
2015	Jeanne F. Goulding Fellowship	\$2 000
2015	QE-II Graduate Scholarship	\$15 000 CAD
2015	Kathleen and Donald Strong Hull Scholarship	706  CAD
2014 – 2016	NSERC CGS M	\$17 500 CAD
2013	Bryant Family Scholarship	\$300 CAD
2013	Monroe Landon Memorial Scholarship	\$1 500
2013	Tatjana Schulz Memorial Scholarship	\$1 000
2013	Dr. Erika Gaertner Scholarship in Botany	\$1 000

## Academic recognitions

2021	Jasper Loftus-Hills Young Investigator Award	American Society of Naturalists
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

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2020	Shelley Wang	Lab volunteer (UBC)
2019	Gaurav Singh-Varma	Lab volunteer (UBC)
2019	Sadie Later	Lab volunteer (UBC)
2019 – 2020	Miranda Andersen	UBC Work Learn & Lab volunteer (UBC)
2018-2019	Lauren Alford	UBC Work Learn & Lab volunteer (UBC)
2020	Frank Yeung	UBC 'SURE' award & Directed studies
2019	Aslı Munzur	Lab volunteer, UBC Int'l Work Learn & Directed studies
2019 – 2020	Avneet Chhina	NSERC 'USRA' & UBC Work Learn (UBC)
2018 – 2019	Julia Bizon	Lab volunteer
2018	Aleksa	
2017 – 2019	Mira Mikkelsen	UBC Work Learn & Lab volunteer (UBC)
2017 - 2018	Madeleine Ankenmann	Lab volunteer (UBC)
2017 - 2018	Joani Viliunas	Volunteer
2017 - 2018	Kately Nikiforuk	Lab volunteer & UBC Work Learn (UBC)
2017	Nicolas Frasson	Summer internship (Schluter lab)
2015	Marcelo Escobar	Field & lab volunteer (U. Toronto)
2016	Jason Tang	Lab volunteer (U. Toronto)
2015 - 16	Cheyenne Cameron	Field & lab volunteer (U. Toronto)
2015 - 16	Malika Ganguli	Lab volunteer (U. Toronto)
2015 - 16	Harmehr Sekhon	Lab volunteer (U. Toronto)
2015 - 16	Anna Mikhailichenko	Lab volunteer (U. Toronto)
2015 - 16	Cindy Prashad	Work study student (U. Toronto)
2015 - 16	Rita Mittal	Lab volunteer (U. Toronto)
2015 – 16	Marcelo Escobar	Lab volunteer (U. Toronto)
2015	Marie Renaudin	Summer internship (U. Toronto)

## 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

### CONTRIBUTED PRESENTATIONS

<sup>&</sup>lt;sup>‡</sup>Talk <sup>†</sup>Poster <sup>\*</sup>Presentation award

## Ken A. Thompson CV

2020 2019	American Society of Naturalists <sup>‡</sup> BC EcoEvo Retreat <sup>‡*</sup>	Asilomar, CA, USA Squamish, BC, Canada
2019	Canadian Society for Ecology & Evolution <sup>‡</sup>	Fredericton, NB, Canada
2019	Hybridization Symposium <sup>†*</sup>	Hamburg, Germany
2019	Speciation Gordon Research Conference & Seminar <sup>†‡</sup>	Ventura, California, USA
2019	Zoology Graduate Research Symposium <sup>†*</sup>	Vancouver, BC, Canada
2018	Canadian Society for Ecology & Evolution <sup>‡</sup>	Guelph, ON, Canada
2018	$\mathrm{EvoWIBO}^{\ddagger}$	Port Townsend, WA, USA.
2018	BC EcoEvo Retreat*	Squamish, BC, Canada
2017	BC EcoEvo Retreat	Squamish, BC, Canada
2017	Evolution $^{\dagger \ddagger}$	Portland, OR, USA
2016	BC EcoEvo Retreat*	Squamish, BC, Canada
2016	Canadian Society for Ecology & Evolution <sup>‡*</sup>	St. Johns, NL, Canada
2016	Evolution <sup>†</sup>	Austin, TX, USA
2016	Ontario Ecology, Ethology & Evolution Colloquium <sup>‡</sup>	Toronto, ON, Canada
2016	Atwood Colloquium <sup>‡*</sup>	University of Toronto
2015	Three Minute Thesis <sup>‡</sup>	Mississauga, ON, Canada
2015	Evolution <sup>‡</sup>	Guarujá, Brazil
2015	U Toronto Mississauga Graduate Research Colloquium <sup>‡</sup>	Mississauga, ON, Canada
2015	Atwood Colloquium <sup>‡</sup>	Toronto, ON, Canada
2014	Canadian Society for Ecology & Evolution <sup>‡</sup>	Montreal, QC, Canada
2014	Ontario Ecology, Ethology & Evolution Colloquium <sup>‡*</sup>	Guelph, ON, Canada
2014	Ontario Biology Day <sup>†*</sup>	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

#### Ken A. Thompson CV

#### Reviewer history

#### Academic journals

- 2021 The American Naturalist, Proceedings B
- 2020 American Journal of Botany, Evolution, Molecular Ecology
- 2019 Biological Journal of the Linnean Society, Ecology Letters ( $\times 2$ ), Evolution, Evolution Letters ( $\times 3$ ), Journal of Urban Ecology, Molecular Ecology, Proceedings B ( $\times 2$ )
- 2018 American Journal of Botany, The American Naturalist, Annals of Botany, Biology Letters, Journal of Urban Eoclogy, Molecular Ecology, New Phytologist, Plant Ecology, Proceedings B, Scientific Reports
- 2017 Plant Biology, Plant Ecology, Evolution
- 2016 Annals of Botany, Madroño
- 2015 Flora
- 2014 American Journal of Botany, Evolution

#### Scholarship & grant applications

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