Tyler V. Kent

tvkent@uchicago.edu Contact Information Website: tvkent.github.io Github: tvkent Postdoctoral Scholar Jul 2024-present EMPLOYMENT University of Chicago Advisor: Dr. Carl Veller Nov 2022-Jun 2024 Postdoctoral Research Associate University of North Carolina at Chapel Hill Advisors: Dr. Daniel Matute and Dr. Dan Schrider **EDUCATION** Ph.D., Ecology and Evolutionary Biology Jan 2023 University of Toronto Thesis: Evolutionary consequences of plant genome structure Advisor: Dr. Stephen I. Wright Jun 2015 B.S., Genetics and Genomics Minor in Statistics University of California, Davis Advisor: Dr. Jeffrey Ross-Ibarra SELECTED NSERC Post-Graduate Scholarship, Doctoral (PGS-D) \$42,000 2019-2020 HONOURS AND Faculty of Arts and Science Top Doctoral Fellowship \$115,000 2015-2019 AWARDS University of Toronto Faculty of Arts and Science University of Toronto EEB Outstanding Teaching Assistant Award \$100 2018 Nominated by undergraduates in EEB323: Evolutionary Genetics Ramsay Wright Award Honourable Mention \$250 2018 University of Toronto EEB, for academic achievement and departmental contributions Society for Molecular Biology and Evolution (SMBE) Registration Award \$395 2017 Evolutionary Genomics of Sex Travel Award \$550 2016American Genetic Association and Arizona State University Ecology and Evolutionary Biology Entrance Award \$3,000 2015

PUBLICATIONS

Kent TV, Schrider DR, Matute DM (2025)

College of Biological Sciences, UC Davis

Citation for Outstanding Performance

Demographic history, genetic load, and the efficacy of selection in the globally invasive mosquito Aedes aegypti

2015

Genome Biology and Evolution doi: 10.1093/gbe/evaf066

Department of Ecology and Evolutionary Biology, University of Toronto

Kryvokhyzha D, Salcedo A, Eriksson MC, Duan T, Tawari N, Chen J, Guerrina M, Kreiner JM, **Kent TV**, Lagercrantz U, Stinchcombe JR, Glémin S, Wright SI, Lascoux M (2019)

Parental legacy, demography, and admixture influenced the evolution of the two subgenomes of the tetraploid *Capsella bursa-pastoris* (Brassicaceae).

PLoS Genetics 15(2): e1007949. doi: 10.1371/journal.pgen.1007949

Kent TV*, Uzunović J*, Wright SI (2017) Coevolution of transposable elements and recombination. Philosophical Transactions of the Royal Society B Volume 372, Issue 1736. doi: 10.1098/rstb.2016.0458 * contributed equally

Sas C, Muller F, Kappel C, Kent TV, Wright SI, Hilker M, Lenhard M (2016)

Repeated inactivation of the first committed enzyme underlies the loss of benzaldehyde emission after the selfing-transition in Capsella.

Current Biology Volume 26, Issue 24, p33133319. doi: 10.1016/j.cub.2016.10.026

Durvasula A, Hoffman P, Kent TV, Liu C, Kono T, Morrell P, Ross-Ibarra J (2016)

ANGSD-wrapper: utilities for analyzing next generation sequencing data. $Molecular\ Ecology\ Resources\ 16:\ 14491454.$ doi: 10.1111/1755-0998.12578

Publications in

Kent TV and Veller C

PREP The harmonic mean recombination rate: Properties, measurement, and implications.

Kent TV, Brandvain Y, Wright SI

Genome structure shapes patterns of introgression from Capsella rubella to Capsella grandiflora.

Presentations

Kent TV and Veller C

2025

The harmonic mean recombination rate: Properties, measurement, and implications Talk at Evolution, Athens, GA

Kent TV, Schrider DR, Matute DR

2024

Demographic history and the efficacy of selection in the globally invasive mosquito Aedes aegypti Talk at the Third Joint Congress on Evolutionary Biology, Montreal, Canada

Kent TV, Schrider DR, Matute DR

2024

Talk at Canadian Society for Ecology and Evolution (CSEE/SCEE), Vancouver, Canada

Kent TV, Schrider DR, Matute DR

2024

Poster at The Allied Genetics Conference (TAGC), Washington D.C.

Kent TV, Brandvain Y, Wright SI

2023

Genome structure drives the landscape of introgression from selfing into outcrossing Capsella Talk at Evo-WIBO, Fort Worden, WA

Kent TV, Brandvain Y, Wright SI

2022

Talk at European Society for Evolutionary Biology (ESEB), Prague, Czech Republic.

Kent TV, Brandvain Y, Wright SI

2022

Talk at Evolution (virtual).

Kent TV, Platts A, Wright SI, and the BMAP Consortium

Cancelled due to Covid19

Repeated polyploidization in the Brassicaceae drives both independent and convergent responses of selection and genome architecture Talk at Society for Molecular Biology and Evolution (SMBE), Quebec City, Canada.

Kent TV, Platts A, Wright SI, and the BMAP Consortium

2019

Conserved sequence evolution and polyploidy in 32 Brassicales genomes

Poster at Society for Molecular Biology and Evolution (SMBE), Manchester, England

	Genome evolution after whole genome duplication in 32 Brassicales species: Ghosts of polyploidy past Talk at the Atwood Colloquium in Ecology and Evolutionary Biology, Toronto, Canada		
	Kent TV, Wright SI, and the BMAP Consortium Genome evolution after whole genome duplication in 32 Brassicales species Talk at the Second Joint Congress on Evolutionary Biology, Montpellier, Fran	2018 nce	
	Kent TV, Wright SI, and the BMAP Consortium	2017	
	Poster at Midwest PopGen, East Lansing MI		
	Kent TV, Wright SI, and the BMAP Consortium	2017	
	Poster at SMBE, Austin TX		
	Kent TV and Wright SI Mutation load within a selfing allotetraploid Talk at Evolutionary Genomics of Sex, Tempe AZ	2016	
	Kent TV and Wright SI How does mating system affect linked selection in Capsella? Poster at The Allied Genetics Conference (TAGC), Orlando FL	2016	
	Durvasula A, Kent TV , Bhadra-Lobo S, Ross-Ibarra J ANGSD-wrapper: scripts to streamline and visualize NGS population genetic Poster at Bay Area Population Genomics (BAPG) XI meeting, UC Davis	2014 s analysis	
NON-PEER REVIEWED PUBLICATIONS	Kent TV (2016) TAGC16 Shorts: the bursting bubble of harmful mutations. <i>Genes to Genomes: a blog from the Genetics Society of America</i> . Contributed article. http://genestogenomes.org/tagc16-shorts-the-bursting-bubble-of-harmful-mutations/		
SOFTWARE	$ANGSD-wrapper\ (https://github.com/ANGSD-wrapper/angsd-wrapper)$		
TEACHING	Teaching Assistant (marking), BIO120 Adaptation and Biodiversity, (U of T)	Fall 2020, 2021	
	Teaching Assistant, EEB323 Evolutionary Genetics, (U of T)	Fall 2017, 2018, 2019	
	Course Development, EEB323 Evolutionary Genetics, (U of T)	Summer 2018	
	Teaching Assistant, BIO251 Plant Form, Function, and Development, (U of T)	Winter 2018	
	Teaching Assistant, BIO120 Adaptation and Biodiversity, (U of T)	Fall 2015, 2016	
	Learning Assistant, BIS2B Principles of Ecology and Evolution, (UC Davis)	Fall 2012	
MENTORSHIP	Gwendolyn Clark, VIC One program (VIC170), U of T	Winter 2018	
JOURNAL SERVICE	Preprint Editorial Team, Proceedings of the Royal Society B Plant Biology Section & Bioinformatics Section Leader	2019-present	
	Reviewer: Evolution; Molecular Biology and Evolution; Genome Biology and Genomes, Genetics; Molecular Ecology; Heredity; Molecular Biology Reports	Evolution; G3: Genes,	

Kent TV, Platts A, Wright SI, and the BMAP Consortium

2019

Department
Service &
Outreach

EEB Graduate Student Association (EGSA) IT Representative (elected), U of T	2017-2020
Newsletter Editor and webmaster, The EEB Quarterly	2018-present
EEB department twitter moderator (@eebtoronto), U of T	2017-2020
Panelist, EEB NSERC award application graduate student panel, U of T	2018, 2019
Volunteer at FACT-B Talk on Biodiversity (social media), Royal Ontario Museum	2019
EGSA Atwood Colloquium Chair (elected), U of T	2018-2019
Atwood Lecturer search committee, U of T	2015-2017, 2019
Organizer of (Re)Views: A reviews-based journal club	2016, 2018
Session moderator, Atwood Colloquium in Ecology and Evolution, U of T	2018
Volunteer at AGA Presidential Symposium, U of T	2018
EGSA Secretary (elected), U of T	2017-2018
Volunteer at EEB booth for Science Rendezvous at the University of Toronto	2017
Co-leader of EEB Summer Book Club at the U of T	2017
EGSA co-chair for Student Journal Club (elected), U of T	2016-2017