

# Tyler V. Kent

---

CONTACT INFORMATION	<a href="mailto:tvkent@unc.edu">tvkent@unc.edu</a> Website: <a href="https://tvkent.github.io">tvkent.github.io</a> Github: <a href="#">tvkent</a>	
EMPLOYMENT	<b>Postdoctoral Scholar</b> University of Chicago Advisor: <a href="#">Dr. Carl Veller</a>	Jul 2024-present
	<b>Postdoctoral Research Associate</b> University of North Carolina at Chapel Hill Advisors: <a href="#">Dr. Daniel Matute</a> and <a href="#">Dr. Dan Schrider</a>	Nov 2022-Jun 2024
EDUCATION	<b>Ph.D., Ecology and Evolutionary Biology</b> University of Toronto Thesis: Evolutionary consequences of plant genome structure Advisor: <a href="#">Dr. Stephen I. Wright</a>	Jan 2023
	<b>B.S., Genetics and Genomics</b> Minor in Statistics University of California, Davis Advisor: <a href="#">Dr. Jeffrey Ross-Ibarra</a>	Jun 2015
SELECTED HONOURS AND AWARDS	NSERC Post-Graduate Scholarship, Doctoral (PGS-D) <i>\$42,000</i>	2019-2020
	Faculty of Arts and Science Top Doctoral Fellowship <i>\$115,000</i> <i>University of Toronto Faculty of Arts and Science</i>	2015-2019
	University of Toronto EEB Outstanding Teaching Assistant Award <i>\$100</i> <i>Nominated by undergraduates in EEB323: Evolutionary Genetics</i>	2018
	Ramsay Wright Award Honourable Mention <i>\$250</i> <i>University of Toronto EEB, for academic achievement and departmental contributions</i>	2018
	Society for Molecular Biology and Evolution (SMBE) Registration Award <i>\$395</i>	2017
	Evolutionary Genomics of Sex Travel Award <i>\$550</i> <i>American Genetic Association and Arizona State University</i>	2016
	Ecology and Evolutionary Biology Entrance Award <i>\$3,000</i> <i>Department of Ecology and Evolutionary Biology, University of Toronto</i>	2015
	Citation for Outstanding Performance <i>College of Biological Sciences, UC Davis</i>	2015
PUBLICATIONS	<b>Kent TV</b> , Schrider DR, Matute DM (2024) Demographic history and the efficacy of selection in the globally invasive mosquito <i>Aedes aegypti</i> <i>bioRxiv</i> doi: 10.1101/2024.03.07.584008	
	Kryvokhyzha D, Salcedo A, Eriksson MC, Duan T, Tawari N, Chen J, Guerrina M, Kreiner JM, <b>Kent TV</b> , 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 PREP

**Kent TV**, Brandvain Y, Wright SI  
 Genome structure shapes patterns of introgression from *Capsella rubella* to *Capsella grandiflora*.

**Kent TV\***, Platts AE\*, Edger PP\*, Choi JY, Zhao T, Maumus F, Washburn J, Shu S, An H, Mayfield-Jones D, Blanchette M, Bird KA, Dismukes W, Abrahams RS, Mummenhoff K, Berry K, Goodstein DM, Yoshinga Y, Daum C, Spunde A, Davidson P, Oakgrove K, Peng Y, Phillips J, Kudrna D, Talag J, Mabry ME, Al-Shehbaz I, Cappa JJ, Purugganan M, Pilon-Smits EA, Pepper AE, Schranz ME, Schmutz J, Weigel D, Mitchell-Olds T, Hall J, Koch MA, Wing RA, Pires JC, Wright SI  
 Comparative genomics of whole genome duplication in 32 species of the Brassicales.  
 \* contributed equally

**Kent TV**, Wright SI  
 Patterns of diversity and linked selection in *Rumex hastatulus*.

## PRESENTATIONS

**Kent TV**, Schrider DR, Matute DR 2024  
 Demographic history and the efficacy of selection in the globally invasive mosquito *Aedes aegypti*  
 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

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

DEPARTMENT SERVICE & OUTREACH	EEB Graduate Student Association (EGSA) IT Representative (elected), U of T	2017-2020
	Newsletter Editor and webmaster, <i>The EEB Quarterly</i>	2018-present
	EEB department twitter moderator ( <a href="#">@eebtoronto</a> ), 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