

Tyler V. Kent

CONTACT INFORMATION

tvkent@unc.edu
Website: tvkent.github.io
Github: [tvkent](https://github.com/tvkent)

EMPLOYMENT

Postdoctoral Research Associate Nov 2022-present
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](#)

B.S., Genetics and Genomics Jun 2015
Minor in Statistics
University of California, Davis
Advisor: [Dr. Jeffrey Ross-Ibarra](#)

SELECTED HONOURS AND AWARDS

NSERC Post-Graduate Scholarship, Doctoral (PGS-D) \$42,000 2019-2020

Faculty of Arts and Science Top Doctoral Fellowship \$115,000 2015-2019
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 2016
American Genetic Association and Arizona State University

Ecology and Evolutionary Biology Entrance Award \$3,000 2015
Department of Ecology and Evolutionary Biology, University of Toronto

Citation for Outstanding Performance 2015
College of Biological Sciences, UC Davis

PUBLICATIONS

Kent TV, Schrider DR, Matute DM (2024)
Demographic history and the efficacy of selection in the globally invasive mosquito *Aedes aegypti*
bioRxiv doi: 10.1101/2024.03.07.584008

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.

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*
 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

Kent TV, Platts A, Wright SI, and the BMAP Consortium 2019
 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 2018
 Genome evolution after whole genome duplication in 32 Brassicales species
 Talk at the Second Joint Congress on Evolutionary Biology, Montpellier, France

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	2016
	Mutation load within a selfing allotetraploid	
	Talk at Evolutionary Genomics of Sex, Tempe AZ	
	Kent TV and Wright SI	2016
	How does mating system affect linked selection in <i>Capsella</i> ?	
	Poster at The Allied Genetics Conference (TAGC), Orlando FL	
	Durvasula A, Kent TV , Bhadra-Lobo S, Ross-Ibarra J	2014
	ANGSD-wrapper: scripts to streamline and visualize NGS population genetics analysis	
	Poster at Bay Area Population Genomics (BAPG) XI meeting, UC Davis	
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, <i>Proceedings of the Royal Society B</i> Plant Biology Section & Bioinformatics Section Leader	2019-present
	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>	
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 (@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