

STEPHEN ISAAC WRIGHT, FRSC

DEGREES

- 2000-2003 University of Edinburgh, Scotland UK
PhD in Evolutionary Genetics, Institute of Cell, Animal and Population Biology
Dissertation: 'Effects of recombination rate and mating system on genome evolution and diversity in *Arabidopsis*'
Advisor: Prof. Deborah Charlesworth
- 1998-2000 McGill University, Montreal, QC, Canada
M.Sc. in Molecular Evolution, Department of Biology
Dissertation: 'Transposon dynamics in self- and cross-fertilizing plant populations'
Advisors: Prof. Daniel Schoen and Prof. Thomas Bureau
- 1994-1998 University of Toronto, Toronto, ON Canada
B.Sc. Evolutionary Biology Specialist, Departments of Botany and Zoology
Thesis: 'Size-dependent gender modification in a hermaphroditic perennial herb'
Advisor: Prof. Spencer C.H. Barrett

EMPLOYMENT

- Sept 2024- Vice-Dean Research and Infrastructure, Faculty of Arts and Science, University of Toronto
- July 2016- Professor and Canada Research Chair in Population Genomics, Department of Ecology and Evolutionary Biology, University of Toronto
- 2023 Interim Department Chair, Department of Ecology and Evolutionary Biology, University of Toronto
- 2019-2022 Department Chair, Department of Ecology and Evolutionary Biology, University of Toronto
- 2011-2016 Associate Professor
Department of Ecology and Evolutionary Biology, University of Toronto
- 2008-2011 Assistant Professor
Dept. of Ecology and Evolutionary Biology, University of Toronto
- 2005-2008 Assistant Professor
Department of Biology, York University, Toronto, ON
- 2003-2004 NSERC postdoctoral fellow
Department of Ecology and Evolutionary Biology
University of California, Irvine, Irvine, CA, USA
Advisor: Prof. Brandon S. Gaut

HONOURS and AWARDS

- 2024 Fellow of the Royal Society of Canada
- 2023 Canadian Society for Ecology and Evolution President's Award for Research Excellence in Ecology and Evolution
- 2022 Tier 1 Canada Research Chair (renewal)

2022 Elected President, Society for the Study of Molecular Biology and Evolution (SMBE)
 2016 Steacie Prize for Natural Sciences
 2016 E.W.R. Steacie Fellowship
 2016 Margaret Dayhoff mid-career Award for Research Excellence, Society for Molecular Biology and Evolution (SMBE)
 2016 College of New Scholars, Artists and Scientists, Royal Society of Canada
 2015 Tier 1 Canada Research Chair
 2015 NSERC Accelerator Award
 2006 Alfred P. Sloan Research Fellowship
 2003 NSERC postdoctoral Fellowship
 2000 Commonwealth Graduate fellowship
 2000 NSERC postgraduate fellowship B
 1998 NSERC postgraduate fellowship A

PROFESSIONAL SERVICE

2024 President, Society for the Study of Molecular Biology and Evolution (SMBE)
 2023 President-elect, Society for the Study of Molecular Biology and Evolution (SMBE)
 2020-2023 Council, Society for the Study of Molecular Biology and Evolution (SMBE)
 2020- Senior Editor, *Molecular Biology and Evolution* (MBE)
 2019 Guest Editor, *New Phytologist Special issue on Evolution of Plant Reproductive Systems*
 2016- Associate Editor, *Evolution Letters*
 2014-2017 Senior Editor, Population genetics and genomics section, *G3: Genes|Genomes|Genetics*
 2013-2020 Associate Editor, *Molecular Biology and Evolution* (MBE)
 2012- Associate Editor, *Genetics*
 2011- Member of Faculty of 1000, Plant Genomes and Evolution

RESEARCH AWARDS

2020-2025 NSERC Discovery Grant (\$325,000 over five years)
 2016-2018 E.W.R. Steacie Fellowship (\$250,000 plus salary support over two years)
 2015-2022 Tier 1 Canada Research Chair (\$1,400,000, including salary support over seven years)
 2015-2018 NSERC Accelerator Award (\$120,000 over three years)
 2015-2020 NSERC Discovery Grant (\$370,000 over five years)
 2013-2016 Genome Canada Bioinformatics and Computational Biology Award (\$1,000,000 over three years, co-investigator)
 2010-2012 NSERC Accelerator Award (\$120,000 over three years)
 2010-2015 NSERC Discovery Grant (\$270,000 over five years)
 2009-2013 Genome Canada/Genome Quebec Competition in Applied Genomics Research Competition in Applied Genomics Research in Bioproducts or Crops (ABC) (\$4,700,000 over five years)

- Co-investigators: Thomas Bureau (McGill-project leader), Stephen Wright (University of Toronto group leader), Daniel Schoen (McGill), Anwar Naseem (McGill), Alan Moses (Toronto), Paul Harrison (McGill), John Stinchcombe (Toronto), Mathieu Blanchette (McGill), Ken Dewar (McGill)
- 2008-2011 CFI/ORF Leaders Opportunity Fund (\$508,000 over three years)
- 2009-2010 NSERC RTI (\$25,000)
- Co-investigators: RF Sage (project leader), Stephen Wright and 2 others
- 2006-2008 Alfred P. Sloan Fellowship in Computational and Evolutionary Molecular Biology (\$40,000 US over 2 years)
- 2005-2010 NSERC Discovery Grant (\$192,500 over five years)
- 2005-2008 CFI/ORF New Opportunities Fund (\$462,268 over three years)

SCHOLARLY AND PROFESSIONAL WORK

PUBLICATIONS (underlining denotes Wright lab trainee, * indicates joint first or last authorship and/or joint corresponding authorship)

131. Sacchi B., Humphries Z., Kružlicová J., Bodláková M., Pyne C., Choudhury B., Gong Y., Bačovský V., Hobza R., Barrett S.C.H., and Wright S.I. Phased assembly of neo-sex chromosomes reveals extensive Y degeneration and rapid genome evolution in *Rumex hastatulus*. *Molecular Biology and Evolution* 2024 doi:10.1093/molbev/msae074
130. Kreiner, J.M.*, Hnatovska, S.*, Stinchcombe, J.R., and **Wright, SI** 2023. Quantifying the role of genome size and repeat content in adaptive variation and the architecture of flowering time in *Amaranthus tuberculatus*. *PloS Genetics* 19(12):e1010865. doi: 10.1371/journal.pgen.1010865
129. Sandler, G, Agrawal AF*, **Wright SI*** 2023. Population genomics of the facultatively sexual liverwort *Marchantia polymorpha*. *Genome Biology and Evolution* 5(11):evad196. doi: 10.1093/gbe/evad196
128. Greer SU, **Wright SI**, Eckert CG. 2023. Population bottleneck associated with but likely preceded the recent evolution of self-fertilization in a coastal dune plant. *Evolution*. 77(2):454-466.
127. Kreiner JM, Latorre SM, Burbano HA, Stinchcombe JR, Otto SP, Weigel D, **Wright SI**. 2022. Rapid weed adaptation and range expansion in response to agriculture over the past two centuries. *Science*. 378(6624):1079-1085.
126. da Cunha NL, Xue H, **Wright SI**, Barrett SCH. 2022. Genetic variation and clonal diversity in floating aquatic plants: Comparative genomic analysis of water hyacinth species in their native range *Mol Ecol*. 2022 31(20):5307-5325. doi: 10.1111/mec.16664.
125. Beaudry FEG, Rifkin JL, Peake AL, Kim D, Jarvis-Cross M, Barrett SCH, **Wright SI**. 2022. Effects of the neo-X chromosome on genomic signatures of hybridization in *Rumex hastatulus*. *Mol Ecol*. 31(13):3708-3721. doi: 10.1111/mec.16496.
124. Rifkin J., Hnatovska S., Yuan M., Sacchi B., Choudhury B., Gong Y., Rastas P., Barrett SCH, **Wright SI**. 2022. Recombination landscape dimorphism and sex chromosome evolution in the dioecious plant *Rumex hastatulus*. *Philosophical Transactions of the Royal Society of London B*. 377: 20210226.

123. Kreiner JM, Sandler G, Stern AJ, Tranel PJ, Weigel D, Stinchcombe JR, **Wright SI**. 2022. Repeated origins, widespread gene flow, and allelic interactions of target-site herbicide resistance mutations. *eLife*. 11:e70242.
122. Cornille A, Tiret M, Salcedo A, Huang HR, Orsucci M, Milesi P, Kryvokhyzha D, Holm K, Ge XJ, Stinchcombe JR, Glémin S*, **Wright SI***, Lascoux M*. 2022. The relative role of plasticity and demographic history in *Capsella bursa-pastoris*: a common garden experiment in Asia and Europe. *AoB Plants*. 14, 1–13
121. Kreiner JM, Tranel PJ, Weigel D., Stinchcombe JR*, **Wright SI*** 2021. The genetic architecture and genome-wide signatures of glyphosate resistance in *Amaranthus tuberculatus*. *Molecular Ecology* 30(21):5373-5389.
120. Kreiner, JM, Caballero, A., **Wright, SI***, Stinchcombe, JR* 2021. Selective ancestral sorting and de novo evolution in the agricultural invasion of *Amaranthus tuberculatus*. *Evolution* 76(1):70-85.
119. K Skead, A Ang Houle, S Abelson, M Agbessi, V Bruat, B Lin, D Soave, Shlush L, **Wright SI**, Dick, J, Morris, Q, Awadalla, P. 2021. Interacting evolutionary pressures drive mutation dynamics and health outcomes in aging blood. *Nature Communications*. 12:1-11
118. Rifkin JL, Beaudry FEG, Humphries, Z, Choudhury BI, Barrett SCH, **Wright SI**. 2021. Widespread recombination suppression facilitates plant sex chromosome evolution. *Molecular Biology and Evolution*. 9;38(3):1018-1030.
117. Sandler G, **Wright SI***, Agrawal AF*. 2021. Patterns and causes of signed linkage disequilibria in flies and plants. *Molecular Biology and Evolution* 27;38(10):4310-4321.
116. Carlier J, Bonnot F, Roussel V, Ravel S, Martinez RT, Perez-Vicente L, Abadie C, **Wright SI**. 2021. Convergent adaptation to quantitative host resistance in a major plant pathogen. *MBio* 12(1): e03129-20
115. **Wright SI**. 2021. Deborah Charlesworth, winner of the society for the study of evolution's inaugural lifetime achievement award: Evolutionary biology for the genomics era. (Perspective Article). *Evolution*. 75(3):566-568.
114. Frazee, LJ, Rifkin, J, Maheepala, DC, Grant, A-G, **Wright, SI**, Kalisz, S, Spigler, R. 2021. New genomic resources and comparative analyses reveal differences in floral gene expression in selfing and outcrossing *Collinsia* sister species. *G3: Genes, Genomes, Genetics*. 11(8): jkab177.
113. Horvath R, Josephs EB, Pesquet E, Stinchcombe JR, **Wright SI**, Scofield D, Slotte T. 2021. Selection on accessible chromatin regions in *Capsella grandiflora*. *Molecular Biology and Evolution*. 38(12):5563-5575
112. Beaudry FEG, Barrett SCH, **Wright SI**. 2020. Ancestral and neo-sex chromosomes contribute to population divergence in a dioecious plant *Evolution*. 74(2):256-269.
111. Beaudry FEG, Rifkin JL, Barrett SCH, and **Wright SI**. 2020 Evolutionary Genomics of Plant Gametophytic Selection. *Plant Commun* 1: 100115.
110. Sandler G, Bartkowska M, Agrawal AF*, and **Wright SI***, 2020 Estimation of the SNP mutation rate in two vegetatively propagating species of duckweed. *G3: Genes, Genomes, Genetics* 10: 4191–4200.
109. Josephs EB, Lee YW, Wood CW, Schoen DJ, **Wright SI**, Stinchcombe JR 2020. The evolutionary forces shaping cis and trans regulation of gene expression within a population of outcrossing plants. *Molecular Biology and Evolution*. 37(8):2386-2393.
108. Kreiner JM, Giacomini DA, Bemm F, Waithaka B, Regalado J, Lanz C, Hildebrandt

- J, Sikkema PH, Tranel PJ, Weigel D*, Stinchcombe JR, **Wright SI*** 2019. Multiple modes of convergent adaptation in the spread of glyphosate-resistant *Amaranthus tuberculatus*. *Proc Natl Acad Sci U S A*. 2019;116(42):21076–21084.
107. Ho, EKH, Bartkowska M, **Wright, SI***, and Agrawal, AF*. 2019. Population genomics of the facultatively asexual duckweed *Spirodela polyrhiza*. *New Phytologist* 224: 1361–1371.
106. Hollister, JD, Greiner, S, Johnson, MTJ, and **Wright, SI** 2019. Hybridization and a loss of sex shape genome-wide diversity and the origins of species in the evening primrose (*Oenothera*). *New Phytologist* 224 (3), 1372-1380.
105. Uzunovic, J, Josephs E, Stinchcombe J, and **Wright SI** 2019. Transposable elements are important contributors to standing variation in gene expression in *Capsella grandiflora*. *Molecular Biology and Evolution* 36 (8), 1734-1745.
104. Kryvokhyzha D, Miles P, Duan T, Orsucci M, **Wright, SI**, Glemin, S, Lascoux, M 2019 Towards the new normal: Transcriptomic convergence and genomic legacy of the two subgenomes of an allopolyploid weed (*Capsella bursa-pastoris*). *PloS Genetics* 13;15(5):e1008131.
103. 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 Genet.* 15;15(2):e1007949. doi: 10.1371/journal.pgen.1007949.
102. Koenig D, Hagemann J, Li R, Bemm F, Slotte T, Neuffer B, **Wright SI**, Weigel D. 2019. Long-term balancing selection drives evolution of immunity genes in *Capsella*. *Elife*. 8. pii: e43606. doi: 10.7554/eLife.43606.
101. Huang HR, Liu JJ, Xu Y, Lascoux M, Ge XJ, **Wright SI**. 2018. Homeologue-specific expression divergence in the recently formed tetraploid *Capsella bursa-pastoris* (Brassicaceae). *New Phytologist* 220(2):624-635.
100. Sandler, G, Beaudry, FEG, Barrett, SCH, and **Wright, SI** 2018. The effects of haploid selection on Y chromosome evolution in two closely related dioecious plants. *Evolution Letters* 2(4):368-377.
99. Hartfield M, **Wright SI**, Agrawal AF. 2018. Coalescence and Linkage Disequilibrium in Facultatively Sexual Diploids. *Genetics* 210(2):683-701.
98. Kreiner, JM, and **Wright, SI** 2018. A less selfish view of genome size evolution in maize. (perspective article) *Plos Genetics* 4(5):e1007249.
97. Kreiner JM, Stinchcombe JR, **Wright SI**. 2018. Population genomics of herbicide resistance: Adaptation via evolutionary rescue. *Annual Review of Plant Biology* 69 611-635.
96. Mohammadin S, Wang, W, Liu T, Moazzeni H, Ertugrui K, Uysal T, Christodoulou C S., Edgar PP, Pires JC, **Wright, SI**, Schranz ME 2018. Genome-wide nucleotide diversity and associations with geography, ploidy level and glucosinolate profiles in *Aethionema arabicum* (Brassicaceae). *Plant Systematics and Evolution* 304: 619-630.
95. Beaudry, FEG, Barrett, SCH, and **Wright, SI** 2017. Genomic loss and silencing on the Y chromosomes of *Rumex*. *Genome Biology and Evolution* 9(12):3345-3355
94. Hough, J, Barrett, SCH, and **Wright, SI** 2017. Hill-Robertson interference reduces genetic diversity on a young plant Y chromosome. *Genetics* 207(2):685-695.

93. Crowson, D, Barrett, SCH, and **Wright, SI** 2017. Purifying and positive selection influence patterns of gene loss and gene expression in the evolution of a plant sex chromosome system. *Molecular Biology and Evolution* 34(5):1140-1154.
92. Kent, T, Uzunovic, J, and **Wright, SI** 2017. Coevolution between transposable elements and recombination. *Philosophical Transactions of the Royal Society of London B*. 19;372(1736)
91. Arunkumar, R, Wang, W, **Wright, SI**, and Barrett, SCH. 2017. The genetic architecture of tristylly and its breakdown to self-fertilization. *Molecular Ecology* 26(3):752-765.
90. Lovell JT*, Williamson RJ*, **Wright SI**, McKay JK, Sharbel TF. 2017. Mutation accumulation in an asexual relative of Arabidopsis. *PloS Genetics* 13(1):e1006550.
89. Josephs EB, **Wright SI**, Stinchcombe JR, Schoen DJ. 2017. The relationship between selection, network connectivity, and regulatory variation within a population of *Capsella grandiflora*. *Genome Biology and Evolution* 9:1099-1109.
88. Josephs, E, Stinchcombe, JR*, and **Wright, SI*** 2017. What can genome-wide association studies tell us about the evolutionary forces maintaining variation for quantitative traits? *New Phytologist*. 214(1):21-33.
87. **Wright, SI**. 2017. Evolution of Genome Size. (encyclopedia entry) In: *Encyclopedia of Life Sciences*. John Wiley & Sons, Ltd: Chichester.
86. Samarasin P, Shuter BJ, **Wright SI**, Rodd FH. 2017. The problem of estimating recent genetic connectivity in a changing world. *Conserv Biol*. 2017 Feb;31(1):126-135.
85. Arunkumar R, Maddison T, Barrett S.C.H., and **Wright SI** 2016. Recent mating system evolution in *Eichhornia* is accompanied by *cis*-regulatory divergence. *New Phytologist*. 211: 697-707.
84. Ågren, A, Huang, H, and **Wright, SI**. 2016. Transposable element evolution in the allotetraploid *Capsella bursa-pastoris*. *American Journal of Botany*. 103(7):1197-202.
83. Josephs, E, and **Wright, SI**. 2016. On the trail of linked selection (Perspectives article). *PloS Genetics*. 12(8): e1006240.
82. Sicard A, Kappel C, Lee YW, Woźniak NJ, Marona C, Stinchcombe JR, **Wright SI**, Lenhard M. 2016. Standing genetic variation in a tissue-specific enhancer underlies selfing-syndrome evolution in *Capsella*. *Proceedings of the National Academy of Sciences* 113(48):13911-13916.
81. Sas, C, Müller 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* 26(24):3313-3319.
80. **Wright, SI**. 2016. Charlesworth et al. on background selection and neutral diversity (*historical perspective*). *Genetics*. 2016 Nov;204(3):829-832.
79. Massouh A, Schubert J, Yaneva-Roder L, Ulbricht-Jones ES, Zupok A, Johnson M.T.J., **Wright SI**, Pellizzer T, Sobanski J, Bock R, and Greiner S. 2016. Spontaneous chloroplast mutants mostly occur by replication slippage and 2 show a biased pattern in the plastome of *Oenothera*. *Plant Cell*. 28(4):911-29.
78. Brandvain Y and **Wright SI** 2016. The limits of natural selection in a non-equilibrium world. *Trends in Ecol. Evol.* 32(4):201-10.
77. Kryvokhyzha D, Holm K, Chen J, Cornille A, Glémin S, **Wright, SI**, Lagercrantz U,

- and Lascoux M. 2016. The influence of population structure on gene expression and flowering time variation in the ubiquitous weed *Capsella bursa-pastoris* (Brassicaceae). *Mol. Ecol.* 25(5):1106-21.
76. Hartfield, M, **Wright, SI**, and Agrawal AF. 2016. Coalescent times and patterns of genetic diversity in species with facultative sex: effects of gene conversion, population structure, and heterogeneity. *Genetics.* 202(1):297-312.
75. Cornille A, Salcedo A, Kryvokhyzha D, Glémin S, Holm K, **Wright, SI**, and Lascoux, M. 2016. Genomic signature of successful colonization of Eurasia by the allopolyploid shepherd's purse (*Capsella bursa-pastoris*). *Mol Ecol.* 25(2):616-29.
74. Josephs, EB, Lee, YW, Stinchcombe, JR*, and **Wright, SI***. 2015. Association mapping reveals the role of purifying selection in the maintenance of genomic variation in gene expression. *Proceedings of the National Academy of Sciences USA.* 112(50):15390-5.
73. Douglas, GM*, Gos, G*, Steige, KA*, Salcedo, A, Holm, K, Josephs, EB, Arunkumar R, Ågren, JA, Hazzouri, KM, Wang, W, Platts, AE, Williamson, RJ, Neuffer, B, Lascoux, M*, Slotte, T*, **Wright, SI***. 2015. Hybrid origins and the earliest stages of diploidization in the highly successful recent polyploidy *Capsella bursa-pastoris*. *Proceedings of the National Academy of Sciences, USA* 112(9):2806-11.
72. Ågren JA, Greiner S, Johnson MTJ, **Wright SI**. 2015. No evidence that sex and transposable elements drive genome size variation in evening primroses. *Evolution* 69(4):1053-62.
71. Hollister JD, Greiner S, Wang W, Wang J, Zhang Y, Wong GK, **Wright SI***, and Johnson MT*. 2015. Recurrent loss of sex is associated with accumulation of deleterious mutations in *Oenothera*. *Molecular Biology and Evolution.* 32(4):896-905.
70. Ågren, JA, and **Wright SI**. 2015. Selfish genetic elements and plant genome size evolution. *Trends in Plant Science* ("Spotlight" article). 20(4):195-6.
69. Edger PP, Heidel-Fischer HM, Bekaerte M, Glöckner G, Platts AE, Heckfield DG, Derick J, Wafulaj E, Tanga M, Hofberger JA, Smithson A, Hall JC, Blanchette M, Bureau TE, **Wright SI**, dePamphilis CW, Schranz E, Barker MS, Conant GC, Wahlberg N, Vogel H, Pires JC, and Wheat CW. 2015. The butterfly plant arms-race escalated by gene and genome duplications. *Proceedings of the National Academy of Sciences USA.* 112:8362-8366.
68. Sicard A, Kappel C, Josephs EB, Lee YW, Marona C, Stinchcombe JR, **Wright SI**, Lenhard M. 2015. Divergent sorting of a balanced ancestral polymorphism underlies the establishment of gene-flow barriers in *Capsella*. *Nature Communications* 6:7960.
67. Arunkumar R, Ness RW, **Wright SI**, Barrett SC. 2015. The evolution of selfing is accompanied by reduced efficacy of selection and purging of deleterious mutations. *Genetics* 199(3):817-29
66. Williamson RJ, Josephs EB, Platts AE, Hazzouri KM, Haudry A, Blanchette M, **Wright SI**. 2014. Evidence for widespread positive and negative selection in coding and conserved noncoding regions of *Capsella grandiflora*, *PloS Genetics* 10: e1004622.
65. Hough J, Ågren JA, Barrett SC, **Wright SI**. Chromosomal distribution of cytonuclear genes in a dioecious plant with sex chromosomes. *Genome Biology and Evolution.* 6(9):2439-43.
64. Hough J, Hollister JD, Wang W, Barrett SC, **Wright SI**, 2014. Genetic degeneration of old and young Y chromosomes in the flowering plant *Rumex*

- hastatulus.*, *Proceedings of the National Academy of Sciences USA*, 111(21), 7713-8
63. Agren JA , Wang W , Koenig D , Neuffer B , Weigel D , **Wright SI**, 2014. Mating system shifts and transposable element evolution in the plant genus *Capsella.*, *BMC Genomics*, 15(1), 602
 62. Huang Y, **Wright SI**, Agrawal AF. 2014. Genome-Wide Patterns of Genetic Variation within and among Alternative Selective Regimes, *PloS Genetics*,10(8), e1004527
 61. Sicard, A, Thamm, A, Marona C, Lee YW, Wahl V , Stinchcombe JR, **Wright SI**, Kappel C, Lenhard M. 2014. Repeated evolutionary changes of leaf morphology caused by mutations to a homeobox gene, *Current Biology*, 24(16), 1880-1886
 60. Salcedo, A, Kalisz S and **Wright SI** 2014. Limited genomic consequences of mixed mating in the recently derived sister species pair, *Collinsia concolor* and *C. parryi*. *Journal of Evolutionary Biology* 27:1400-1412.
 59. Barrett SCH, Arunkumar R and **Wright SI** 2014. The demography and population genomics of evolutionary transitions to self-fertilization in plants. *Phil. Trans. Roy. Soc. B*. 369 (1648).
 58. Arunkumar R, Josephs EB, Williamson R, and **Wright SI** 2013. Pollen-specific, but not sperm-specific genes show stronger purifying selection and higher rates of positive selection than sporophytic genes in *Capsella grandiflora*. *Mol. Biol. Evol.* 30: 2475-2486.
 57. Slotte T, Hazzouri KM, Agren JA, Koenig D, Maumus F, Guo YL, Steige K, Platts AE, Escobar JS, Newman LK, Wang W, Mandáková T, Vello E, Smith LM, Henz SR, Steffen J, Takuno S, Brandvain Y, Coop G, Andolfatto P, Hu TT, Blanchette M, Clark RM, Quesneville H, Nordborg M, Gaut BS, Lysak MA, Jenkins J, Grimwood J, Chapman J, Prochnik S, Shu S, Rokhsar D, Schmutz J, Weigel D* & **Wright S.I.*** 2013. The *Capsella rubella* genome and the genomic consequences of rapid mating system evolution. *Nature Genetics*. 45(7):831-5. (* co-corresponding authors)
 56. Brandvain Y, Slotte T, Hazzouri KM, **Wright SI** and Coop G. 2013. Genomic identification of founding haplotypes reveals the history of the selfing species *Capsella rubella*. *PloS Genetics* 9: e003754.
 55. Haudry A, Platts AE, Vello E, Hoen DR, Leclercq M, Williamson RJ, Forczek E, Joly-Lopez Z, Steffen JG, Hazzouri KM, Dewar K, Stinchcombe JR, Schoen DJ, Wang X, Schmutz J, Town CD, Edger PP, Pires JC, Schumaker KS, Jarvis DE, Mandáková T, Lysak MA, van den Bergh E, Schranz ME, Harrison PM, Moses AM*, Bureau TE*, **Wright SI***, Blanchette M*. (*co-corresponding authors). 2013. An atlas of over 90,000 conserved noncoding sequences provides insight into crucifer regulatory regions. *Nature Genetics* 45(8):891-8.
 54. Hough J, Williamson RJ, and **Wright SI**. 2013. Patterns of selection in plant genomes. *Annual Review of Ecology, Evolution and Systematics*. 44:31-49.
 53. **Wright SI**, Kalisz S., and Slotte T. 2013. Evolutionary consequences of self-fertilization in plants. *Proc. Roy. Soc. London B* 280:1471-2954.
 52. Hazzouri, KM*, Escobar, J*, Ness, RW*, Newman, LK, Randle, A, Kalisz, S, and **Wright, S.I.** 2013. Comparative population genomics in *Collinsia* sister species reveals evidence for reduced effective population size, relaxed selection and evolution of biased gene conversion with an ongoing mating system shift. *Evolution* 67: 1263-1278.
 51. Indriolo E, Tharmapalan P, **Wright SI** and Goring DR 2012. The ARC1 E3 ligase gene is frequently deleted in self-compatible Brassicaceae species and has a conserved role in *Arabidopsis lyrata* self-pollen rejection. *Plant Cell* 24:4607-4620.

50. Gos G, Slotte T, Wright SI 2012. Signatures of balancing selection are maintained at disease resistance loci following mating system evolution and a population bottleneck in the genus *Capsella*. *BMC Evol Biol.* 12:152.
49. St. Onge K*, Foxe JP*, Junrui L, Haipeng L, Holm K, Corcoran P, Slotte T. Lascoux M. and **Wright SI**. 2012. Coalescent-based analysis distinguishes between allo- and autopolyploid origin in shepherd's purse (*Capsella bursa-pastoris*). *Mol. Biol. Evol.* 29(7):1721-1733.
48. Slotte T*, Hazzouri KM*, Stern D, Andolfatto P, and **Wright, SI**. 2012. Genetic architecture and adaptive significance of the selfing syndrome in *Capsella*. *Evolution* 66(5):1360-1374.
47. St. Onge K, Palmé AE, **Wright SI** and Lascoux M. 2012. The impact of sampling schemes on demographic inference: an empirical study in two species with different mating systems and demographic histories. *G3: Genes, Genomes, Genetics.* 2(7):803-14.
46. Slotte T, Bataillon T, Hansen TT, St Onge K, **Wright SI**, Schierup MH. 2011. Genomic determinants of protein evolution and polymorphism in *Arabidopsis*. *Genome Biol. Evol.* 3: 1210-1219.
45. Ågren JA, **Wright SI**. 2011. Co-evolution between transposable elements and their hosts: a major factor in genome size evolution? *Chromosome Research* 19:777-786.
44. Ågren JA, **Wright SI**. 2011. Sizing up *Arabidopsis* genome evolution. *Heredity* 107:509-510.
43. Roux C, Castric V, Pauwels M, **Wright SI**, Saumitou-Laprade P, Vekemans X. 2011. Does Speciation between *Arabidopsis halleri* and *Arabidopsis lyrata* Coincide with Major Changes in a Molecular Target of Adaptation? *PloS One* 6:e26872.
42. Qiu S*, Zeng K*, Slotte T*, **Wright SI**, Charlesworth D. 2011. Reduced efficacy of natural selection on codon usage bias in selfing *Arabidopsis* and *Capsella* species. *Genome Biol Evol.* 868-880. * joint first authors
41. **Wright SI** and Barrett SCH. 2010. The long-term benefits of self-rejection. *Science* 330: 459-460. (Perspectives)
40. Charlesworth D, Qiu S, Bergero R, Ågren JA, and **Wright SI**. 2010 Using DNA sequence diversity to test for selection in *Silene*. *International Journal of Plant Sciences.* 171:1072-1082.
39. Siol M., **Wright S.I.**, and S.C. Barrett. 2010. The population genomics of plant adaptation. *New Phytologist.* 188: 313-332.
38. Foxe JP, Stift M, Tedder A, Haudry A, **Wright SI**, and Mable BK. 2010. Reconstructing origins of loss of self-incompatibility and selfing in North American *Arabidopsis lyrata*: A population genetic context. *Evolution* 64:3495-3510.
37. Slotte T, Foxe JP, Hazzouri KM, and **Wright SI**. 2010. Genome-wide evidence for efficient positive and purifying selection in *Capsella grandiflora*, a plant species with a large effective population size. *Molecular Biology and Evolution* 27:1813-1821.
36. Evans BJ, Pin L, Melnick DJ, and **Wright SI**. 2010. Sex-linked inheritance in macaque monkeys: Implications for effective population size and dispersal to Sulawesi. *Genetics.* 185:923-937.
35. Ness RW, **Wright SI**, and Barrett SCH. 2010. Mating-system variation, demographic history and patterns of nucleotide diversity in the tristylous plant *Eichhornia paniculata*. *Genetics* 184:381-392.
34. Foxe JP and **Wright SI**. 2009. Signature of diversifying selection on members of the

- pentatricopeptide repeat protein family in *Arabidopsis lyrata*. *Genetics* 183:663-672.
33. Bagherie-Lachidan M, **Wright SI**, and Kelly SP. 2009. Claudin-8 and -27 tight junction proteins in puffer fish *Tetraodon nigroviridis* acclimated to freshwater and seawater. *J. Comp. Physiol. B* 2009 179:419-31.
 32. Foxe JP*, Slotte T*, Stahl EA, Neuffer B, Hurka H, and **Wright SI**. 2009. Recent speciation associated with the evolution of selfing in *Capsella*. *Proc Natl Acad Sci USA*. 106(13):5241-5. *highlighted in Faculty of 1000; featured in Nature research highlights, Nature 457:938-938; featured in a 'Dispatch' in Current Biology, Curr. Biol. 12:R369-70.*
 31. Morton BR, Dar VU, and **Wright SI**. 2009. Analysis of site frequency spectra from *Arabidopsis* with context-dependent corrections for ancestral misinference. *Plant Physiol.* 149(2):616-24.
 30. Gos G and **Wright SI**. 2008. Conditional neutrality at two adjacent NBS-LRR disease resistance loci in natural populations of *Arabidopsis lyrata*. *Molecular Ecology* 17:4953-4962.
 29. Kawabe A, Forrest A, **Wright SI** and Charlesworth D. 2008. High DNA sequence diversity in pericentromeric genes in *Arabidopsis lyrata*. *Genetics* 179: 985-995.
 28. Ross-Ibarra J*, **Wright SI***, Foxe JP, Kawabe A, DeRosa Wilson L, Gos G, Charlesworth D, and Gaut BS. 2008. Patterns of Polymorphism and Demographic History in Natural Populations of *Arabidopsis lyrata*. *Plos One* 3:e2411. * joint first authors *highlighted in Faculty of 1000*
 27. Foxe JP, Dar N, Zheng H, Nordborg M, Gaut BS, and **Wright SI**. 2008. Selection on amino acid substitutions in *Arabidopsis*. *Molecular Biology and Evolution* 25:1375-1383.
 26. Hazzouri KM, Mohajer A, Dejak SI, Otto SP, and **Wright SI**. 2008. Contrasting patterns of transposable element insertion polymorphism and nucleotide diversity in autotetraploid and allotetraploid *Arabidopsis* species. *Genetics* 179:581-592.
 25. Bagherie-Lachidan M, **Wright SI** and Kelly SP. 2008. Claudin-3 tight junction proteins in *Tetraodon nigroviridis*: Cloning, tissue specific expression and a role in hydromineral balance. *American Journal of Physiology-Regulatory, Integrative, and Comparative* 294:R1638-1647.
 24. **Wright SI**, and Andolfatto P. 2008. The impact of natural selection on the genome: emerging patterns from *Drosophila* and *Arabidopsis*. *Annual Review of Ecology Evolution and Systematics* 39:193-213.
 23. **Wright SI**, Nano N, Foxe JP, and Dar N. 2008. Effective population size and tests of neutrality at cytoplasmic genes in *Arabidopsis*. *Genetics Research* 90: 119-128.
 22. **Wright SI**, Ness RW, Foxe JP, and Barrett SCH. 2008. Genomic consequences of outcrossing and selfing in plants. *International Journal of Plant Sciences* **169**:105–118.
 21. Yamasaki M, **Wright SI**, and McMullen M. 2007. Genomic screening for artificial selection during domestication and improvement in maize. *Annals of Botany*. 100:967-973.
 20. **Wright SI**, Iorgovan G, Misra M, and Mokhtari M. 2007. Neutral evolution of synonymous base composition in the Brassicaceae. *Journal of Molecular Evolution* 64: 136-141.

19. Gaut BS, **Wright SI**, Rizzon C, Dvorak J and Anderson LK. 2007. Recombination: an underappreciated factor in the evolution of plant genomes. *Nature Reviews Genetics*. 8, 77-84.
18. Morton B and **Wright SI**. 2007. Selective constraints on codon usage of nuclear genes from *Arabidopsis thaliana*. *Molecular Biology and Evolution* 24:122-129.
17. **Wright SI**, Foxe JP, DeRose Wilson L., Kawabe A., Looseley M., Gaut B., and Charlesworth D. 2006. Testing for effects of recombination rate on nucleotide diversity in natural populations of *Arabidopsis lyrata*. *Genetics* 174:1421-1430.
16. **Wright SI**, Bi IV, Schroeder SG, Yamasaki M, Doebley JF, McMullen MD, and Gaut BS. 2005. The effects of artificial selection on the maize genome. *Science* 308:1310-4. *highlighted as 'must read' in Faculty of 1000*
15. International Rice Genome Sequencing Project (S Wright coauthor in Annotation and Analysis), 2005. The map-based sequence of the rice genome. *Nature* 436:793-800.
14. **Wright SI** and Gaut BS. 2005. Molecular population genetics and the search for adaptive evolution in plants. *Molecular Biology and Evolution* 22:506-519.
13. **Wright SI**, and Charlesworth B. 2004. The HKA test revisited: A maximum likelihood ratio test of the standard neutral model. *Genetics* 168:1071-1076.
12. Marais G, Charlesworth B. and **Wright S**. 2004. Recombination and base composition: the case of the highly self-fertilizing plant *Arabidopsis thaliana*. *Genome Biology*. 5:R45. *highlighted in Faculty of 1000*
11. **Wright SI**, Yau CBK, Looseley M and Meyers B. 2004. Effects of gene expression on molecular evolution in *Arabidopsis thaliana* and *Arabidopsis lyrata*. *Molecular Biology and Evolution* 21:1719-1726.
10. **Wright SI**, Agrawal N, and Bureau TE. 2003. Effects of recombination rate and gene density on transposable element distributions in *Arabidopsis thaliana*. *Genome Research* 13: 1897-1903.
9. **Wright SI**, Lauga B. and Charlesworth D. 2003. Subdivision and haplotype structure in natural populations of *Arabidopsis lyrata*. *Molecular Ecology* 12:1247-1263. *highlighted in Faculty of 1000*
8. **Wright SI**, Lauga B and Charlesworth D. 2002. Rates and patterns of molecular evolution in inbred and outbred *Arabidopsis*. *Molecular Biology and Evolution* 19:1399-1406. *highlighted in Faculty of 1000*
7. Charlesworth D and **Wright SI**. 2001. Breeding systems and genome evolution. *Current Opinion in Genetics and Development* 11:685-690.
6. **Wright SI** and Finnegan D. 2001. Genome evolution: Sex and the transposable element. *Current Biology* 11:R296-R299. (Dispatch)
5. **Wright SI**, Le QH, Schoen DJ, and Bureau TE. 2001. Population dynamics of an Ac-like transposable element in self- and cross-pollinating *Arabidopsis*. *Genetics* 158:1279-1288.
4. Yu Z, **Wright SI**, and Bureau TE. 2000. Mutator-like elements in *Arabidopsis thaliana*: structure, diversity and evolution. *Genetics* 156:2019-2031.
3. Le QH*, **Wright SI***, Yu Z, and Bureau TE. 2000. Transposon diversity in *Arabidopsis thaliana*. *Proceedings of the National Academy of Sciences, USA* 97: 7376-7381. *-joint first authorship.
2. **Wright SI** and Schoen DJ 1999. Transposon dynamics and the breeding system. *Genetica* 107:139-148.

1. **Wright SI** and Barrett SCH 1999. Size-dependent gender modification in a hermaphroditic perennial herb. *Proceedings of the Royal Society of London B* 266: 225-232.

PREPRINTS

1. Haoran Xue, Yunchen Gong, Stephen I. Wright, Spencer C.H. Barrett
Genomic evidence for supergene control of Darwin's "complex marriage arrangement" – the tristylous floral polymorphism
bioRxiv 2024.01.15.575583; doi: <https://doi.org/10.1101/2024.01.15.575583>
2. Sacchi B, Humphries Z, Kružlicová J, Bodláková M, Pyne C, Choudhury B, Gong Y., Bačovský V., Hobza R., Barrett SCH, and **Wright SI**. Phased assembly of neo-sex chromosomes reveals extensive Y degeneration and rapid genome evolution in *Rumex hastatulus*. *bioRxiv*, 2023.09.26.559509
3. Mark S. Hibbins, Joanna L. Rifkin, Baharul I. Choudhury, Olena Voznesenka, Bianca Sacchi, Meng Yuan, Yunchen Gong, Spencer C. H. Barrett, Stephen I. Wright.
Phylogenomics resolves key relationships in *Rumex* and uncovers a dynamic history of independently evolving sex chromosomes. <https://doi.org/10.1101/2023.12.13.571571>

GOOGLE SCHOLAR CITATION METRICS:

h-index: 59

Number of citations: 14,322

INVITED SEMINARS

- Wright, SI 2023. President's Award for Research Excellence Plenary talk, Canadian Society for Ecology and Evolution (CSEE) Annual meeting, Winnipeg, Manitoba
- Wright, SI 2023. Adaptation and maladaptation in plant genomes. Department Seminar, University of California Irvine
- Wright, SI 2023. Adaptation and maladaptation in plant genomes. Department Seminar, University of Iowa
- Wright, SI 2022. Adaptation and maladaptation in plant genomes. Department Seminar, University of California Berkeley
- Wright, SI. 2021. Evolution of Plant Sex chromosomes. Virtual Department Seminar, McGill University Department of Plant Sciences.
- Wright, SI. 2021. Dimorphism in recombination landscape contributes to sex chromosome evolution in a dioecious plant. European Society for Evolutionary Biology Virtual Satellite Meeting The remarkable diversity in the rate and mechanisms of sex chromosome evolution.
- Wright, SI. 2020. Evolution of Plant sex chromosomes. Virtual Department Seminar, Colorado State University College of Agricultural Sciences.
- Wright, SI. 2020. Evolutionary Genomics of Y Chromosome Degeneration. The Molecular

- Basis and Evolution of Sexual Dimorphism. European Molecular Biology Organization (EMBO) Symposium. Invited Speaker. Virtual conference due to COVID19 Pandemic (originally scheduled to take place in Heidelberg)
- Wright SI, 2020. Y Degenerate? Evolutionary genomics of sex chromosomes. University of British Columbia Biodiversity Research Seminar
- Wright, SI. 2019. Y degenerate? The population genomics of degenerative genome evolution. UC Berkeley Plant and Microbial Biology Departmental Seminar.
- Wright, SI. 2019. Y degenerate? The evolution of plant sex chromosomes. University of Georgia Genetics Departmental Seminar.
- Wright SI. 2019. Y degenerate? Evolutionary genomics of Y chromosome degeneration in plants. Genetics Society Meeting, A Century of Genetics Symposium. Edinburgh, UK.
- Wright S.I. 2019 Haploid expression, pollen competition, and sex chromosome evolution in plants. Plant Biology Initiative Symposium, Harvard University
- Wright S.I. 2018 Evolution of plant sex chromosomes: Y degenerate? Symposium on Evolution of Plant Reproductive Systems, University of Toronto
- Wright S.I. 2018 Population genomics of polyploid genome evolution. Second joint Evolution conference, Montpellier, France
- Wright, S.I. 2018 Evolution of plant sex chromosomes: Y degenerate? Departmental Seminar, University of Veterinary Medicine, Vienna, Austria
- Wright, S.I. 2017
Population genomics of plant reproductive transitions.
Evolution of sex chromosomes: Y go backwards?
Plenary talks, Symposium on Evolution of Plant reproductive systems, Campo Grande, Brazil
- Wright, S.I. 2017
Population genomics of Y chromosome degeneration. International Botanic Congress, Shenzhen, China
- Wright, S.I. 2016 Population genomics of degenerative genome evolution. Duke University Durham, North Carolina. Departmental 'super speaker' program
- Wright, S.I. 2016 Population genomics of degenerative genome evolution. Max Planck Institute for Plant Breeding. Cologne, Germany
- Wright, S.I. 2016 Big questions in Evolution. Kyushu University, Fukuoka, Japan.
- Wright, S.I. 2016 Population genomics of the maintenance of genetic variation. University of California, Davis Department Seminar
- Wright, S.I. 2016 Population genomics of plant mating system evolution. University of Michigan Departmental Seminar
- Wright, S.I. 2015 When history repeats itself: population genomics of degenerative genome evolution. Plenary Speaker. Canadian Plant Genomics Workshop, Victoria, BC.
- Wright, S.I. 2015 Population genomics of degenerative genome evolution. Plants and People Conference, Max Planck Institute for Molecular Plant Physiology. Potsdam, Germany.
- Wright, S.I. 2015 Polyploid origins and early genome evolution in *Capsella bursa-pastoris*. Joint Genome Institute User Meeting, Department of Energy, Walnut Creek, CA
- Wright S.I. 2015 Population genomics of mating system evolution. Seminar, Hudson Alpha Institute for Biotechnology, Huntsville Alabama

- Wright, S.I. 2015 Genomics of adaptation. Lausanne Genomics days, University of Lausanne, Switzerland.
- Wright, S.I. 2015 Rapid polyploid adaptation in the highly successful worldwide weed *Capsella bursa-pastoris*. Plant and Animal Genome Conference, Workshop on Weed Genomics. San Diego, CA
- Wright, S.I. 2014 Polyploid origins and selective consequences in *Capsella bursa-pastoris*. International Adaptomics symposium on Genome-enabled approaches towards molecular functions in ecology and evolution. Bad Neuenahr, Germany.
- Wright, S.I. 2013 Population genomics of plant mating systems. University of Minnesota, Plant Biology Graduate Student Symposium Seminar
- Wright, S.I. 2012 Population genomics of mating system evolution. Missouri University, Interdisciplinary program in Plant Biology Seminar
- Wright, S.I. 2012 Comparative and population genomics in the Brassicaceae. International Plant Molecular Biology (IPMB) Conference, Jeju, Korea, Invited speaker
- Wright, S.I. 2012 How much selection is acting on plant genomes? University of Southern California, departmental seminar
- Wright S.I. 2012 Genome-wide quantification of positive and negative selection in the Brassicaceae. Seminar, Gregor Mendel Institute, Vienna Austria
- Wright, S.I. 2012 Comparative and population genomics in the Brassicaceae. Plant and Animal Genome Conference, San Diego, Invited speaker
- Wright, S.I. 2012. Population genomics of plant mating system evolution. IGERT symposium, invited by graduate student committee, University of Arizona
- Wright, S.I. 2012. How much selection is acting on plant genomes? Department of Plant Science, University of Arizona, invited seminar.
- Wright, S.I. 2011. Population genomics of plant adaptation. UC Davis, Department of Plant genetics.
- Wright, S.I. 2011. How much selection is acting on plant genomes? McMaster University, Department of Biology.
- Wright, S.I. 2010. Selection with demography: Population genetics of the evolution of selfing in *Capsella*. Symposium on selection and demography in a metapopulation, Society for Molecular Biology and Evolution (SMBE) Conference, Lyon, France
- Wright, S.I. 2009. Population genomics of plant adaptation: Case studies in *Arabidopsis* And *Capsella*. Department of Botany and Plant Pathology, Purdue University, West Lafayette, IN, USA
- Wright, S.I. 2008. The population genomics of plant adaptation. Department of Botany, University of British Columbia, Vancouver, BC
- Wright, S.I. 2008. Population genomics of plant adaptation in *Arabidopsis* and *Capsella*. Annual Symposium in Plant Biology, University of Massachusetts, Amherst: "Ecological Genomics: the Genetic Basis of Plant Adaptation" Amherst, MA USA
- Wright, S.I. 2008. Population genomics of plant adaptation. Institute of Arctic Biology, Fairbanks Alaska
- Wright S.I. 2007. Extent of selection on the maize genome. Banbury Center Workshop on Genetics of Domestication, Cold Spring Harbor, NY
- Wright, S.I. 2007. The extent of selection acting on plant genomes. Department of

- Biology, University of Toronto, Scarborough
- Wright, S.I. 2007. The extent of selection acting on plant genomes. Department of Biology, University of Rochester, NY
- Wright, S.I. 2007. Polymorphism and divergence in *Arabidopsis*: Does inbreeding matter? Department of Evolutionary Functional Genomics, University of Uppsala Sweden
- Wright, S.I. 2007. Signatures of demographic history and selection in plant genomes. Department of Plant Biology, University of Minnesota
- Wright, S.I. 2007. Demographic history and natural selection in *Arabidopsis*. Department of Integrative Biology, University of Guelph
- Wright, S.I. 2006. Demographic history and selection in plant genomes. Department of Biology, McMaster University.
- Wright, S.I. 2006. Demographic history and natural selection in *Arabidopsis lyrata*. Department of Computational Biology, University of Southern California
- Wright, S.I. 2006. The extent of selection acting on the maize genome. Gordon Research Conference on Molecular Evolution, Ventura, California
- Wright, S.I. 2006. Demographic history and selection in plant genomes. Departments of Botany and Zoology, Evolution seminar, University of Toronto
- Wright, S.I. 2006. Demographic history and selection in plant genomes. Department of Biology, McGill University
- Wright, S.I. 2004. Demographic history and selection during maize domestication. Department of Ecology and Evolution, University of San Diego
- Wright, S.I. 2003. Mating systems and genome evolution. Max Planck Institute for Chemical Ecology, Jena, Germany

GRADUATE THESES SUPERVISED

- John Paul Foxe, M. Sc. Differential gene expression and the effects on molecular evolution and diversity. Completed 2007. Sole supervision.
- Khaled Hazzouri, M.Sc. Contrasting patterns of transposable element insertion polymorphism in autotetraploid and allotetraploid *Arabidopsis* species. Completed 2007. Sole supervision.
- Gessecia Gos, M.Sc. Natural selection on disease resistance genes in *Arabidopsis lyrata*. Completed 2007. Sole supervision.
- Vauqaar-un-Nisa Dar. M.Sc. Effect of natural selection on the frequency of single nucleotide polymorphisms in *Arabidopsis thaliana*. Completed 2008. Sole supervision.
- John Paul Foxe, PhD. Population genetics of mating system transitions in the Brassicaceae. Completed 2010. Sole supervision.
- Gessecia Gos, PhD. Phenotypic evolution and molecular population genomics of weedy polyploid species. Completed 2012. Sole supervision.
- Khaled Hazzouri, PhD. QTL mapping and population genetics of floral evolution in *Capsella*. Completed 2012. Sole supervision.
- Arvid Agren, PhD. Evolution of transposable element activity in *Capsella*. Completed 2015. Sole supervision.
- Adriana Salcedo, M.Sc. completed. Population genomics of adaptation in *Capsella bursa-pastoris*. Completed 2015. Co-supervision
- Emily Josephs, PhD. Genetic basis of gene expression variation in

Capsella. Completed 2016. Co-supervision
Josh Hough, PhD. Evolution of sex chromosomes in *Rumex*. Initiated May 2011.
Completed 2016. Co-supervision.
Ramesh Arunkumar, PhD. Evolutionary genomics of mating system evolution in
Eichhornia. Completed 2016. Co-supervision
Daisy Crowson, M.Sc. Population genomics of sex chromosomes in *Rumex*.
Completed 2016. Co-supervision
Robert Williamson, PhD Completed 2017. Selection on noncoding DNA in *Capsella*.
Initiated Sept. 2010. Sole supervision.
Felix Beaudry, PhD completed 2020. Genome assembly and analysis of sex chromosomes
in *Rumex*. Initiated January 2015. Sole supervision
Julia Kreiner, PhD completed 2020. Comparative population genomics of herbicide
resistance. Initiated September 2015. Co-supervision
Tyler Kent, PhD. Completed 2023. The role of linked selection in structuring genome-wide
diversity. Initiated September 2015. Sole supervision.
Jasmina Uzunovic, M.Sc. Completed 2017. The effects of transposable elements on gene
expression variation in *Capsella*. Sole supervision
Zoë Humphries, PhD. In progress. Evolution of DNA methylation on the sex chromosomes of
Rumex. Co-supervision
Bianca Sacchi, PhD Testing the enhancer runaway model using population genomics. Sole
Supervision. In progress
Haoran Xue, PhD. Genetic basis of tristylly in *Eichhornia paniculata*. In progress. Co-supervision
Georgy Sandler, PhD. Completed 2022. Evolution of sexual reproduction in the wild. Co-
Supervision
Meng Yuan, PhD. Population genomics of sexually antagonistic gene expression. Co-
supervision In Progress.
Cassandre Pyne, PhD. Evolutionary genomics of sex chromosome rearrangements in *Rumex*. In
Progress.

POSTDOCTORAL SUPERVISION

Tanja Slotte, completed 2010, current associate professor, University of Stockholm. sole
supervision
Juan Escobar, EEB Postdoctoral fellow, Completed 2012, currently research associate at
Vidarium Research Centre. sole supervision
Jesse Hollister, completed 2014, currently Assistant Professor, State University of New
York (SUNY) Stony Brook. co-supervision
Young Wha Lee, complete 2014, currently Research Scientist at Monsanto. co-supervision
Magdalena Bartkowska, completed 2015, currently Postdoctoral Fellow, Queen's
University. co-supervision
Stuart Campbell, Banting Postdoctoral fellow in progress. co-supervision, Completed 2016
Kim Gilbert, co-supervision Completed 2016
Joanna Rifkin, co-supervision Completed 2021
Mark Hibbins, in progress