Nadia D. Singh

University of Oregon
Department of Biology
Biology Department
1210 University of Oregon
Eugene, OR 97403-1210

Office: (541) 346-9308
Fax: (541) 346-2364
e-mail: nsingh@uoregon.edu
www.nadiasinghlab.org

EDUCATION

Stanford University, Ph.D. in Biological Sciences (Dmitri Petrov, advisor) 2001-2006
Harvard University, Bachelor of Arts *magna cum laude* in Biology 1996-1999
University of Chicago, coursework towards Bachelor of Arts 1994-1995

PROFESSIONAL EMPLOYMENT

University of Oregon, Associate Professor, Department of Biology 2016-present
North Carolina State University, Associate Professor, Department of Biological Sciences 2016-2017
North Carolina State University, Assistant Professor, Department of Biological Sciences 2013-2016
North Carolina State University, Assistant Professor, Department of Genetics 2010-2013
Cornell University, Postdoctoral Fellow, Department of Molecular Biology and Genetics (Andrew Clark, Charles Aquadro, advisors) 2006-2010
Harvard School of Public Health, Laboratory technician, Program for Human Population Genetics (PI: Xiping Xu) 2000-2001
Harvard University, Research assistant, Department of Organismic and Evolutionary Biology (PI: Stephen Palumbi) 1997-1999
Georgetown University Medical Center, Laboratory technician, Department of Pharmacology (PI: Robert Glazer) 1996

PEER REVIEWED ARTICLES (‡ denotes undergraduate author)

35) Singh, N. D. 2018. Wolbachia infection associated with increased recombination in Drosophila. G3: Genes, Genomes, Genetics, 9(1) 229-237.
34) Kohl, K. P. and N. D. Singh. 2018. Experimental evolution across different thermal regimes yields genetic divergence in recombination fraction but no divergence in temperature-associated plastic recombination. Evolution 72(4): 989-999.
33) Fraimout, A., V. Debat, S. Fellous, R. A. Hufbauer, J. Foucaud, P. Pudlo, J. Marin, D. K. Price, J. Cattel, X. Chen, M. Depra, P. F. Duyck, C. Guedot, M. Kenis, M. T. Kimura, G. Loeb, A. Loiseau, I. Martinez-Sanuda, M. Pascual, M. P. Richmond, P. Shearer, N. Singh, K. Tamura, A. Xuereb, J. Zhang, and A. Estoup. 2017. Deciphering the routes of invasion by *Drosophila suzukii* by means of ABC Random Forest. Molecular Biology and Evolution 34(4): 980-996.
32) Ritz, K. R., M. A. F. Noor, and N. D. Singh. 2017. Variation in recombination rate: Adaptive or Not? Trends in Genetics 33(5): 364-374.
31) Kuzu, G., E. Kaye, J. Chery, T. Siggers, L. Yang, J. Dobson, S. Boor, J. Bliss, W. Lu, G. Jogl, R. Rohs, N. D. Singh, M. Bulyk, M. Tostorukov, and E. Larschan. 2016. Expansion

of GA dinucleotide repeats on the X chromosome promotes the evolution of Drosophila dosage compensation. PLOS Genetics 12(7): e1006120.

30) Hunter, C. M., M. C. Robinson, D. L. Aylor and N. D. Singh. 2016. Genetic background, maternal age, and interaction effects mediate rates of crossing over in *Drosophila melanogaster females*. G3: Genes, Genomes, Genetics 6(5):1409-1416.

29)

28) Dumont, B. L., A. A. Devlin, D. M. Truempy‡, J. C. Miller and N. D. Singh. 2015. No evidence that infection alters global recombination rate in house mice. PLOS ONE 10(11): e0142266.

27) Singh, N. D., D. Criscoe‡, S. Skofield‡, K. P. Kohl, E. S. Keebaugh, and T. A. Schlenke. 2015. Fruit flies diversify their offspring in response to parasite infection. Science 349 (6249):747-750.

26) Jackson, S.‡, D. M. Nielsen and N. D. Singh. 2015. Increased exposure to acute thermal stress is associated with a non-linear decrease in fitness in Drosophila. BMC Evolutionary Biology 15:175

25) O'Shea, K.L.‡ and N. D. Singh. 2015. Tetracycline-exposed *Drosophila melanogaster* females produce fewer offspring but a relative excess of sons. Ecology and Evolution 5(15):3130-3139.

24) Adrion, J.R.‡, A. Kousathanas, M. Pascual, H. J. Burrack, N. M Haddad, A. O. Bergland, H. Machado, T. B. Sackton, T. A. Schlenke, M. Watada, D. Wegmann, and N. D. Singh. 2014. *Drosophila suzukii*: The Genetic footprint of a recent, world-wide invasion. Molecular Biology and Evolution 31:3148-3163.

23) Singh, N. D., L. B. Koerich, A. B. Carvalho, and A. G. Clark. 2014. Positive and purifying selection on the Drosophila Y Chromosome. Molecular Biology and Evolution 31:2612-2623.

22) Hunter, C. M. and N. D. Singh. 2014. Do males matter? Testing the effects of male genetic background on female meiotic crossover rates in *Drosophila melanogaster*. Evolution 68(9):2718-2726.

21) Robinson, M. C., E. A. Stone, and N. D. Singh. 2014. Population genomic analysis reveals no evidence for GC-biased gene conversion in *Drosophila melanogaster*. Molecular Biology and Evolution 31(2):425-433.

20) Singh. N. D., E. A. Stone, C. F. Aquadro and A. G. Clark. 2013. Fine-scale heterogeneity in crossover rate in the *garnet-scalloped* region of *the D. melanogaster* X chromosome. Genetics 194(2):375-87.

19) Singh, N. D., J. D. Jensen, A. G. Clark and C. F. Aquadro. 2013. Inferences of demography and selection in an African population of *D. melanogaster*. Genetics 193:215-228.

18) Connallon, T., N. D. Singh, and A. G. Clark. 2012. Impact of genetic architecture on the relative rates of X versus autosomal adaptive substitution. Molecular Biology and Evolution 29:1933-1942.

17) Fiston-Lavier, A. S., N. D. Singh, M. Lipatov and D. A. Petrov. 2010. *Drosophila melanogaster* recombination rate calculator. Gene 363:18-20.

16) Singh, N. D., C. F. Aquadro, and A. G. Clark. 2009. Estimation of fine-scale recombination intensity variation in the *white-echinus* region of *D. melanogaster*. Journal of Molecular Evolution 69(1):42-53.

15) Singh, N.D., P. F. Arndt, A. G. Clark and C. F. Aquadro. 2009. Strong evidence for lineage- and sequence-specificity of substitution rates and patterns in Drosophila. Molecular Biology and Evolution 26(7):1591-1605.

14) Nishant, K. T., N. D. Singh, and E. Alani. 2009. Genomic mutation rates: What high throughput methods can tell us. Bioessays 31(9):912-920.

13) Bauer DuMont, V. L., N. D. Singh, M. H. Wright, and C. F. Aquadro. 2009. Locus-specific decoupling of base composition evolution at synonymous sites and introns along the *Drosophila melanogaster* and *Drosophila sechellia* lineages. Genome Biology and Evolution 2009:67-74.

12) Singh, N. D., A. M. Larracuente and A. G. Clark. 2008 Contrasting the efficacy of selection on the X and autosomes in Drosophila. Molecular Biology and Evolution 25(2):454-467.

11) Larracuente, A. M., T. B. Sackton, A. Greenberg, A. Wong, N. D. Singh, D. Sturgill, Y. Zhang, B. Oliver and A. G. Clark. Protein-coding gene evolution in Drosophila. 2007. Trends in Genetics 24(3):114-123.

10) Singh, N. D., V. L. Bauer DuMont, M. J. Hubisz, R. Nielsen, and C. F. Aquadro. 2007. Patterns of mutation and selection at synonymous sites in Drosophila. Molecular Biology and Evolution 24(12):2687-2697.

9) Drosophila 12 Genomes Consortium. 2007. Evolution of genes and genomes on the Drosophila phylogeny. Nature 450 (7167):203-218.

8) Singh, N. D., J. M. Macpherson, J. D. Jensen, and D. A. Petrov. 2007. Similar levels of X-linked and autosomal nucleotide polymorphism in African and non-African strains of *Drosophila melanogaster*. BMC Evolutionary Biology *7*:202.

7) Singh, N. D., P. F. Arndt, and D. A. Petrov. 2006. Minor shift in background substitutional patterns in the *Drosophila saltans* and *willistoni* lineages is insufficient to explain GC content of coding sequences. BMC Biology 4:37.

6) Singh, N. D., J. C. Davis, and D. A. Petrov. 2005. X-linked genes evolve higher codon bias in Drosophila and Caenorhabditis. Genetics 171:145-155.

5) Singh, N. D., J. C. Davis, and D. A. Petrov. 2005. Codon bias and noncoding GC content correlate negatively with recombination rate on the Drosophila X chromosome. Journal of Molecular Evolution 61:315-324.

4) Singh, N. D., P. F. Arndt, and D. A. Petrov. 2005. Genomic heterogeneity of background substitutional patterns in *Drosophila melanogaster*. Genetics 169:709-722.

3) Singh, N. D., and D. A. Petrov. 2004. Rapid sequence turnover at an intergenic locus in Drosophila. Molecular Biology and Evolution 21:670-680.

2) Seielstad, M., N. Yuldasheva, N. Singh, P. Underhill, P. Oefner, P. Shen, and R. S. Wells. 2003. A Novel Y-chromosome variant puts an upper limit on the timing of first entry into the Americas. American Journal of Human Genetics 73:700-705.

1) Drici, M. D., S. Ahmad, N. Singh, I. Ducic, R. Glazer, M. Morad, and R. L. Woosley. 1997. Gender difference in I-sK protein in isolated rabbit heart is linked to differences in I-KS in isolated myocytes. Clinical Pharmacology & Therapeutics 61:203.

INVITED BOOK CHAPTERS, REVIEW ARTICLES, AND PERSPECTIVES

6) Stone, E. A. and N. D. Singh. 2016. Bias-variance tradeoffs in recombination rate estimation. Genetics 202(2): 857-9.

5) Singh, N. D. 2012. Classical genetics meets next-generation sequencing: Uncovering a genome-wide recombination map in *Drosophila melanogaster*. PLoS Genetics 8(10):e1003024.

4) Singh, N. D. and K. L. Shaw. 2012. On the scent of pleiotropy. Proceeedings of the National Academy of Sciences (USA). 109(1):5-6.

3) Singh, N. D., A. M. Larracuente, T. B. Sackton and A. G. Clark. 2009. Comparative genomics on the Drosophila phylogenetic tree. Annual Review of Ecology, Evolution, and Systematics. 40(10):459-480.

2) Singh, N. D. and D. A. Petrov. 2007. Evolution of gene function on the X chromosome and the autosomes *in* Jean-Nicolas Volff, ed. Genome Dynamics volume 3: Gene and Protein Evolution. Karger, Wurzburg, Germany.

1) Srikummool, M., D. Kangwanpong, N. Singh, and M. Seielstad. 2001. Y-chromosomal variation in uxorilocal and patrilocal populations in Thailand *in* L. Jin, M. Seielstad, and C. Xiao, eds. Genetic, Linguistic, and Archeological Perspectives on Human Diversity in Southeast Asia. World Scientific Publishing, River Edge, New Jersey.

GRANT SUPPORT

Current Support

Project Title: The Genetic basis of phenotypic plasticity in meiotic recombination rate
Investigator(s): Singh, N.D.
Objectives: To determine the genetic basis of population-level variation in meiotic recombination rate. To determine the genes mediating changes in recombination rate in response to the environment.
Sponsor: National Science Foundation (MCB-1412813)
Funding: $619,708 ($430,568 direct; 8/1/2014-7/31/2019)

Project Title: CAREER: The Evolution of fine-scale recombination landscapes.
Investigator(s): N. D. Singh
Objectives: To quantify population level variation in fine-scale recombination landscapes. To assess effects of fine scale heterogeneity in recombination for polymorphism and divergence.
Sponsor: National Science Foundation (DEB- 1552040)
Funding: $1,249,869 ($848,281 direct; 8/1/2016-7/31/2021)

Completed Support

Project Title: Quantification of fine-scale variation in recombination rate in Drosophila using targeted next-generation sequencing
Investigator(s): Clark, A. G., N. D. Singh and C. F. Aquadro
Objectives: To produce an ultra-fine-scale map of recombination intensity in a 2.1 Mb region of the *D. melanogaster* X chromosome.
Sponsor: Cornell Center for Comparative and Population Genomics
Funding: $13,268 ($13,268 direct; 6 months; 01/01/2010-6/30/2010)

Project Title: Role of mutation rate variation in patterns of molecular evolution in Drosophila
Investigator(s): Singh, N.D., A. G. Clark, and C. F. Aquadro
Objectives: To use polymorphism patterns at unconstrained transposable elements throughout the genome to infer neutral mutational patterns.
Sponsor: National Institutes of Health (NRSA Postdoctoral Fellowship F32GM080944)
Funding: $147,750 (3 years; 7/1/2007-6/30/2010)

HONORS AND AWARDS

NIH Ruth L. Kirschstein National Research Service Award (2007)
Center for Evolutionary Studies (CES) Research Fellowship (2003, 2004, 2005)
Department of Biological Sciences Excellence in Teaching Award (2002)

Stanford University Centennial Teaching Award (2005)
Trainee on Stanford Genome Training Grant (funded by 5 T32 HG00044 from NHGRI) (2003, 2004, 2005)
Harvard College Research Program Grant (1999)
Dean's List, Harvard University (1997-9)

PROFESSIONAL SERVICE

Editorial and Review Service

Preprint Editor, PLOS Genetics (2016-present)
Associate Editor, Molecular Biology and Evolution (2015-present)
Academic Editor, PLoS One (2011-2014)
Guest Associate Editor, PLoS Genetics (3X, 2012-2015)
Ad hoc peer reviewer for primary journals (102 total): American Naturalist (2017), BMC Evolutionary Biology (3X, 2009-2015), BMC Genomics (2X, 2008-2013), Current Biology (2X, 2014-2018), Environmental Entomology (2015), European Journal of Entomology (2014), Evolution (5X, 2009-2018), Genes, Genomes, Genetics (3X, 2012-2014), Genome Biology and Evolution (8X, 2010-2018), Gene (2X, 2007-2009), Genetica (2009), Genetics (20X, 2007-2017), Genome Research (2X, 2008-2015), Heredity (3X, 2008-2016), Journal of Heredity (2017), Journal of Insect Science (2016), Journal of Molecular Evolution (4X, 2006-2009), Nature Genetics (2017), Molecular Biology and Evolution (17X, 2005-2017), Molecular Ecology (2X, 2008), Philosophical Transactions of the Royal Society B: Biological Sciences (2016), PLoS Biology (2X, 2008-2018), PLoS Genetics (10X, 2008-2017), PLoS One (3X, 2011-2016), Proceedings of the National Academy of Sciences (3X, 2006-2018), Proceedings of the Royal Society Series B (2011), Science (2016) Scientific Reports (2X, 2015-2018)
Reviewer, National Institutes of Health Genetic Variation and Evolution Study Section (2X, 2016-2018)
Reviewer, National Science Foundation Evolutionary Genetics Panel (4X, 2011-2016)
Ad hoc peer reviewer for grants: National Science Foundation (6X, 2010-2018), Austrian Science Fund (2015), Israel Science Foundation (2016), US-Israel Binational Science Foundation (2X, 2017-2018)
Ph.D. Defense opponent, Uppsala University (Jonas Berglund, major advisor Matthew Webster; 2014)

Conference and Society Service

Member, Genetics Society of America Committee on Equity and Inclusion (2019-present)
Secretary, Society for Molecular Biology and Evolution (2019-present)
Council Member, American Genetics Association (2017-present)
Session Chair, Evolution and Population Genetics, Annual Drosophila Research Conference 2018
Organizer, Workshop on 'Navigating the transition to being a PI,' Annual Drosophila Research Conference 2018
Session Chair, Population, Evolutionary and Quantitative Genetics Conference 2018
Organizer, Workshop "A Community-oriented approach to build and support women in science," Population, Evolutionary and Quantitative Genetics Conference 2018
Selection Committee, Society for Molecular Biology and Evolution Walter M. Fitch award (2016)
Selection Committee, Genetics Society of America DeLill Nasser Award (2013-2016)
Selection Committee, Society for the Study of Evolution Hamilton Award (2014)
Poster judge, Annual Biomedical Research Conference for Minority Students (2017, 2018)
Poster judge, Annual Drosophila Research Conference (2014)

Faculty Mentor, Society for Molecular Biology and Evolution Undergraduate Travel Award (2014)
Poster judge, Annual meeting of the Society for Molecular Biology and Evolution (2012)

University Service

Faculty Associate in STEM programming, Center on Diversity and Community (2019-present)
Member, Search Committee for Research Development Officer (2018-2019)
Member, Committee on Sexual and Gender-Based Violence (2017-present)
Chair, CAS Natural Sciences Diversity Leadership Committee (2018-2019)
Chair, G3CF FAC (2018-2019)
Participant, Knight Campus Strategic Planning Workshop (2018)
Reviewer, OHSU-UO Collaborative Seed Grants (2018)
Reviewer, UO Women in Graduate Science Awards (2018)
Member, GTFF faculty workgroup (2018)
Faculty Mentor, Initiative for Maximizing Student Diversity (2012-2017)
Member, Program in Genetics Executive Committee (2014-2016)
Chair, Program in Genetics Activities Committee (2014)

Departmental Service

Member, Department of Biology Undergraduate Research Committee (2017-2018)
Chair, Department of Biology Diversity Committee (2017-2019)
Member, Genetics Training Grant Executive Committee (2018-present)
Co-Chair, Department of Genetics Retreat Planning committee (2011-2013)

Institute of Ecology and Evolution Service
Member, Director Advisory committee (2018-present)

Search Committees

Faculty Search Committee, Assistant Professor of Genomics and Bioinformatics (2017-2018)
Faculty Search Committee, Assistant/Associate Professor of Neuroscience (2015-2016)
Faculty Search Committee, Assistant Professor of DNA Forensics (2012-2014)
Faculty Search Committee, Assistant Professor of Mouse Genetics (2011-2012)
Faculty Search Committee, Assistant Professor of Genetics (2010-2011)

Graduate Thesis Committees

In progress
Shola Aleru (Ph. D., Biology; Major advisor: Matthew Barber)
Zac Bush (Ph.D., Biology; Major advisor: Diana Libuda)
Nicole Nakata (Ph. D., Biology; Major advisor: Richard Emlet)
Erik Toraason (Ph.D., Biology; Major advisor: Diana Libuda)

Completed
Xiang Ji (Ph.D., Bioinformatics; 2017; Major advisor: Jeff Thorne)
Katherine Swoboda (Ph.D., Entomology; 2017; Major advisor: Hannah Burrack)
Sarah Cash (Ph.D., Genetics; 2016; Major advisor: Fred Gould)
Carlee Hemphill (M.S., Functional Genomics; 2015; Major advisor: David Aylor)
Lauren Dembeck (Ph.D., Genetics; 2015; Major advisor: Trudy Mackay)
Megan Supple (Ph.D., Biomathematics, 2014; Major advisor: Owen McMillan)
Steven Vensko (Ph.D., Genetics; 2015; Major advisor: Eric Stone)

Xin Wang (Ph.D., Bioinformatics, 2013; Major advisor: Jung-Ying Tzeng)

Graduate Student Representative
Lucky Mehra (Ph.D., Plant Pathology, 2015; Major advisor: Christina Cowger)
Kathleen Burchhardt (Ph.D., Plant Pathology, 2014; Major advisor: Marc Cubeta)

PROFESSIONAL AFFILIATIONS

Genetics Society of America (2008-present)
Society for Molecular Biology and Evolution (2004-6, 2008-present)

Bioinformatics Research Center, North Carolina State University (2015-2017)
W. M. Keck Center for Behavioral Biology, North Carolina State University (2010-2017)

TEACHING EXPERIENCE

University of Oregon

Population Genetics (BI610). Winter 2019
Population Genetics (BI486/586). Spring 2018
SCORE (Students of Color Opportunities for Research Enrichment, BI407). Fall 2018, 2019

North Carolina State University

Population and Quantitative Genetics (GN703). Co-instructor with Dr. Dahlia Nielsen. Spring 2012-2017
Application for Graduate Study (GN490). Spring 2014, 2015
Guest Lecture, Population and Quantitative Genetics (GN703). Spring 2011

Other Universities

Summer Institute in Statistical Genetics, University of Washington. Conservation Genetics Module. Co-Instructor with Dahlia Nielsen. Summer 2018, 2019.
Workshop in Bioinformatics and Computational Biology, Fayetteville State University. Instructor. Spring 2016.
Workshop in Quantitative Evolutionary Biology. Mathematics Village, Turkey. Instructor. Summer 2014.
Fundamentals of Molecular Evolution (Bio113). Stanford University. Teaching assistant. Spring 2003.
Introduction to Ecology (Bio101). Stanford University. Teaching assistant. Fall 2002.
Physiology, Plant Biology, Ecology and Evolution (Bio43). Stanford University. Teaching assistant. Spring 2002.
Organismic and Evolutionary Biology (BS2). Harvard University. Course assistant. Fall 1997.

INVITED RESEARCH PRESENTATIONS

2019

University of North Carolina, Chapel Hill, Integrative Program for Biological & Genome Science, August 13
American Genetic Association President's Symposium on 'Sex and asex: The Genetics of complex life cycles," June 4
University of Kansas, Department of Molecular Biosciences, May 6

2018

University of New Mexico, Center for Evolutionary and Theoretical Immunology, November 30
University of California, Santa Cruz, Department of Molecular, Cellular and Developmental Biology, October 8
University of Oregon, Genetics Training Grant Seminar, May 8
Oregon State University, Department of Integrative Biology, March 12

2016

Texas A&M University, Genetics and Genomics Seminar Series, September 26
META Center for Systems Biology Symposium, August 6
University of Rochester, Department of Biology, May 5
Cornell University, Department of Molecular Biology and Genetics, May 3
University of Florida, Department of Biology, April 7
University of Arizona, Department of Ecology and Evolution, March 24
University of Oregon, Department of Biology, January 21

2015

Duke University, PopGroup Seminar Series, December 3
Vienna Graduate School of Population Genetics, November 3
Duke University, Drosophila Seminar Series, September 10
Drosophila Research Conference, Workshop on 'Homologous Recombination: Mechanisms and Metrics.' March 7.
Drosophila Research Conference, Plenary Session for Undergraduates. March 5

2014

Uppsala University, Evolutionary Biology Center, November 21
Meiosis Gordon Research Conference, June 5
University of California, Los Angeles, Bioinformatics Seminar Series, May 19
University of Rochester, Department of Biology, April 7

2013

Ecole Polytechnique Federale de Lausanne, Systems and Computational Biology Group,November 25
University of North Carolina, Greensboro, Department of Biology, November 20
Brown University, Department of Molecular Biology, Cellular Biology, and Biochemistry, October 30

2012

American Genetics Association Symposium on 'Recombination: Molecular mechanisms and evolutionary consequences,' July 15
Wayne State University, Department of Biology. April 23.
Brown University, Department of Ecology and Evolutionary Biology. April 20.
North Carolina State University, Department of Biology. April 12.

2011

University of North Carolina, Chapel Hill, Department of Genetics. April 27.

2010

Duke University, Department of Biology. November 11.
University of Michigan, Department of Biology. February 18.
University of Massachusetts, Boston, Department of Biology. February 10.
University of Pennsylvania, Department of Biology. January 21.
University of Pittsburgh, Department of Biological Sciences. January 11.

2009

Rutgers University, Department of Genetics. December 9.
Society for Molecular Biology and Evolution annual meeting, Symposium on 'The X factor: analyses of sex-specific demography using the X chromosome.' June 8.
North Carolina State University, Department of Genetics. March 26.
University of Washington, Department of Genome Sciences. March 12.
Drosophila Research Conference, Workshop on 'Evolution and causes of codon usage in the genus Drosophila.' March 6.
University of Notre Dame, Department of Biology. February 20.
University of Arizona, Department of Ecology and Evolutionary Biology. February 9.
University of North Carolina, Charlotte, Department of Bioinformatics and Genomics. February 5.
University of Southern California, Department of Biological Sciences. January 30.
University of California, Santa Barbara, Department of Ecology, Evolution, and Marine Biology. January 12.
University of Massachusetts Medical School, Program in Bioinformatics and Integrative Biology. January 5.

2008

University of California, San Diego, Division of Biological Sciences. December 11.
Colgate University, Department of Biology Capstone Seminar. February 8.

SUBMITTED RESEARCH PRESENTATIONS (* denotes presenting author; ‡ denotes undergraduate author)

Hunter, C. M. and N. D. Singh*. 2015. The Genetic architecture of recombination rate variation in *Drosophila melanogaster*. Oral presentation at the annual meeting of the European Society for Evolutionary Biology.

Hunter, C. M.* and N. D. Singh. 2015. Rates of recombination gradually increase over time in *Drosophila melanogaster* females. Poster presentation at the annual Drosophila Research Conference.

Hunter, C. M.* and N. D. Singh. 2014. The Genetic architecture of recombination rate variation in *Drosophila melanogaster*. Poster presentation at the annual meeting of the Society for the Study of Evolution.

Criscoe, D.‡, E. S. Keebaugh, S. Skolfield‡, T. A. Schlenke and N. D. Singh*. 2014. Pathogen pressures increase meiotic recombination rate in Drosophila. Oral presentation at the annual meeting of the Society for Molecular Biology and Evolution.

Hunter, C. M.* and N. D. Singh. 2014. The Genetic architecture of recombination rate variation *in Drosophila melanogaster*. Poster presentation at the annual meeting of the Society for Molecular Biology and Evolution.

Criscoe, D.*‡, E. S. Keebaugh, S. Skolfield‡, T. A. Schlenke and N. D. Singh. 2014. Pathogen pressures increase the rate of meiotic recombination in Drosophila. Poster presentation at the annual Drosophila Research Conference.

Hunter, C. M.* and N. D. Singh. 2013. Do males matter? Exploring male-mediated effects on

female meiotic recombination. Poster presentation at the annual Drosophila Research Conference.

Adrion, J. R.*‡, N. M. Haddad, H. J. Burrack, and N. D. Singh. 2012. Genetic population structure of the emergent invasive fruit pest, *Drosophila suzukii*. Poster presentation at the annual Drosophila Research Conference.

Robinson, M.*, E. A. Stone, and N. D. Singh. 2012. No evidence of GC-biased gene conversion in *Drosophila melanogaster*. Poster presentation at the annual Drosophila Research Conference.

Singh, N. D.*, E. A. Stone, C. F. Aquadro and A. G. Clark. 2010. Ultra-fine scale recombination heterogeneity in *D. melanogaster*. Oral presentation at the annual Drosophila Research Conference.

Bauer Dumont, V. L.*, N. D. Singh, M. H. Wright and C. F. Aquadro. 2009. Genome-wide comparisons of base composition evolution between synonymous and intron sites identifies loci with divergent selective pressures. Oral presentation at the annual meeting of the Society for Molecular Biology and Evolution.

Singh, N. D.*, C. F. Aquadro and A. G. Clark. 2008. Fine-scale recombination rate estimation in *Drosophila melanogaster*. Poster presentation at the annual meeting of the Society for Molecular Biology and Evolution.

Singh, N. D.*, C. F. Aquadro and A. G. Clark. 2008. Fine-scale recombination rate estimation in *Drosophila melanogaster*. Poster presentation at the annual Drosophila Research Conference.

Singh, N. D.*, P. F. Arndt, A. G. Clark and C. F. Aquadro. 2007 Inter- and intra-specific heterogeneities in substitutional patterns in Drosophila. Poster presentation at the annual meeting of the Society for Molecular Biology and Evolution.

Singh, N. D.*, J. C. Davis, and D. A. Petrov. 2005. X-linked genes evolve higher codon bias in Drosophila and Caenorhabditis. Oral presentation at the annual meeting of the Society for Molecular Biology and Evolution.

Singh, N. D.*, P. F. Arndt, and D. A. Petrov. 2004. Genomic heterogeneity in background substitutional patterns in Drosophila. Oral presentation at the annual meeting of the Society for Molecular Biology and Evolution.

Singh, N. D.* and D. A. Petrov. 2003. Dramatic sequence turnover at an unconstrained fourth chromosome locus in Drosophila. Oral presentation at the annual Evolution meeting.

Singh, N. D.* and D. A. Petrov. 2003. Dramatic sequence turnover at an unconstrained fourth chromosome locus in Drosophila. Oral presentation at the annual meeting of the Society for Molecular Biology and Evolution.

LAB MEMBERS AND ALUMNI

Graduate students

In progress

Sophia Frantz (Ph.D. Biology 2019-present)
Sabrina Mostoufi (Ph.D. Biology 2019-presents

Completed

Chad Hunter (Ph.D. Genetics, 2011-2016)
Matthew Robinson (M.S., Genetics, 2010-2014)

Postdoctoral associates

In progress

Amanda Bonner (2019-present)

Completed

Victoria Cattani (2016-2017; currently employed with Eva Garland Consulting)

Bethany Dumont (2013-2016; currently Assistant Professor at The Jackson Laboratory)
Kathryn Kohl (2013-2014; currently Assistant Professor at Winthrop University)
Heather Hines (co-sponsor 2010-2012; currently Assistant Professor at Pennsylvania State University)

Research professionals
Ari Winbush (2018-present)
Annette Estevez (2018-present)
Joshua Coleman (2018-present)
Stephanie Ruzsa (2010-2017)

NCSU Undergraduates
Dana Truempy (2014-2016)
Amy Kelly (2014-2015)
Kaitlyn O'Shea (2013-2015)
Goran Cetkovic (2014)
Savannah Jackson (2013-2014)
Haylee McLean (2013-2014)
Stephen Gilene (2013-2014)
Dallas Criscoe (2012-2014)
Jeffrey Adrion (2011-2012)
Dhriti Nayyar (2011-2012)

High School Students
Supriya Sivadanam (Summer 2014)
Karl Widney (2013-2014)