Nolan C. Kane
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Positions:
Assistant Professor, University of Colorado, Boulder, 2013-present.
Research Associate, University of Colorado, Boulder, 2012-2013.
Editor, News and Views, *Molecular Ecology*, 2006-present.
Editor, News and Views, *Molecular Ecology Resources*, 2009-present.
Post-doctoral Fellow, University of British Columbia, Vancouver, Canada, 2008-2013.

Education:
Ph.D. in Evolution, Ecology and Behavior, Indiana University in Bloomington. "Genetics and ecology of adaptation and speciation in *Helianthus*" with Loren H. Rieseberg, 2001-2007.
Sc. B Biology, *magna cum laude*, Brown University, Honors dissertation, 1995-1999.

Teaching Experience:
Instructor, *Next generation sequencing data in ecology and evolution*, Evolution 2012, Ottowa.
Instructor, *Plant Evolution* University of British Columbia, 2009.
Associate Instructor, *Honors Evolution*, Indiana University. 2005.
Teaching Assistant, *Genetics*, Brown University. 1999.
Teaching Assistant *Plant Organism* Brown University. 1998, 1999.

Fellowships, Major grants and Awards:

2013	Most cited paper in *Botany*.	$1,000
2009	Genome Canada, *Genomics of Sunflower,* Co-PI	$10,481,589
2008	Sigma Xi, Full Member	
2002	NSF Evolution, Development and Genomics, IGERT fellowship	$63,300
2001	NSF Graduate Research Fellowship	$110,000
1999	Maria L. Caleel Memorial Prize for Academic Excellence	
1999	Sigma Xi	
1999	Phi Beta Kappa	
1995	Hall-Dale High School,Valedictorian	

Publications: **h-index: 16 i10-index: 19 Total citations: 1040 (August 2013)**

Peer reviewed publications:

In press:

Bell, G. D. B., **Kane, N.C.**, Rieseberg, L. H., and Adams, K.L. RNA-seq analysis of allele-specific expression, hybrid effects, and regulatory divergence in hybrids compared with their parents from natural populations. *Genome Biology and Evolution*.

Bock, D. G., **Kane, N. C.**, Ebert, D. P, Rieseberg, L. H. The origin of the Jerusalem artichoke: neither from Jerusalem nor an Artichoke. *New Phytologist.*

Yang, J. Y., Scascitelli, M., Motilal, L. A., Sveinsson, S., Engels, J. M. M., **Kane, N. C.**, Dempewolf, H., Zhang, D., Maharaj, K., and Cronk, QCB. Complex origin of Trinitario-type *Theobroma cacao (*Malvaceae) from Trinidad and Tobago revealed using plastid genomics. *Tree Genetics and Genomes*. DOI:10.1007/s11295-013-0601-4

Hodgins, K., Lai, Z., Oliveira, L., Still, D. W., Scascitelli, M., Barker, M., **Kane, N. C.**, *et al*. Genomics of Compositae crops: Reference transcriptome assemblies, and evidence of hybridization with wild relatives. *Molecular Ecology Resources.*

2013. **Kane, N. C.**, Marek, L., Burke, J. M., Seiler G. and Rieseberg, L. H. Sunflower genetic, genomic and ecological resources. *Molecular Ecology Resources* 13:10-20. (Cover illustration)

Vines, T. H., Andrew, R. L., Bock, D. G., Franklin, M.T., Gilbert, K. J., **Kane, N.C.**, Kleynhans, E., Moore, J-S., Moyers, B. T. Renaut, S., Rennison, D. J., Veen, T. and Yeaman, S. Mandated archiving greatly improves access to research data. *FASEB* 27:1304-1308.

Renaut, S., Grassa, C. J., Yeaman, S., Moyers, B. T., Lai, Z., **Kane, N. C.**, Bowers, J. E., Burke, J. M. and Rieseberg, L. H. Number and size of genomic islands of differentiation do not vary with geography of speciation. *Nature Communications* 4:1827.

Sveinsson, S., Gill, N, **Kane, N. C.**, and Cronk, Q. Transposon fingerprinting using low coverage whole genome shotgun sequencing in Cacao (*Theobroma cacao* L.) and related species. *BMC Genomics* 14:502.

Andrew, R. L, Bernatchez, L., Bonin, A., Carstens, B. C., Emerson, B. C., Garant, D., Giraud, T., **Kane, N. C.**, et al. A roadmap for molecular ecology. *Molecular Ecology* 22:2605-2626.

Andrew, R. L., **Kane, N. C.**, Baute, G. J., Grassa, C. J. and Rieseberg, L. H. Recent non-hybrid origin of sunflower ecotypes in a novel habitat. *Molecular Ecology.* 22:799-813.

2012. Renaut, S., Grassa, C., Moyers, B., **Kane, N. C.** and Rieseberg, L.H. The population genomics of sunflowers and genomic determinants of protein evolution revealed by RNAseq. *Biology* 1: 575-596.

Koziol, L., Rieseberg, L. H., **Kane, N. C.**, and Bever, J. D. Reduced drought tolerance results from trade-off against resource allocation towards growth and fecundity during domestication and the evolution of weediness. *Evolution* 66(12):3803-14.

Rieseberg, L. H., Blackman, B. K., Scascitelli, M., and **Kane, N. C.** On the Origin of Sunflowers: Fossils, Genes, Genomes, and Hybridization. Proceedings of 18th International Sunflower Conference, 2012, Mar del Plata & Balcarce, Argentina.

Staton, S. E., Bakken, B. H., Ungerer, M. C., **Kane, N. C.,** Knapp, S. J., Rieseberg, L. H. and Burke, J. M. 2012. The sunflower (*Helianthus annuus* L.) genome reflects a history of biased accumulation of transposable elements. *The Plant Journal* 72:142-153.

Gilbert, K. J., Andrew, R. L., Bock, D. G., Franklin, M. T., **Kane, N. C.**, Moore, J-S., Moyers, B. T. Renaut, S., Rennison, D. J., Veen, T. and Vines, T. H. Recommendations for utilizing and reporting population genetic analyses: the reproducibility of genetic clustering using the program STRUCTURE. *Molecular Ecology* 21: 4925–4930.

Lai, Z., Zou, Y., **Kane, N. C.**, Choi, J., Wang, M. and Rieseberg, L. H. Preparation of normalized cDNA libraries for 454 Titanium transcriptome sequencing. Methods in Molecular Biology 888:119-33.

Kane, N. C., Sveinsoon, S., Dempewolf, H., Yang, J. Y., Zhang, D., Engels, J. M. M. and Cronk, Q. Ultra-barcoding in cacao using whole chloroplast genomes and nuclear ribosomal DNA. *American Journal of Botany* 99:320-329.

Lai, Z., **Kane, N.C.**, Kozik, A., Hodgins, K. A., Dlugosch, K. M., Barker, M. S. *et al.* Genomics of Compositae weeds: EST libraries, microarray, and evidence of introgression. *American Journal of Botany* 99:209-218.

2011. Blackman, B. K., Scascitelli, M., **Kane, N. C.**, Luton, H., Bye, R. A., Lentz, D. L. and Rieseberg, L. H. Sunflower domestication alleles support single domestication center in eastern North America. *Proceedings of the National Academy of Sciences,* 34:14360-14365.

Kane, N. C., Zhan, S., Barker, M. S. and Rieseberg, L. H. Molecular evolution across the Asteraceae: micro- and macroevolutionary processes. *Molecular Biology and Evolution, 28:3225–3235.*

Mayrose, M., **Kane, N. C.**, Mayrose I. and Rieseberg, L. H. Increased vigour in sunflower correlates with reduced defenses and altered gene expression during biotic and abiotic stress responses. *Molecular Ecology* 20:4683-4694.

Kane, N. C., Gill, N., King, M.G. , Bowers, J.E., Berges, H., Gouzy, J., Bachlava, E., Langlade, N.B., Lai, Z., Stewart, M., Burke, J.M., Vincourt, P., Knapp, S.J. and Rieseberg, L.H. Progress towards a reference genome for sunflower. *Botany* 89:429-437.
Most cited paper in *Botany* from 2011.

Strasburg, J. L., **Kane, N. C.,** Raduski, A. R., Bonin, A., Kozik, A., Michelmore, R. and Rieseberg, L. H. Effective population size is strongly correlated with rates of adaptive divergence among annual sunflowers. *Molecular Biology and Evolution* 28:1569-1580.
Faculty of 1000, http://f1000.com/10407956http://f1000.com/10407956

2010. Dempewolfe, H., **Kane N. C.** Ostvik K. L. *et al.* Establishing genomic tools and resources for *Guizotia abyssinica* (L.f.) Cass. – the development of a library of expressed sequence tags, microsatellite loci and the sequencing of its chloroplast genome. *Molecular Ecology Resources* 10:1048-1058.

Molecular Ecology Resources Primer Development Consortium, *et al.* Permanent Genetic Resources added to the Molecular Ecology Resources Database 1 February 2010–31 March 2010. *Molecular Ecology Resources* 10:751-754.

Barker, M. S., Dlugosch, K. M., Dinh, L., Challa, S., **Kane, N. C.**, King, M. G. and Rieseberg, L. H. EvoPipes.net: Bioinformatic pipelines and forums for ecological and evolutionary genomics. *Evolutionary Bioinformatics* 6:143-149.

2009. **Kane, N. C.,** King, M. G., Barker, M. S., Raduski, A., Karrenberg, S., Yatabe, Y., Knapp, S. J. and Rieseberg, L. H. Comparative genomic and population genetic analyses indicate highly porous genomes and high levels of gene flow between divergent *Helianthus* species. *Evolution* 63:2061-2075.

2008. Barker, M. S., **Kane, N. C**., Kozik, A., Michelmore, R. W., Knapp, S. J., Kesseli, R. K., Still, D. W., Bradford, K. J., and Rieseberg, L. H. Multiple paleopolyploidizations during the evolution of the Compositae reveal parallel patterns of duplicate gene retention after millions of years. *Molecular Biology and Evolution*. 25:2445-2455.

Lai, Z. **Kane, N. C.**, and Rieseberg, L. H. Natural variation in gene expression between wild and weedy populations of *Helianthus annuus*. *Genetics* 179:1881-1890.

Kane, N. C. and Rieseberg, L. H. Genetics and the evolution of weediness in *Helianthus annuus. Molecular Ecology* 17: 384-394.

2007. Yatabe, Y., **Kane, N. C**. Scotti-Saintagne, C. and Rieseberg, L. H. 2007. Rampant gene exchange across a strong reproductive barrier between the annual sunflowers, *Helianthus annuus* and *H. petiolaris*. *Genetics* 175: 1883-1893.

Kane, N. C. and Rieseberg, L. H. 2007. Selective sweeps reveal candidate genes for adaptation to drought and salt tolerance in common sunflower, *Helianthus annuus*. *Genetics* 175:1823-1824.

2004. Ludwig, F., Rosenthal, D. M., Johnston, J. A., **Kane, N.**, Gross, B. L., Lexer, C., Dudley, S. A., Rieseberg, L. H. and Donovan, L. A. 2004. Selection on leaf ecophysiological traits in a desert hybrid *Helianthus* species and early generation hybrids. *Evolution* 58:2682-2692.

Weinig, C., Gravuer, K., **Kane**, **N. C.** and J. Schmitt. 2004. Testing adaptive plasticity to UV: costs and benefits of stem elongation and light-induced phenolics. *Evolution* 58:2645-2656.

Gross, B. L. , **Kane, N. C**., Lexer, C. Ludwig, F., Rosenthal, D. M., Donovan, L. A. and Rieseberg, L. H. 2004. Reconstructing the origin of *Helianthus deserticola*: Survival and selection on the desert floor. *The American Naturalist* 164:145-156.

Huber, H., **Kane, N. C.,** Heschel, M. S. von Wettberg, E. J. Banta, J., Leuck, A. and Schmitt, J. 2004. Frequency and microenvironmental pattern of selection on plastic shade-avoidance traits in a natural population of *Impatiens capensis*. *The American Naturalist* 163:548-563.

2003. Weinig C., Dorn L.A**., Kane N.C.**, German Z.M., Hahdorsdottir S.S., Ungerer M.C., Toyonaga Y., Mackay T.F.C., Purugganan M.D., Schmitt J. 2003. Heterogeneous selection at specific loci in natural environments in *Arabidopsis thaliana*. *Genetics* 165:321-329.

2002. Weinig, C., Ungerer, M. C., Dorn, L. A., **Kane, N. C.**, Toyonaga, Y, Halldorsdottier, S. S., Mackay, T. F. C., Purugganan, M. D. and Schmitt, J. 2002. Novel loci control variation in reproductive timing in *Arabidopsis thaliana* in natural environments. *Genetics* 162:1875–1884.

Non-peer-reviewed scientific publications:

2013. Rieseberg, L., Vines, T. and **Kane, N**. Editorial 2013. *Molecular Ecology*, 22:1-14.

2012. Rieseberg, L., Vines, T. and **Kane, N**. Editorial 2012. *Molecular Ecology* 21:1-22.

2011. Rieseberg, L., Vines, T. and **Kane, N**. Editorial – 20 years of Molecular Ecology. *Molecular Ecology* 20:1-21.

2010. Geraldes, A. and **Kane, N. C.** Pushing north one bottleneck at a time: site frequency spectra tell the history of Sitka spruce. *Molecular Ecology* 19:3837–3839.

Moyers, B. and **Kane, N. C**. Genetics of adaptation during colonization. *Molecular Ecology* 19:1270-1272.

Rieseberg, L., Vines, T. and **Kane, N**. 2010 Editorial and Retrospective. *Molecular Ecology* 19:1-22.

2009. Hudson, M. E., and **Kane, N. C.** Plant genomes do a balancing act. *Molecular Ecology* 18:2743-2745.

Kane, N. C. and King, M. Using parentage analysis to examine gene flow and spatial genetic structure. *Molecular Ecology.* 18:1551-1552.

Rieseberg, L., Vines, T. and **Kane, N**. 2009 Editorial and Retrospective. *Molecular Ecology* 18: 1-13.

2008. **Kane, N. C.** and Cronk, Q. Meeting Review: Botany Without Borders, Barcoding in focus. *Molecular Ecology* 17:5175-5176.

2007. **Kane, N. C.** and Baack, E. J. Hybridization and the origin of weedy rice. *Molecular Ecology* 16: 4423-4425.

Ortiz-Barrientos, D. and **Kane, N. C.** The genetics of speciation. *Molecular Ecology* 16: 2852-2854.

2006. **Kane, N. C.**, Gross, B. L., and Rieseberg, L. H. Transgressive segregation (plant breeding). pp. 331-334 in "McGraw-Hill Yearbook of Science & Technology." McGraw-Hill, New York.

2005. **Kane, N. C**. and Rieseberg, L. H. Maize genetics: The treasure of the Sierra Madre. *Current Biology* 15: R137-R139.

2002. **Kane, N. C.**, Gross, B. L., and Rieseberg, L. H. Book review: Hey, J. Genes, categories, and species - The evolution and cognitive cause of the species problem. *Plant Systematics and Evolution* 234:237-239.

Publications in review/revision:

Sagers, C. L., Travers, S. E., Londo, J. P., Franks, S. J., Schafer, M. G., H'Hara, N. B., Van dewater, P. K., **Kane, N. C.**, and Ellstrand, N., C. Crop-Wild Hybridization, Feralization and Rapid Evolution in Agro-ecosystems. In revision.

Natalia, L., Cossua, R. M., Barghinia, E., Giorania, T., Butia, M., Mascagnia, F., Gill, N., **Kane, N. C.**, Rieseberg, L., Cavallini, A. The repetitive component of the sunflower genome: comparative analyses using different approaches for assembling NGS reads. *In revision.*

Presentations:

Invited talks

2013. **Kane, N. C.** The role of hybridization during domestication and feralization. SMBE meeting, Chicago, Illinois.

Kane, N. C. The evolutionary importance of hybridization. Colorado State University, Fort Collins, Colorado.

Kane, N. C. The evolutionary importance of hybridization. University of Minnesota, St. Paul, Minnesota.

Kane, N. C. The evolutionary importance of hybridization. University of Boulder, Boulder, Colorado.

Kane, N. C. The evolutionary importance of hybridization. University of Nevada, Reno, Reno, Nevada.

Kane, N. C. Hybridization and introgression associated with range expansion and invasion in

sunflowers. Plant and Animal Genome XXI Conference, San Diego, California.

Kane, N. C. Sunflower genome update. Plant and Animal Genome XXI Conference, San Diego, California.

2012. **Kane, N. C.** Hybridization and the origins of novelty. Iowa State University, Ames, Iowa.

Kane, N. C. Hybridization and the origins of novelty. Washington State University, Pullman, Washington.

Kane, N. C. Hybridization and the origin of novelty. University of Arkansas, Fayetteville, Arkansas.

Kane, N. C. Hybrid origins of modern chocolate, cultivated sunflowers and several invasive plants. University of Connecticut, Stores, Connecticut.

Kane, N. C., Grassa, C. J., Gill, N., Bowers, J., Berges, H., Gouzy, J., King, M. G., Bachlava, E., Langlade, N., Burke, J. M., Vincourt., P., Knapp, S. J., and Rieseberg, L. H. The sunflower genome and its evolution. Plant and Animal Genome XX. San Diego, California.

2011. **Kane, N. C.** Crop-wild hybridization is associated with evolution of weedy sunflowers. ESA, Austin, Texas.

Kane, N. C., Grassa, C., Andrew, R., Renaut, S., Rieseberg, L. H. Genetic underpinnings of divergence and adaptation in *Helianthus.* Symposium talk, Botany 2011, St. Louis, MO.

Kane, N. C., King, M. G., Rieseberg, L. H, Andrew, R. Gene flow, hybridization and adaptation in wild, domesticated, and weedy sunflowers. Symposium, International Botanical Congress, Melbourne, Australia.

Rieseberg, L. H., **Kane, N. C.**, Andrew, R., Renaut, S., Scasitelli, M., Strasburg, J. The nature of species boundaries in plants. Keynote symposium, International Botanical Congress, Melbourne, Australia.

Kane, N. C., Grassa, C., Andrews, R. and Rieseberg, L. H. RAD sequencing in sunflowers: Genomics, evolution and ecology. 2011 RAD Sequencing symposium. Portland, Oregon.

Kane, N. C. Next-gen sequencing illuminates the nature of species and speciation. Boyce Thompson Institute, Ithaca, New York.

Kane, N. C. Evolutionary genomics of adaptation and speciation in sunflowers. University of Vermont, Burlington, Vermont.

Rieseberg, L. H., **Kane, N. C.,** *et al.* Physical mapping and sequencing of the sunflower genome. Oral presentation. Plant and Animal Genome XIX, San Diego, California.

Rieseberg, L. H., **Kane, N. C.,** *et al.* The nature of species boundaries in plants. Plant and Animal Genome XIX, San Diego, California.

2010. **Kane, N. C.** The sunflower genome and related genomic resources. J. Craig Venter Institute, Rockville, Maryland.

Kane, N. C. Sequencing the sunflower genome. Oral presentation. Plant and Animal Genome XVIII, San Diego, California.

2009. Dlugosch, K. M., Lai, Z., **Kane, N. C.**, Mayrose, M. and Rieseberg, L. H. The evolution of genomic responses to stress in Compositae weeds. International Plant Molecular Biology Congress, St. Louis.

2008. **Kane, N. C.** Barker, M. S. and Rieseberg, L. H. Molecular evolution across the Asteraceae:

micro- and macroevolutionary processes. Plant and Animal Genome XVI, San Diego, California.

2006. **Kane, N. C.** and Rieseberg, L. H. The genetics of drought tolerance, salt tolerance, and weediness in *Helianthus annuus*. Plant and Animal Genome XIV, San Diego, California.

Kane, N. C. Selective sweeps, gene flow and species boundaries in *Helianthus annuus.* AGA Symposium, Speciation Genetics, Vancouver, British Columbia.

2005. **Kane, N. C.** and Brunick, B. Analysis of phenotypic variation in sunflowers. Compositae genome meetings, Athens, Georgia.

Contributed talks and posters

2013. Grassa, C. J., Ebert, D. P., **Kane, N. C.** and Rieseberg, L. H. Cytoplasmic genomes of sunflowers: Assembly, evolution, structure, and function. Poster P0442. Plant and Animal Genome XXI. San Diego, California.

Baute, G. J., **Kane, N. C.**, Grassa, C. J., and Rieseberg, L. H. The genetics of domestication and improvement in sunflowers (*Helianthus* annuus). Poster P0444. Plant and Animal Genome XXI. San Diego, California.

2012. Gill, N., **Kane, N. C.**, Berges, H., Burke, J. M., Vincourt., P., Knapp, S. J., and Rieseberg, L. H. A sequence-based physical map of the sunflower (*Helianthus annuus* L.) genome. Poster P0700. Plant and Animal Genome XX. San Diego, California.

Grassa, C. J., **Kane, N. C.**, Bowers, J., Knapp, S. J., Burke, J. M., and Rieseberg, L. H. Ultra-high density genetic map of sunflower. Poster P0701. Plant and Animal Genome XX. San Diego, California.

Andrew, R. L., **Kane, N. C.**, Grassa, C. J., Baute, G. J., and Rieseberg, L. H. Genome-wide patterns of divergence between sunflower ecotypes. Poster P0072. Plant and Animal Genome XX. San Diego, California.

2010. **Kane, N. C.,** Whitney, K., Bonin, A. and Rieseberg, L. H. Genomics of invasiveness in *Helianthus*. Oral presentation. Evolution 2010, Portland, Oregon.

2009. **Kane, N. C.** and Rieseberg, L. H. Genes under selection during domestication and adaptation in *Helianthus*. Oral presentation. Evolution 2009, Moscow, Idaho.

2008. **Kane, N. C.** Chloroplast genome sequencing using Solexa and SOLiD. Oral presentation. Botany 2008, Vancouver, BC.

2007. **Kane, N. C.**, Barker, M. S. and Rieseberg, L. H. Molecular evolution across the Asteraceae: micro- and macroevolutionary processes. Oral presentation. ESEB meeting, Uppsala, Sweden.

Barker, M. S., **Kane, N. C.** and Rieseberg, L. H. Widespread paleopolyploidy across the Viridiplantae. Poster presentation. AGA meeting, Bloomington, Indiana.

Barker, M. S., **Kane, N. C.** and Rieseberg, L. H. Widespread paleopolyploidy across the Viridiplantae. Oral presentation. BSA meetings, Chicago, Illinois.

Barker, M. S., **Kane, N. C.** and Rieseberg, L. H. Widespread paleopolyploidy across the Viridiplantae. Poster presentation. MBE meetings, Halifax, Canada.

Kane, N. C. The evolution of agricultural weed ecotypes of *H. annuus*. Oral presentation.

UBC, Vancouver, Canada.

2005. **Kane, N. C.** and Rieseberg, L. H. Selective sweeps reveal candidate genes for adaptation to drought and salt tolerance in *Helianthus annuus*. Oral presentation. Evolution 2005. Fairbanks, Alaska.

2004. **Kane, N. C**. Selective sweeps, linkage disequilibrium, and speciation. Poster presentation. Evolution of Gene Regulation Minisymposium, Eugene, Oregon.

Kane, N. C. Documenting selective sweeps in wild sunflowers: genetics of adaptation. Oral presentation. IGERT seminar series, Indiana University, Bloomington, Indiana.

2003. **Kane, N. C.**, Gross, B. L. and Rieseberg, L. H. Reconstructing the hybrid origins of *Helianthus deserticola*: selection experiments on the desert floor. Oral presentation. Evolution 2003, Chico, California.

2002. **Kane, N. C.** Molecular evolution of genes in pathways. Poster presentation. Mini-symposium on the Microevolution of Development, Indiana University, Bloomington, Indiana.

2001. **Kane, N. C.** Genetics of speciation and divergence in *Helianthus*. Poster presentation. Evolution of gene networks 2001 conference, Eugene, Oregon.

2000. **Kane, N. C.,** Dorn, L. A. and Schmitt, J**.** Novel phenotypes for novel environments: responses to seasonal cues in *Arabidopsis* recombinant inbreds. Oral presentation. Evolution 2000, Bloomington, Indiana.

1999. **Kane, N. C.,** Dorn, L. A. and Schmitt, J. Maternal environmental effects in *Arabidopsis* recombinant inbreds. Poster presentation. XVI International Botanical Congress, St. Louis, Missouri.

Other professional activities:

Scientific Journal Editorships:

News and Views Editor, Molecular Ecology 2006-present
News and Views Editor, Molecular Ecology Resources 2009-present
Advisory Board member, Evolutionary Applications 2011-present
Board of Advisors to the Editors, New Phytologist 2012-present

Reviewer for:

American Journal of Botany, Annals of Botany, BMC Evolutionary Biology, BMC Genomics, Conservation Genetics, Evolution, Evolutionary Applications, Genetic Resources and Crop Evolution, Genetics, Journal of Cell Biology and Genetics, Journal of Heredity, Journal of Molecular Evolution, Molecular Biology and Evolution, Molecular Ecology, Molecular Ecology Resources, New Phytologist, Philosophical Transactions of the Royal Society, Plant Biology, PLoS One, Theoretical and Applied Genetics**.**

Memberships:

Botanical Society of America, Canadian Society for Ecology and Evolution, Ecological Society of America, European Society of Evolutionary Biology, Sigma Xi, Society for the Study of Evolution

Broader impacts:

2012. Full day, hands-on student workshop on "Next generation sequencing data in ecology and evolution", sponsored by the Canadian Institute of Ecology & Evolution (CIEE) and Canadian

Society for Ecology & Evolution (CSEE). July 11, 2012, Ottawa.
2011. Assisted with lesson plans on evolution for 8^{h} graders at Mercer Middle School in Seattle, WA (See *The Seattle Times,* Dec. 7 2011 "How Mercer Middle School soared after struggling" a front page article on the teacher I worked with, Bob Ettinger, mentioning a lesson).
2011. Three exhibits on domestication and speciation in *Helianthus* and *Guizotia,* Beaty Biodiversity Museum, Vancouver.
2011. Blog article on the use of Fst *vs* Jost's D for population genetics on The Molecular Ecologist, http://www.molecularecologist.com/
2006. Lecture and discussion on domestication and speciation in sunflowers, Trout Creek public high school, Trout Creek, Utah.

Popular press coverage:

January 14, 2010. *Science Daily* "Sunflower genome holds the promise of sustainable agriculture".

January 13, 2010. *Vancouver Sun* "Scientists seek sunflowers' secrets: Cracking the plant's DNA code could lead to food, energy improvements."