

# Jeffrey Ross-Ibarra

Department of Evolution and Ecology  
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## Education

PhD Genetics, University of Georgia 2006  
MS Botany, University of California Riverside 2000  
BA Botany, University of California Riverside 1998

## Academic Employment

Professor, Dept. Evolution and Ecology, University of California Davis 2019-present  
Professor, Dept. Plant Sciences, University of California Davis 2016-2019  
Associate Professor, Dept. Plant Sciences, University of California Davis 2012-2016  
Assistant Professor, Dept. Plant Sciences, University of California Davis 2009-2012  
Postdoctoral Researcher, University of California Irvine 2006-2008  
Profesor de Asignatura, Universidad Nacional Autónoma de México 2001

## Selected Fellowships and Awards

Corn Pun Trophy, Genetics Society of America 2017  
Stadler Mid-Career Excellence in Maize Genetics Award 2016  
Faculty Development Award in recognition of university service 2015  
DuPont Young Professor Award 2012  
Presidential Early Career Award for Scientists and Engineers 2009  
Dean's Award for Postdoctoral Excellence, UC Irvine 2008

## Instruction and Advising

Current (total) advisees: 4 (22) postdoc, 5 (9) graduate, 3 (30) undergraduate  
Plant Biology (UC Davis, PLB200A, graduate), 2018-present  
Genetics (UC Davis, BIS 101, undergraduate), 2013-present  
Ecological Genomics (UC Davis, ECL 243, graduate), 2014-present  
Faculty advisor, US-Mexico graduate student exchange program, 2011-2015  
Population and Quantitative Genetics (GGG 201D, graduate), 2010-2013  
Plant Genetics (PLS 152, undergraduate), 2010-2011  
Biología de Plantas I (undergraduate), UNAM, 2001

## Service: selected from last 2 years

### *University*

Chair, Ecology & Evolution Seminar Series  
 Campus-wide High-Performance Computing Task Force  
 Executive Cmte, Plant Biology Graduate Group  
 Ecology Graduate Group admissions committee  
 Campus Disciplinary Peer Review Committee on sexual violence and sexual harassment  
 Campus Task Force on Bioinformatics  
 Section Chair for Agricultural Plant Biology  
 Plant Sciences executive committee  
 Faculty advisor, Corteva graduate student symposium in plant science  
 Search committees: Climate Adaptation  
 Dept. of Plant Sciences academic planning committee

### *Professional*

Chair, PEQG 2022 Conference  
 Organizing Committee, PEQG 2020 Conference  
 LEAD21 Leadership in Land Grant Institutions, Class 14  
 Skype-a-Scientist K-12 Outreach: Canada, Spain, New Jersey  
 Maize Genetics conference steering committee  
 Maize Genetics Awards Committee  
 Editorial Boards: Genes, Genomes, and Genetics (SE, AE)Genetics (Guest) PLoS Genetics (AE)PeerJ (SE, AE)PNAS (Guest)  
 Journal peer review: eLife (3), Cell, Nature Communications (3), Nature Reviews Genetics, PNAS (3), Science, PLoS Genetics, New Phytologist (2), Molecular Ecology, G3 (many), Plant Journal, Agriculture, Ecosystems and Environment

## Current Funding

NSF: "Uncovering the role of transposons in maize variation" \$800,000 of \$4.5M total (Co-PI), 2019-2022  
 NSF: "Harnessing convergence and constraint to predict adaptations to abiotic stress for maize and sorghum" \$740,000 of \$5.4M total (Co-PI), 2018-2022  
 NSF: "The evolutionary genetics of pollen-pistil incompatibility and reproductive isolation in *Zea mays*" \$320,000 of \$1M total (Co-PI), 2018-2021  
 NSF: "The genetics of highland adaptation in maize", \$4.2M (PI), 2016-2021

## Invited Seminars

Calvin Sperling Memorial Biodiversity Lectureship, Phoenix, 2020  
 NCSU, Raleigh, Nov 2020  
 U. Oulu, Finland, April 2020

NYU Abu Dhabi, UAE, Feb. 2020  
 U. Oregon, Eugene, Feb 2020  
 U. Massachusetts, Nov 2019  
 CAAS, Beijing, China, June 2019  
 U. of Science and Technology, Beijing, China, June 2019  
 International Forum on Crop Science, Wuhan, China, June 2019  
 U. California, Riverside, May 2019  
 U. Vermont, Burlington, Apr 2019  
 U. Washington, Seattle, Mar 2019  
 Keynote Speaker, Seed Central, U. California, Davis, Feb 2019  
 Annual James Brewbaker Lecture on Genetics & Plant Breeding, U. Hawaii, Manoa Dec. 2018  
 National Science Foundation, Washington DC, Sept 2018  
 U. Georgia, Athens, Aug 2018  
 Science and Society public lecture, Woodland, Aug 2018  
 Fisher Biosciences, July 2018  
 Texcoco pioneer symposium Sept. 2018 (declined)  
 Corteva Agriscience, Johnston, July 2018  
 Plenary Speaker, Maize Genetics Conference, Saint-Malo, France, Mar 2018  
 University of Paris-Saclay, Gif-sur-Yvette, France, Mar 2018  
 U. California, Davis, Mar 2018  
 Plant And Animal Genome Conference (two workshops), San Diego, Jan 2018  
 Plant And Animal Genome Conference (big data) (declined), Jan 2018  
 U. Nebraska, Lincoln, Nov 2017  
 U. Colorado, Boulder, Oct 2017  
 SBE structural variation symposium, San Antonio, July 2017  
 Harris Moran Breeding, Davis, Feb 2017  
 PAG next-generation sequencing symposium, Jan 2017 (declined)  
 VI Brazilian Plant Molecular Genetics symposium, Ouro Preto, Brazil, May 2017 (declined)  
 Davis Science Cafe, Aug 2016  
 SBE domestication symposium, Queensland, Australia, July 2016  
 UC Master Gardeners, May 2016  
 U. Arizona, Apr. 2016  
 Jo 6 conferencesGenome Institute, Mar. 2016  
 U. Southern California, Feb. 2016  
 LANGEBIO, Irapuato, Mexico, Nov. 2015  
 U. Toronto, Oct. 2015  
 Danforth Center, Sept. 2015  
 SBE workshop on adaptation and next-gen sequencing, Montpellier, June 2015  
 San Francisco Exploratorium, May 2015  
 Dept. of Ecology and Evol. Bio, UC Irvine, April 2015  
 Cornell Plant Breeding Symposium, March 2015

LANGEBIO (Irapuato), Sept. 2014  
Pioneer Hi-Bred (IA), Sept. 2014  
Dept. of Ecology and Evolution, Iowa State U., Sept. 2014  
Pioneer Hi-Bred (CA), Aug. 2014  
Bioagricultural Sciences and Pest Management, Colorado State U., May 2014  
Plant Breeding Genetics and Biotechnology Program, Michigan State (MI), Apr. 2014  
National Maize Improvement Center of China, China Agricultural University (Beijing), Mar. 2014  
Dept. of Agronomy, University of Guelph, Feb. 2014  
Plant and Animal Genome Conference, maize workshop, Jan. 2014  
Plant and Animal Genome Conference, symposium on domestication, Jan. 2014  
Featured Speaker, Ecological Genomics Symposium, Ecological Genetics Institute (MO), Nov. 2013  
Department of Genetics, U. Georgia, Sept. 2013  
Plenary Speaker, Canadian Plant Genomics Workshop (Halifax) Aug. 2013  
Organizer, Evolutionary Genomics symposium, ASPB (RI) 2013  
Biodesign Institute, Arizona State U. 2013  
Interdisciplinary Plant Group, U. Missouri 2013  
UCD@BGI featured speaker, UC Davis 2013  
Plant and Animal Genome Conference, symposium on translational genomics (CA) 2013  
Featured Speaker, UC Davis Seed Central 2013  
Crop Wild Relative Genomics meeting (CA) 2012  
Germplasm Enhancement of Maize, ASTA Conference (IA) 2012  
Pioneer Hi-Bred (CA) 2012  
Plenary Speaker, Coastwide Salmonid Genomics Conference (CA) 2012  
BASF Plant Science (NC) 2012  
Pioneer Hi-Bred (IA) 2012  
Illinois Corn Breeders School (IL) 2012  
Keynote Speaker, North Central Regional Corn Breeding Research Meeting (IL) 2012  
Plant and Animal Genome Conference, symposium on ecological genomics (CA) 2012  
ASA/CSSA/SSSA Convention, symposium on maize biology (TX) 2011  
Dept. of Plant & Microbial Biology, UC Berkeley 2011  
Seminis Vegetable Seeds (CA) 2011  
Dept. of Plant Sciences, UC Davis 2011  
Center for Population Biology, UC Davis 2011  
Dept. of Botany and Plant Sciences, UC Riverside 2011  
USDA Agricultural Research Service, Iowa State U. 2010  
Microbial and Plant Genomics Institute, U. Minnesota 2010  
Society for Molecular Biology and Evolution, Plant Ecological Genomics Symposium (France) 2010  
Dept. of Plant Sciences, UC Davis 2009  
Instituto de Ecología, Universidad Nacional Autónoma de México 2008  
Harlan II Symposium, UC Davis 2008  
Dept. of Biology, UC Riverside 2008

Secretaría de Medio Ambiente y Recursos Naturales, GMO Risk Assessment (Mexico) 2008  
 Dept. of Plant Sciences, UC Davis 2007  
 Dept. of Biology, York University 2007  
 Dept. of Botany and Plant Sciences, UC Riverside 2007  
 Georgia Partnership for Reform in Science and Mathematics (PRISM), U. Georgia 2004  
 University of Georgia Chapter of Sigma-Xi, U Georgia 2004

## Publications (lab members bold, \*equal contribution, †undergraduate, §corresponding, [citations])

### Preprints

Lozano R, Gazave E, dos Santos JPR, Stetter MG, Valluru R, Vandliio N, Fernandes SB, Brown PJ, Shakoor N, Mockler T, **Ross-Ibarra J**, Buckler ES, Gore M. Comparative evolutionary analysis and prediction of deleterious mutation patterns between sorghum and maize. doi: 10.1101/777623 [1]

**Gates DJ**§, Runcie D, Janzen GM, Romero Navarro A, Willcox M, Sonder K, Snodgrass SJ, Rodríguez-Zapata F, Sawers RJH, Rubén Rellín-Álvarez, Buckler ES, Hearne S, Hufford MB, **Ross-Ibarra J**§. Single-gene resolution of locally adaptive genetic variation in Mexican maize. doi: 10.1101/706739 [0]

**Stitzer MC**§, Anderson SN, Springer NM, **Ross-Ibarra J**. The Genomic Ecosystem of Transposable Elements in Maize. doi: 10.1101/559922 [8]

### In press or in print

H-Index 42 (8712 citations as of Fri May 8 14:44:25 2020)

91. Chen Q, Samayo LF, Yang CJ, Bradbury PJ, Olukolu BA, Neumeyer MA, Romay, MC, Sun Q, **Lorant A**, Buckler ES, **Ross-Ibarra J**, Holland JB, Doebley JF (2020). The genetic architecture of the maize progenitor, teosinte, and how it was altered during maize domestication PLoS GENETICS *Accepted* [0]
90. **Zeitler L**, **Ross-Ibarra J**§, **Stetter MGS**§ (2020). Loss of diversity and accumulation of genetic load in doubled-haploid lines from European maize landraces. G3 *Accepted* [0]
89. Wang B, Lin Z, Li X, Zhao Y, Zhao B, Wu G, Ma X, Wang H, Xie Y, Li Q, Song G, Kong D, Zheng Z, Wei H, Shen R, Chen C, Meng Z, Wang T, Li X, Chen Y, Lai J, Hufford MB, **Ross-Ibarra J**, He H, Wang H (2020). Genome-wide selection and genetic improvement during modern maize breeding. NATURE GENETICS *In Press* [0]
88. Torres R\*, **Stetter MG**\*, Hernandez R§, **Ross-Ibarra J**§ (2020). The temporal dynamics of background selection in non-equilibrium populations. GENETICS 214: 1019-1030 [6]
87. **Turner-Hissong SD**§, Mabrey ME, Beissinger TM, **Ross-Ibarra J**, Pires JC (2020). Evolutionary insights into plant breeding. CURRENT OPINION IN PLANT BIOLOGY 54: 93-100 [0]
86. Anderson SN, **Stitzer MC**, Zhou P, **Ross-Ibarra J**, Hirsch CD, Springer NM (2019) Dynamic patterns of transcript abundance of transposable element families in maize. G3 9: 3673-3682 [4]

85. Anderson SN\*, **Stitzer MC\***, Brohammer A\*, Zhou P, Noshay JM, O'Connor CH, Hirsch CD, **Ross-Ibarra J**, Hirsch CN, Springer NM (2019). Transposable elements contribute to dynamic genome content in maize. *THE PLANT JOURNAL* 100: 1052-1065 [13]
84. Wei X, Anderson SN, Wang X, Yang L, Crisp PA, Li Q, Noshay J, Albert PS, Birchler JA, **Bilinski MC**, **Stitzer MC**, **Ross-Ibarra J**, Flint-Garcia S, Chen X, Springer NM, Doebley JF (2019). Hybrid decay: a transgenerational epigenetic decline in vigor and viability triggered in backcross populations of teosinte with maize. *GENETICS* 213: 143-160 [0]
83. **O'Brien AM<sup>§</sup>**, Sawers RJH, Strauss SY, **Ross-Ibarra J<sup>§</sup>** (2019). Adaptive phenotypic divergence in teosinte differs across biotic contexts. *EVOLUTION* 73: 2230-2246 [0]
82. Gonzalez-Segovia E, Pérez-Limon S, Cíntora-Martínez C, Guerrero-Zavala A, Jansen G, Hufford MB, **Ross-Ibarra J**, Sawers RJH (2019). Characterization of introgression from the teosinte *Zea mays* ssp. *mexicana* to Mexican highland maize. *PEERJ* 7: e6815. [1]
81. **Josephs EM<sup>§</sup>**, Berg JJ, **Ross-Ibarra J**, Coop G (2019) Detecting adaptive differentiation in structured populations with genomic data and common gardens. *GENETICS* 211: 989-1004. [12]
80. **Stetter MG<sup>§</sup>**, Thornton K, **Ross-Ibarra J<sup>§</sup>** (2018) Genetic architecture and selective sweeps after polygenic adaptation to distant trait optima. *PLOS GENETICS* 14(11): e1007794. [13]
79. **O'Brien A<sup>§</sup>**, Sawers R, **Ross-Ibarra J**, Strauss SY<sup>§</sup> (2018) Evolutionary responses to conditionality in species interactions across environmental gradients. *AMERICAN NATURALIST* 192(6): 715-730. [0]
78. **Stitzer MC<sup>§</sup>**, **Ross-Ibarra J** (2018) Maize domestication and gene interaction. *NEW PHYTOLOGIST* 220:395-408 [22]
77. Manchanda N, Snodgrass SJ, **Ross-Ibarra J**, Hufford MB (2018) Evolution and adaptation in the maize genome. In *THE ZEA MAYS GENOME*, Bennetzen, Flint-Garcia, Hirsch, Tuberosa (Eds.), Springer Nature Publishing *In Press* [0]
76. **Lorant A**, **Ross-Ibarra J**, Maud Tenaillon (2018) Genomics of long- and short- term adaptation in maize and teosinte. In *STATISTICAL POPULATION GENOMICS*, Dutheil (Ed.), Springer Nature Publishing *In Press* [0]
75. Dawe RK, Lowry EG, Gent J, **Stitzer MC**, Higgins DM, **Ross-Ibarra J**, Wallace JG, Kanizay L, Alabady M, Wang N, Gao Z, Birchler J, Harkess AE, Hodges AL, Hiatt EN (2018) A novel maize kinesin causes neocentromere activity and meiotic drive, altering inheritance patterns across the genome. *CELL* 173: 839-850. [31]
74. Aburto-Oropeza O, Johnson A, Agha M, Allen E, Allen M, González JA, Arenas-Moreno DM, Beas R, Butterfield H, Caetano G, Caselle J, Casteñada Gaytán G, Castorani MCN, Anh Cat L, Cavanaugh K, Chambers JQ, Cooper RD, Arafeh-Dalmau N, Dawson T, Diaz de la Vega A, DiMento JFC, Domínguez S, Edwards M, Ennen J, Estrada-Medina H, Fierro N, Gadsden H, Galina-Tessaro P, Gibbons P, Goode EV, Gorris ME, Harmon T, Hecht SB, Heredia Fragoso MA, Hernández-Solano A, Hernández-Cortés D, Hernández-Carmona G, Hillard S, Huey RB, Hufford MB, Pàramo Figueroa VH, Jenerette D, Jiménez-Osornio J, López-Nava KJ, Lara R, Leslie H, Lopez-Feldman A, Luja V, Martínez-Méndez N, Mautz W, Medellín-Azuara J, Meléndez-Torres C, de la Cruz FRM, Micheli F, Miles D, Montagner G, Montañño-Moctezuma G, Müller J, Oliva P, Ortinez A, Ortiz Partida JP, Palleiro-Nayar J, Parnell PE, Raimondi P, Ramirez A, Randerson JT, Reed DC, Riquelme M, Torres

- TR, Rosen PC, **Ross-Ibarra J**, Sanchez-Cordero V, Sandoval-Solis S, Santos J, Sawers R, Sinervo B, Sites J, Sosa-Nishizaki O, Stanton T, Stapp J, Stewart J, Torre J, Torres-Moye G, Treseder KK, Valdez-Villavicencio JH, Jiménez FIV, Vaughn M, Welton L, Westphal MF, Woolrich-Piña G, Yunez-Naude A, Zertuche-González JA, Taylor JE (2018) Harnessing Cross-border Resources to Confront Climate Change. *ENVIRONMENTAL SCIENCE AND POLICY In Press*. [3]
73. **Bilinski P<sup>§</sup>**, Albert P, Berg JJ, Birchler JA, Grote M, **Lorant A**, **Quezada J<sup>‡</sup>**, Swarts, K, **Yang J**, **Ross-Ibarra J<sup>§</sup>** (2018) Parallel altitudinal clines reveal adaptive evolution of genome size in *Zea mays*. *PLoS GENETICS* 14: e1007162 [0]
  72. **Mei W**, **Stetter MG**, **Gates DJ**, **Stitzer MC**, **Ross-Ibarra J<sup>§</sup>** (2018) Adaptation in plant genomes: bigger is different. *AMERICAN JOURNAL OF BOTANY* 105: 16-19 [26]
  71. Bukowski R, Guo X, Lu Y, Zou C, He B, Rong Z, Wang B, Xu D, Yang B, Xie C, Fan L, Gao S, Xu X, Zhang G, Li Y, Jiao Y, Doebley J, **Ross-Ibarra J**, **Lorant A**, **Buffalo V**, Romay MC, Buckler ES, Ware D, Lai J, Sun Q, Xu Y (2017) Construction of the third generation *Zea mays* haplotype map. *GIGASCIENCE* gix134 [0]
  70. Wang L, **Beissinger TM**, **Lorant A**, **Ross-Ibarra C**, **Ross-Ibarra J<sup>§</sup>**, Hufford MB<sup>§</sup> (2017) The interplay of demography and selection during maize domestication and diffusion. *GENOME BIOLOGY* 18:215 [62]
  69. **Yang J<sup>§</sup>**, **Mezmouk S\***, Baumgarten A, Buckler ES, Guill KE, McMullen MD, Mumm RH, **Ross-Ibarra J<sup>§</sup>** (2017) Incomplete dominance of deleterious alleles contribute substantially to trait variation and heterosis in maize. *PLoS GENETICS* 13:e1007019 [50]
  68. **Lorant A**, Pedersen S, Holst I, Hufford MB, Winter K, Piperno D, **Ross-Ibarra J<sup>§</sup>** (2017) The potential role of genetic assimilation during maize domestication. *PLoS ONE* 12:e0184202 [11]
  67. Aguilar-Rangel MR, Chàvez Montes RA, Gonzalez-Segovia E, **Ross-Ibarra J**, Simpson JK, Sawers RJH (2017) Allele specific expression analysis identifies regulatory variation associated with stress-related genes in the Mexican highland maize landrace Palomero Toluqueño. *PEERJ* 5:e3737 [10]
  66. **Stetter MG<sup>§</sup>**, **Gates DJ**, **Mei W**, **Ross-Ibarra J<sup>§</sup>** (2017) How to make a domesticate. *CURRENT BIOLOGY* 27:R896-R900 [17]
  65. Swarts K, Gutaker RM, Schuenemann V, Benz B, Blake M, Bukowski R, Holland J, Kruse-Peoples M, Lepak N, Matson RG, Prim L, Romay C, **Ross-Ibarra J**, Sanchez J, Schmidt C, Sofro E, Krause J, Weigel D, Buckler ES, Burbano HA (2017) Genomic estimation of complex traits reveals ancient maize adaptation to temperate North America. *SCIENCE* 357:512-515 [63]
  64. **Bilinski P<sup>§</sup>**, Han Y, **Hufford MB**, **Lorant A**, Zhang P, Jiang J, **Ross-Ibarra J<sup>§</sup>** (2017) Genomic abundance is not predictive of tandem repeat localization in grass genomes. *PLoS ONE* 12:e0177896 [6]
  63. Jiao Y, Peluso P, Shi J, Liang T, **Stitzer MC**, Wang B, Campbell M, Stein JC, Wei X, Chin C-S, Guill K, Regulski M, Kumari S, Olson A, Gent J, Schneider KL, Wolfgruber TK, May MR, Springer N, Antoniou E, McCombie R, Presting GG, McMullen M, **Ross-Ibarra J**, Dawe RK, Hastie A, Rank DR, Ware D (2017) Improved maize reference genome with single-molecule technologies. *NATURE* 546:524-527 [397]

62. **Renny-Byfield S<sup>§</sup>**, Rodgers-Melnick E, **Ross-Ibarra J<sup>§</sup>** (2017) Gene fractionation and function in the ancient subgenomes of maize. *MBE* 34:1825-1832 [29]
61. **Velasco D**, Aradhya M, and **Ross-Ibarra J<sup>§</sup>** (2016) Evolutionary genomics of peach and almond domestication. *G3* 6:3985-3993 [22]
60. Ramos-Madrigal J, Smith BD, Moreno-Mayar JV, Gopalakrishnan S, **Ross-Ibarra J**, Gilbert MTP, Wales N (2016) Genome sequence of a 5310-year-old maize cob provides insights into the early stages of maize domestication. *CURRENT BIOLOGY* 26:3195-3201 [22]
59. **Durvasula A<sup>†\*</sup>**, Hoffman PJ\*, **Kent TV<sup>‡</sup>**, Liu C, Kono TJY, Morrell PL<sup>§</sup>, **Ross-Ibarra J<sup>§</sup>** (2016) ANGSD-wrapper. *MOLECULAR ECOLOGY RESOURCES* 16:1449-1454 [0]
58. **Beissinger TM<sup>§</sup>**, Wang L, **Crosby K**, **Durvasula A<sup>‡</sup>**, Hufford MB, **Ross-Ibarra J<sup>§</sup>** (2016) Recent demography drives changes in linked selection across the maize genome. *NATURE PLANTS* 2:16084 [75]
57. Wolfgruber TK, Nakashima MM, Schneider KL, Sharma A, Xie Z, Albert PS, Xu R, **Bilinski P**, Dawe RK, **Ross-Ibarra J**, Birchler JA, Presting G (2016) High quality maize centromere 10 sequence reveals evidence of frequent recombination events. *FRONTIERS IN PLANT SCIENCE* 7 [22]
56. Orozco-Ramírez Q, Santacruz-Varela A, **Ross-Ibarra J**, Brush B (2016) Maize diversity associated with social origin and environmental variation in southern Mexico. *HEREDITY* 116:477-484. [31]
55. Gerke JP<sup>§</sup>, Edwards JW, Guill KE, **Ross-Ibarra J<sup>§</sup>**, McMullen MD. The genomic impacts of drift and selection for hybrid performance in maize (2015). *GENETICS* 201: 1201-1211 [30]
54. Sosso D, Luo D, Li Q-B, Sasse J, **Yang J**, Gendrot G, Suzuki M, Koch KE, McCarty DR, Chourey PS, Rogoswsky PM, **Ross-Ibarra J**, Yang B, Frommer WB (2015) Seed filling in domesticated maize and rice depends on SWEET-mediated hexose transport. *NATURE GENETICS* 47:1489-1493 [130]
53. **Takuno S**, Ralph P, Swarts K, Elshire RJ, Glaubitz JC, Buckler ES, **Hufford MB**, **Ross-Ibarra J<sup>§</sup>** (2015) Independent molecular basis of convergent highland adaptation in maize. *GENETICS* 200:1297-1312 [50]
52. **Vann LE**, **Kono T**, **Pyhäjärvi T**, **Hufford MB<sup>§</sup>**, **Ross-Ibarra J<sup>§</sup>** (2015) Natural variation in teosinte at the domestication locus *teosinte branched1 (tb1)*. *PEERJ* 3:e900 [11]
51. Hake S, **Ross-Ibarra J** (2015) Genetic, evolutionary and plant breeding insights from the domestication of maize. *ELIFE* 2015;4:e05861 [39]
50. Fonseca RR, Smith B, Wales N, Cappellini E, Skoglund P, Fumagalli M, Samaniego JA, Caroe C, Avila-Arcos MC, Hufnagel D, Korneliussen TS, Vieira FG, Jakobsson M, Arriaza B, Willerslev E, Nielsen R, Hufford MB, Albrechtsen A, **Ross-Ibarra J**, Gilbert MT (2015) The origin and evolution of maize in the American Southwest. *NATURE PLANTS* 1:14003 [100]
49. Dyer GA, López-Feldman A, Yúnez-Naude A, Taylor JE, **Ross-Ibarra J** (2015) Reply to Brush *et al.*: A wake up call for crop conservation science. *PNAS* 112 (1), E2-E2 (letter). [7]



48. Makarevitch I, Waters M, West P, **Stitzer M, Ross-Ibarra, J**, Springer NM (2015) Mobile elements contribute to activation of genes in response to abiotic stress. *PLoS GENETICS* 11 (1): e1004915. [223]
47. Tiffin P, **Ross-Ibarra J** (2014) Advances and limits of using population genetics to understand local adaptation. *TRENDS IN ECOLOGY AND EVOLUTION* 29:673-680 [223]
46. **Bilinski P, Distor KD, Gutierrez-Lopez J, Mendoza Mendoza G, Shi J, Dawe RK, Ross-Ibarra J<sup>S</sup>** (2014) Diversity and evolution of centromere repeats in the maize genome. *CHROMOSOMA* 0009-5915 [17]
45. **Mezmouk S, Ross-Ibarra J<sup>S</sup>** (2014) The pattern and distribution of deleterious mutations in maize. (2014). *G3* 4:163-171 [61]
44. Waters AJ, **Bilinski P**, Eichten SR, Vaughn MW, **Ross-Ibarra J**, Gehring M, Springer NM (2013) Comprehensive analysis of imprinted genes in maize reveals allelic variation for imprinting and limited conservation with other species. *PNAS* 110:19639-19644 [83]
43. **Pyhäjärvi T, Hufford MB, Mezmouk S, Ross-Ibarra J<sup>S</sup>** (2013) Complex patterns of local adaptation in teosinte. *GENOME BIOLOGY AND EVOLUTION* 5: 1594-1609 [106]
42. Wills DM, Whipple C, **Takuno S**, Kursel LE, Shannon LM, **Ross-Ibarra J**, Doebley JF (2013) From many, one: genetic control of prolificacy during maize domestication. *PLoS GENETICS* 9(6): e1003604. [74]
41. McCouch S, Baute GJ, Bradeen J, Bramel P, Bretting PK, Buckler E, Burke JM, Charest D, Cloutier S, Cole G, Dempewolf H, Dingkuhn M, Feuillet C, Gepts, P, Grattapaglia D, Guarino L, Jackson S, Knapp S, Langridge P, Lawton-Rauh A, Lijua Q, Lusty C, Michael T, Myles S, Naito K, Nelson RL, Pontarollo R, Richards CM, Rieseberg L, **Ross-Ibarra J**, Rounsley S, Hamilton RS, Schurr U, Stein N, Tomooka N, van der Knaap E, van Tassel D, Toll J, Valls J, Varshney RK, Ward J, Waugh R, Wenzl P, Zamir. (2013) Agriculture: Feeding the future. *NATURE* 499:23-24 [334]
40. **Hufford MB**, Lubinsky P, **Pyhäjärvi T**, **Devenzeno MT<sup>†</sup>**, Ellstrand NC, **Ross-Ibarra J<sup>S</sup>** (2013) The genomic signature of crop-wild introgression in maize. *PLoS GENETICS* 9(5): e1003477. [219]
39. **Provance MC<sup>S</sup>**, Garcia Ruiz I, **Thommes C<sup>†</sup>**, **Ross-Ibarra J** (2013) Population genetics and ethnobotany of cultivated *Diospyros riojae* Gómez Pompa (Ebenaceae), an endangered fruit crop from Mexico. *GENETIC RESOURCES AND CROP EVOLUTION* 60: 2171-2182. [5]
38. Melters DP\*, Bradnam KR\*, Young HA, Telis N, May MR, Ruby JG, Sebra R, Peluso P, Eid J, Rank D, Fernando Garcia J, DeRisi J, Smith T, Tobias C, **Ross-Ibarra J<sup>S</sup>**, Korf IF<sup>S</sup>, Chan SW-L. (2013) Patterns of centromere tandem repeat evolution in 282 animal and plant genomes. *GENOME BIOLOGY* 14:R10 [226]
37. Kanizay LB, **Pyhäjärvi T**, Lowry E, **Hufford MB**, Peterson DG, **Ross-Ibarra J**, Dawe RK (2013) Diversity and abundance of the Abnormal chromosome 10 meiotic drive complex in *Zea mays*. *HEREDITY* 110: 570-577. [19]
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