

# Michael C Whitlock

## List of Publications by Year in descending order

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113  
papers

18,181  
citations

28274

55  
h-index

22832

112  
g-index

126  
all docs

126  
docs citations

126  
times ranked

17290  
citing authors

#	ARTICLE	IF	CITATIONS
1	The incomplete natural history of mitochondria. <i>Molecular Ecology</i> , 2004, 13, 729-744.	3.9	1,767
2	Indirect measures of gene flow and migration: $F_{ST} \approx 1/(4Nm+1)$ . <i>Heredity</i> , 1999, 82, 117-125.	2.6	1,408
3	Assisted Gene Flow to Facilitate Local Adaptation to Climate Change. <i>Annual Review of Ecology, Evolution, and Systematics</i> , 2013, 44, 367-388.	8.3	708
4	Combining probability from independent tests: the weighted Z-method is superior to Fisher's approach. <i>Journal of Evolutionary Biology</i> , 2005, 18, 1368-1373.	1.7	681
5	Finding the Genomic Basis of Local Adaptation: Pitfalls, Practical Solutions, and Future Directions. <i>American Naturalist</i> , 2016, 188, 379-397.	2.1	663
6	Experimental evolution. <i>Trends in Ecology and Evolution</i> , 2012, 27, 547-560.	8.7	631
7	THE GENETIC ARCHITECTURE OF ADAPTATION UNDER MIGRATION-SELECTION BALANCE. <i>Evolution; International Journal of Organic Evolution</i> , 2011, 65, 1897-1911.	2.3	514
8	PERSPECTIVE: EVOLUTION AND DETECTION OF GENETIC ROBUSTNESS. <i>Evolution; International Journal of Organic Evolution</i> , 2003, 57, 1959-1972.	2.3	504
9	Evaluation of demographic history and neutral parameterization on the performance of $F_{ST}$ outlier tests. <i>Molecular Ecology</i> , 2014, 23, 2178-2192.	3.9	472
10	PERSPECTIVE:EVOLUTION AND DETECTION OF GENETIC ROBUSTNESS. <i>Evolution; International Journal of Organic Evolution</i> , 2003, 57, 1959.	2.3	467
11	The relative power of genome scans to detect local adaptation depends on sampling design and statistical method. <i>Molecular Ecology</i> , 2015, 24, 1031-1046.	3.9	447
12	The Effective Size of a Subdivided Population. <i>Genetics</i> , 1997, 146, 427-441.	2.9	421
13	SOME POPULATION GENETIC CONSEQUENCES OF COLONY FORMATION AND EXTINCTION: GENETIC CORRELATIONS WITHIN FOUNDING GROUPS. <i>Evolution; International Journal of Organic Evolution</i> , 1990, 44, 1717-1724.	2.3	415
14	Multiple Fitness Peaks and Epistasis. <i>Annual Review of Ecology, Evolution, and Systematics</i> , 1995, 26, 601-629.	6.7	378
15	Estimating Effective Population Size and Migration Rates From Genetic Samples Over Space and Time. <i>Genetics</i> , 2003, 163, 429-446.	2.9	378
16	Reliable Detection of Loci Responsible for Local Adaptation: Inference of a Null Model through Trimming the Distribution of $F_{ST}$ . <i>American Naturalist</i> , 2015, 186, S24-S36.	2.1	375
17	Evolutionary inference from $Q_{ST}$ . <i>Molecular Ecology</i> , 2008, 17, 1885-1896.	3.9	357
18	The Red Queen Beats the Jack-Of-All-Trades: The Limitations on the Evolution of Phenotypic Plasticity and Niche Breadth. <i>American Naturalist</i> , 1996, 148, S65-S77.	2.1	327

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19	Convergent local adaptation to climate in distantly related conifers. <i>Science</i> , 2016, 353, 1431-1433.	12.6	303
20	The Probability of Fixation in Populations of Changing Size. <i>Genetics</i> , 1997, 146, 723-733.	2.9	293
21	and <i>D</i> do not replace <i>F</i> <sub>ST</sub> . <i>Molecular Ecology</i> , 2011, 20, 1083-1091.	3.9	274
22	FIXATION OF NEW ALLELES AND THE EXTINCTION OF SMALL POPULATIONS: DRIFT LOAD, BENEFICIAL ALLELES, AND SEXUAL SELECTION. <i>Evolution; International Journal of Organic Evolution</i> , 2000, 54, 1855-1861.	2.3	268
23	Fixation Probability and Time in Subdivided Populations. <i>Genetics</i> , 2003, 164, 767-779.	2.9	242
24	Local drift load and the heterosis of interconnected populations. <i>Heredity</i> , 2000, 84, 452-457.	2.6	240
25	PURGING THE GENOME WITH SEXUAL SELECTION: REDUCING MUTATION LOAD THROUGH SELECTION ON MALES. <i>Evolution; International Journal of Organic Evolution</i> , 2009, 63, 569-582.	2.3	234
26	Data archiving in ecology and evolution: best practices. <i>Trends in Ecology and Evolution</i> , 2011, 26, 61-65.	8.7	208
27	Inferences About the Distribution of Dominance Drawn From Yeast Gene Knockout Data. <i>Genetics</i> , 2011, 187, 553-566.	2.9	186
28	Selection, Load and Inbreeding Depression in a Large Metapopulation. <i>Genetics</i> , 2002, 160, 1191-1202.	2.9	178
29	PHENOTYPIC PLASTICITY FACILITATES MUTATIONAL VARIANCE, GENETIC VARIANCE, AND EVOLVABILITY ALONG THE MAJOR AXIS OF ENVIRONMENTAL VARIATION. <i>Evolution; International Journal of Organic Evolution</i> , 2012, 66, 2891-2902.	2.3	172
30	Neutral additive genetic variance in a metapopulation. <i>Genetical Research</i> , 1999, 74, 215-221.	0.9	164
31	Testing for Spatially Divergent Selection: Comparing <i>Q</i> <sub>ST</sub> to <i>F</i> <sub>ST</sub> . <i>Genetics</i> , 2009, 183, 1055-1063.	2.9	164
32	Mutation Load: The Fitness of Individuals in Populations Where Deleterious Alleles Are Abundant. <i>Annual Review of Ecology, Evolution, and Systematics</i> , 2012, 43, 115-135.	8.3	163
33	A GENETIC INTERPRETATION OF ECOLOGICALLY DEPENDENT ISOLATION. <i>Evolution; International Journal of Organic Evolution</i> , 2001, 55, 198-201.	2.3	161
34	Inbreeding Changes the Shape of the Genetic Covariance Matrix in <i>Drosophila melanogaster</i> . <i>Genetics</i> , 2001, 158, 1137-1145.	2.9	156
35	Some Population Genetic Consequences of Colony Formation and Extinction: Genetic Correlations within Founding Groups. <i>Evolution; International Journal of Organic Evolution</i> , 1990, 44, 1717.	2.3	150
36	Data Archiving. <i>American Naturalist</i> , 2010, 175, 145-146.	2.1	150

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37	Evaluating methods for estimating local effective population size with and without migration. <i>Evolution; International Journal of Organic Evolution</i> , 2015, 69, 2154-2166.	2.3	143
38	Nonequilibrium Population Structure in Forked Fungus Beetles: Extinction, Colonization, and the Genetic Variance Among Populations. <i>American Naturalist</i> , 1992, 139, 952-970.	2.1	138
39	TEMPORAL FLUCTUATIONS IN DEMOGRAPHIC PARAMETERS AND THE GENETIC VARIANCE AMONG POPULATIONS. <i>Evolution; International Journal of Organic Evolution</i> , 1992, 46, 608-615.	2.3	136
40	The Changes in Genetic and Environmental Variance With Inbreeding in <i>Drosophila melanogaster</i> . <i>Genetics</i> , 1999, 152, 345-353.	2.9	134
41	FACTORS AFFECTING THE GENETIC LOAD IN <i>DROSOPHILA</i> : SYNERGISTIC EPISTASIS AND CORRELATIONS AMONG FITNESS COMPONENTS. <i>Evolution; International Journal of Organic Evolution</i> , 2000, 54, 1654-1660.	2.3	127
42	Environmental duress and epistasis: how does stress affect the strength of selection on new mutations?. <i>Trends in Ecology and Evolution</i> , 2010, 25, 450-458.	8.7	127
43	The Evolution of Metapopulations. , 1997, , 183-210.		121
44	Heterosis increases the effective migration rate. <i>Proceedings of the Royal Society B: Biological Sciences</i> , 2000, 267, 1321-1326.	2.6	107
45	Temporal Fluctuations in Demographic Parameters and the Genetic Variance among Populations. <i>Evolution; International Journal of Organic Evolution</i> , 1992, 46, 608.	2.3	103
46	Fluctuating asymmetry does not increase with moderate inbreeding in <i>Drosophila melanogaster</i> . <i>Heredity</i> , 1994, 73, 373-376.	2.6	99
47	EFFECTS OF MIGRATION ON THE GENETIC COVARIANCE MATRIX. <i>Evolution; International Journal of Organic Evolution</i> , 2007, 61, 2398-2409.	2.3	97
48	Local Adaptation Interacts with Expansion Load during Range Expansion: Maladaptation Reduces Expansion Load. <i>American Naturalist</i> , 2017, 189, 368-380.	2.1	88
49	Quantifying how constraints limit the diversity of viable routes to adaptation. <i>PLoS Genetics</i> , 2018, 14, e1007717.	3.5	78
50	Selection and Drift in Metapopulations. , 2004, , 153-173.		76
51	The variance in inbreeding depression and the recovery of fitness in bottlenecked populations. <i>Proceedings of the Royal Society B: Biological Sciences</i> , 1999, 266, 2061-2066.	2.6	74
52	GENE INTERACTION AFFECTS THE ADDITIVE GENETIC VARIANCE IN SUBDIVIDED POPULATIONS WITH MIGRATION AND EXTINCTION. <i>Evolution; International Journal of Organic Evolution</i> , 1993, 47, 1758-1769.	2.3	72
53	Data archiving is a good investment. <i>Nature</i> , 2011, 473, 285-285.	27.8	72
54	Background selection and $F_{ST}$ : Consequences for detecting local adaptation. <i>Molecular Ecology</i> , 2019, 28, 3902-3914.	3.9	68

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55	Probability of Fixation in a Heterogeneous Environment. <i>Genetics</i> , 2005, 171, 1407-1417.	2.9	63
56	THE DISTRIBUTION OF PHENOTYPIC VARIANCE WITH INBREEDING. <i>Evolution; International Journal of Organic Evolution</i> , 1999, 53, 1143-1156.	2.3	61
57	The exquisite corpse: a shifting view of the shifting balance. <i>Trends in Ecology and Evolution</i> , 2000, 15, 347-348.	8.7	59
58	Compensatory mutations are repeatable and clustered within proteins. <i>Proceedings of the Royal Society B: Biological Sciences</i> , 2009, 276, 1823-1827.	2.6	59
59	Variation in recombination rate affects detection of outliers in genome scans under neutrality. <i>Molecular Ecology</i> , 2020, 29, 4274-4279.	3.9	59
60	PERSISTENCE OF CHANGES IN THE GENETIC COVARIANCE MATRIX AFTER A BOTTLENECK. <i>Evolution; International Journal of Organic Evolution</i> , 2002, 56, 1968-1975.	2.3	57
61	Lack of correlation between heterozygosity and fitness in forked fungus beetles. <i>Heredity</i> , 1993, 70, 574-581.	2.6	55
62	VARIANCE-INDUCED PEAK SHIFTS. <i>Evolution; International Journal of Organic Evolution</i> , 1995, 49, 252-259.	2.3	54
63	Response to Comment on "Ongoing Adaptive Evolution of ASPM, a Brain Size Determinant in Homo sapiens" and "Microcephalin, a Gene Regulating Brain Size, Continues to Evolve Adaptively in Humans". <i>Science</i> , 2006, 313, 172b-172b.	12.6	51
64	NO EFFECT OF ENVIRONMENTAL HETEROGENEITY ON THE MAINTENANCE OF GENETIC VARIATION IN WING SHAPE IN DROSOPHILA MELANOGASTER. <i>Evolution; International Journal of Organic Evolution</i> , 2010, 64, 3398-3408.	2.3	47
65	FOUNDER EFFECTS AND PEAK SHIFTS WITHOUT GENETIC DRIFT: ADAPTIVE PEAK SHIFTS OCCUR EASILY WHEN ENVIRONMENTS FLUCTUATE SLIGHTLY. <i>Evolution; International Journal of Organic Evolution</i> , 1997, 51, 1044-1048.	2.3	44
66	Male <i>Drosophila melanogaster</i> have higher mating success when adapted to their thermal environment. <i>Journal of Evolutionary Biology</i> , 2006, 19, 1894-1900.	1.7	44
67	Modern Approaches to Local Adaptation. <i>American Naturalist</i> , 2015, 186, S1-S4.	2.1	44
68	The Genetics of Adaptation: The Roles of Pleiotropy, Stabilizing Selection and Drift in Shaping the Distribution of Bidirectional Fixed Mutational Effects. <i>Genetics</i> , 2003, 165, 2181-2192.	2.9	44
69	$Q_{ST}$ vs $F_{ST}$ comparisons with unbalanced half-sib designs. <i>Molecular Ecology Resources</i> , 2015, 15, 262-267.	4.8	38
70	Founder Effects and Peak Shifts Without Genetic Drift: Adaptive Peak Shifts Occur Easily When Environments Fluctuate Slightly. <i>Evolution; International Journal of Organic Evolution</i> , 1997, 51, 1044.	2.3	37
71	Environmental stress, inbreeding, and the nature of phenotypic and genetic variance in <i>Drosophila melanogaster</i> . <i>Proceedings of the Royal Society B: Biological Sciences</i> , 2002, 269, 677-683.	2.6	37
72	Sexual selection against deleterious mutations via variable male search success. <i>Biology Letters</i> , 2009, 5, 795-797.	2.3	36

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73	The Effects of Selection and Bottlenecks on Male Mating Success in Peripheral Isolates. <i>American Naturalist</i> , 1999, 153, 437-444.	2.1	35
74	Variance-Induced Peak Shifts. <i>Evolution; International Journal of Organic Evolution</i> , 1995, 49, 252.	2.3	33
75	<i>Q<sub>ST</sub></i> in a hierarchically structured population. <i>Molecular Ecology Resources</i> , 2012, 12, 481-483.	4.8	31
76	FACTORS AFFECTING THE GENETIC LOAD IN <i>DROSOPHILA</i> : SYNERGISTIC EPISTASIS AND CORRELATIONS AMONG FITNESS COMPONENTS. <i>Evolution; International Journal of Organic Evolution</i> , 2000, 54, 1654.	2.3	29
77	Global adaptation complicates the interpretation of genome scans for local adaptation. <i>Evolution Letters</i> , 2021, 5, 4-15.	3.3	29
78	Gene Interaction Affects the Additive Genetic Variance in Subdivided Populations with Migration and Extinction. <i>Evolution; International Journal of Organic Evolution</i> , 1993, 47, 1758.	2.3	26
79	SINGLE FOUNDER-FLUSH EVENTS AND THE EVOLUTION OF REPRODUCTIVE ISOLATION. <i>Evolution; International Journal of Organic Evolution</i> , 1998, 52, 1850-1855.	2.3	26
80	The Distribution of Phenotypic Variance with Inbreeding. <i>Evolution; International Journal of Organic Evolution</i> , 1999, 53, 1143.	2.3	26
81	Speciation: Founder Events and Their Effects on X-Linked and Autosomal Genes. <i>American Naturalist</i> , 1995, 145, 676-685.	2.1	25
82	The panda and the phage: compensatory mutations and the persistence of small populations. <i>Trends in Ecology and Evolution</i> , 1999, 14, 295-296.	8.7	25
83	THE DISTRIBUTION AMONG POPULATIONS IN PHENOTYPIC VARIANCE WITH INBREEDING. <i>Evolution; International Journal of Organic Evolution</i> , 1996, 50, 1919-1926.	2.3	24
84	The need for archiving data in evolutionary biology. <i>Journal of Evolutionary Biology</i> , 2010, 23, 659-660.	1.7	22
85	The genetics of adaptation to discrete heterogeneous environments: frequent mutation or large-effect alleles can allow range expansion. <i>Journal of Evolutionary Biology</i> , 2017, 30, 591-602.	1.7	22
86	DATA ARCHIVING. <i>Evolution; International Journal of Organic Evolution</i> , 2010, 64, 603-604.	2.3	20
87	Robustness to noise in gene expression evolves despite epistatic constraints in a model of gene networks. <i>Evolution; International Journal of Organic Evolution</i> , 2015, 69, 2345-2358.	2.3	20
88	Two-Locus Drift with Sex-Chromosomes: The Partitioning and Conversion of Variance in Subdivided Populations. <i>Theoretical Population Biology</i> , 1995, 48, 44-64.	1.1	19
89	PERSISTENCE OF CHANGES IN THE GENETIC COVARIANCE MATRIX AFTER A BOTTLENECK. <i>Evolution; International Journal of Organic Evolution</i> , 2002, 56, 1968.	2.3	19
90	ECOLOGY: Inbreeding and Metapopulations. <i>Science</i> , 2002, 295, 454-455.	12.6	18

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91	The immediate costs and long-term benefits of assisted gene flow in large populations. <i>Conservation Biology</i> , 2022, 36, e13911.	4.7	18
92	Dietary stress does not strengthen selection against single deleterious mutations in <i>Drosophila melanogaster</i> . <i>Heredity</i> , 2012, 108, 203-210.	2.6	17
93	A Balanced Data Archiving Policy for Long-Term Studies. <i>Trends in Ecology and Evolution</i> , 2016, 31, 84-85.	8.7	17
94	Genetic recombination and adaptation to fluctuating environments: selection for geotaxis in <i>Drosophila melanogaster</i> . <i>Heredity</i> , 2003, 91, 78-84.	2.6	16
95	Patterns of genetic variation within and among populations in <i>Arbutus unedo</i> and its relation with selection and evolvability. <i>Perspectives in Plant Ecology, Evolution and Systematics</i> , 2015, 17, 185-192.	2.7	16
96	Bioinformatically predicted deleterious mutations reveal complementation in the interior spruce hybrid complex. <i>BMC Genomics</i> , 2017, 18, 970.	2.8	16
97	The costs and benefits of resource sharing: reciprocity requires resource heterogeneity. <i>Journal of Evolutionary Biology</i> , 2007, 20, 1772-1782.	1.7	15
98	Local adaptation does not always predict high mating success. <i>Journal of Evolutionary Biology</i> , 2010, 23, 875-878.	1.7	12
99	Using genetic relatedness to understand heterogeneous distributions of urban rat-associated pathogens. <i>Evolutionary Applications</i> , 2021, 14, 198-209.	3.1	11
100	Fission and the Genetic Variance Among Populations: The Changing Demography of Forked Fungus Beetle Populations. <i>American Naturalist</i> , 1994, 143, 820-829.	2.1	11
101	The Distribution Among Populations in Phenotypic Variance with Inbreeding. <i>Evolution; International Journal of Organic Evolution</i> , 1996, 50, 1919.	2.3	10
102	Plasticity via feedback reduces the cost of developmental instability. <i>Evolution Letters</i> , 2020, 4, 570-580.	3.3	10
103	The value of complementary approaches in evolutionary research: reply to Magalhães and Matos. <i>Trends in Ecology and Evolution</i> , 2012, 27, 650-651.	8.7	9
104	A GENETIC INTERPRETATION OF ECOLOGICALLY DEPENDENT ISOLATION. <i>Evolution; International Journal of Organic Evolution</i> , 2001, 55, 198.	2.3	7
105	Overdominance interacts with linkage to determine the rate of adaptation to a new optimum. <i>Journal of Evolutionary Biology</i> , 2015, 28, 95-104.	1.7	7
106	The impact of epistatic selection on the genomic traces of selection. <i>Molecular Ecology</i> , 2009, 18, 4985-4987.	3.9	6
107	Environmental stress does not increase the mean strength of selection. <i>Journal of Evolutionary Biology</i> , 2018, 31, 1599-1606.	1.7	6
108	Experimental Tests of Founder-Flush: A Reply to Templeton. <i>Evolution; International Journal of Organic Evolution</i> , 1999, 53, 1632.	2.3	4

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109	EXPERIMENTAL TESTS OF FOUNDER-FLUSH: A REPLY TO TEMPLETON. <i>Evolution; International Journal of Organic Evolution</i> , 1999, 53, 1632-1633.	2.3	4
110	Multilocus estimation of selfing and its heritability. <i>Heredity</i> , 2012, 109, 173-179.	2.6	4
111	No evidence of positive assortative mating for genetic quality in fruit flies. <i>Proceedings of the Royal Society B: Biological Sciences</i> , 2019, 286, 20191474.	2.6	3
112	A clever solution to a vexing problem. <i>Molecular Ecology</i> , 2015, 24, 3513-3514.	3.9	2
113	Growth genes are implicated in the evolutionary divergence of sympatric piscivorous and insectivorous rainbow trout ( <i>Oncorhynchus mykiss</i> ). <i>Bmc Ecology and Evolution</i> , 2021, 21, 63.	1.6	2