

# Luis B Barreiro

## List of Publications by Year in descending order

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Version: 2024-02-01

118  
papers

14,435  
citations

29994

54  
h-index

23472

111  
g-index

146  
all docs

146  
docs citations

146  
times ranked

22909  
citing authors

#	ARTICLE	IF	CITATIONS
1	Defining trained immunity and its role in health and disease. <i>Nature Reviews Immunology</i> , 2020, 20, 375-388.	10.6	1,345
2	TLR3 Deficiency in Patients with Herpes Simplex Encephalitis. <i>Science</i> , 2007, 317, 1522-1527.	6.0	970
3	Herd Immunity: Understanding COVID-19. <i>Immunity</i> , 2020, 52, 737-741.	6.6	877
4	BCG Educates Hematopoietic Stem Cells to Generate Protective Innate Immunity against Tuberculosis. <i>Cell</i> , 2018, 172, 176-190.e19.	13.5	802
5	Natural selection has driven population differentiation in modern humans. <i>Nature Genetics</i> , 2008, 40, 340-345.	9.4	526
6	From evolutionary genetics to human immunology: how selection shapes host defence genes. <i>Nature Reviews Genetics</i> , 2010, 11, 17-30.	7.7	471
7	Integration of Genetic and Immunological Insights into a Model of Celiac Disease Pathogenesis. <i>Annual Review of Immunology</i> , 2011, 29, 493-525.	9.5	459
8	Genetic Ancestry and Natural Selection Drive Population Differences in Immune Responses to Pathogens. <i>Cell</i> , 2016, 167, 657-669.e21.	13.5	419
9	Social networks predict gut microbiome composition in wild baboons. <i>ELife</i> , 2015, 4, .	2.8	403
10	Reovirus infection triggers inflammatory responses to dietary antigens and development of celiac disease. <i>Science</i> , 2017, 356, 44-50.	6.0	367
11	Evolutionary Dynamics of Human Toll-Like Receptors and Their Different Contributions to Host Defense. <i>PLoS Genetics</i> , 2009, 5, e1000562.	1.5	341
12	Microbial signals drive pre-leukaemic myeloproliferation in a Tet2-deficient host. <i>Nature</i> , 2018, 557, 580-584.	13.7	296
13	Trained immunity, tolerance, priming and differentiation: distinct immunological processes. <i>Nature Immunology</i> , 2021, 22, 2-6.	7.0	274
14	Social environment is associated with gene regulatory variation in the rhesus macaque immune system. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2012, 109, 6490-6495.	3.3	257
15	Seasonal Variation in Human Gut Microbiome Composition. <i>PLoS ONE</i> , 2014, 9, e90731.	1.1	246
16	Deciphering the genetic architecture of variation in the immune response to <i>Mycobacterium tuberculosis</i> infection. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2012, 109, 1204-1209.	3.3	238
17	Social status alters immune regulation and response to infection in macaques. <i>Science</i> , 2016, 354, 1041-1045.	6.0	235
18	Genome-Wide Association Studies of the Human Gut Microbiota. <i>PLoS ONE</i> , 2015, 10, e0140301.	1.1	228

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19	Bacterial infection remodels the DNA methylation landscape of human dendritic cells. <i>Genome Research</i> , 2015, 25, 1801-1811.	2.4	195
20	The macrophage IRF8/IRF1 regulome is required for protection against infections and is associated with chronic inflammation. <i>Journal of Experimental Medicine</i> , 2016, 213, 585-603.	4.2	194
21	Dispersals and genetic adaptation of Bantu-speaking populations in Africa and North America. <i>Science</i> , 2017, 356, 543-546.	6.0	188
22	Evolutionary genetic dissection of human interferons. <i>Journal of Experimental Medicine</i> , 2011, 208, 2747-2759.	4.2	170
23	Promoter Variation in the DC-SIGN-Encoded Gene CD209 Is Associated with Tuberculosis. <i>PLoS Medicine</i> , 2006, 3, e20.	3.9	166
24	Genetic regulatory effects modified by immune activation contribute to autoimmune disease associations. <i>Nature Communications</i> , 2017, 8, 266.	5.8	157
25	M.Âtuberculosis Reprograms Hematopoietic Stem Cells to Limit Myelopoiesis and Impair Trained Immunity. <i>Cell</i> , 2020, 183, 752-770.e22.	13.5	148
26	Inferring the Demographic History of African Farmers and Pygmy Hunter-Gatherers Using a Multilocus Resequencing Data Set. <i>PLoS Genetics</i> , 2009, 5, e1000448.	1.5	142
27	Vaginal microbiome in early pregnancy and subsequent risk of spontaneous preterm birth: a case-control study. <i>BJOG: an International Journal of Obstetrics and Gynaecology</i> , 2019, 126, 349-358.	1.1	132
28	Deciphering the Ancient and Complex Evolutionary History of Human Arylamine N-Acetyltransferase Genes. <i>American Journal of Human Genetics</i> , 2006, 78, 423-436.	2.6	127
29	Gene activation precedes DNA demethylation in response to infection in human dendritic cells. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2019, 116, 6938-6943.	3.3	127
30	Chronic Inflammation Permanently Reshapes Tissue-Resident Immunity in Celiac Disease. <i>Cell</i> , 2019, 176, 967-981.e19.	13.5	126
31	Gut microbiome heritability is nearly universal but environmentally contingent. <i>Science</i> , 2021, 373, 181-186.	6.0	126
32	IL-15, gluten and HLA-DQ8 drive tissue destruction in coeliac disease. <i>Nature</i> , 2020, 578, 600-604.	13.7	122
33	Adaptively introgressed Neandertal haplotype at the OAS locus functionally impacts innate immune responses in humans. <i>Genome Biology</i> , 2016, 17, 246.	3.8	117
34	Evolutionary insights into the high worldwide prevalence of MBL2 deficiency alleles. <i>Human Molecular Genetics</i> , 2006, 15, 2650-2658.	1.4	114
35	Reservoir Host Immune Responses to Emerging Zoonotic Viruses. <i>Cell</i> , 2015, 160, 20-35.	13.5	114
36	The impact of agricultural emergence on the genetic history of African rainforest hunter-gatherers and agriculturalists. <i>Nature Communications</i> , 2014, 5, 3163.	5.8	96

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37	Genome-wide quantification of the effects of DNA methylation on human gene regulation. <i>ELife</i> , 2018, 7, .	2.8	96
38	Functional Comparison of Innate Immune Signaling Pathways in Primates. <i>PLoS Genetics</i> , 2010, 6, e1001249.	1.5	94
39	Adaptive, convergent origins of the pygmy phenotype in African rainforest hunter-gatherers. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2014, 111, E3596-603.	3.3	91
40	Widespread Shortening of 3â€™ Untranslated Regions and Increased Exon Inclusion Are Evolutionarily Conserved Features of Innate Immune Responses to Infection. <i>PLoS Genetics</i> , 2016, 12, e1006338.	1.5	90
41	Efficient and Robust NK-Cell Transduction With Baboon Envelope Pseudotyped Lentivector. <i>Frontiers in Immunology</i> , 2019, 10, 2873.	2.2	84
42	Signatures of Purifying and Local Positive Selection in Human miRNAs. <i>American Journal of Human Genetics</i> , 2009, 84, 316-327.	2.6	83
43	The Heritage of Pathogen Pressures and Ancient Demography in the Human Innate-Immunity CD209/CD209L Region. <i>American Journal of Human Genetics</i> , 2005, 77, 869-886.	2.6	81
44	The epigenomic landscape of African rainforest hunter-gatherers and farmers. <i>Nature Communications</i> , 2015, 6, 10047.	5.8	75
45	Fecal microbiota transplant rescues mice from human pathogen mediated sepsis by restoring systemic immunity. <i>Nature Communications</i> , 2020, 11, 2354.	5.8	75
46	Formulating a Historical and Demographic Model of Recent Human Evolution Based on Resequencing Data from Noncoding Regions. <i>PLoS ONE</i> , 2010, 5, e10284.	1.1	74
47	Exploring the Occurrence of Classic Selective Sweeps in Humans Using Whole-Genome Sequencing Data Sets. <i>Molecular Biology and Evolution</i> , 2014, 31, 1850-1868.	3.5	72
48	The contribution of natural selection to present-day susceptibility to chronic inflammatory and autoimmune disease. <i>Current Opinion in Immunology</i> , 2014, 31, 66-78.	2.4	72
49	Social status alters chromatin accessibility and the gene regulatory response to glucocorticoid stimulation in rhesus macaques. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2019, 116, 1219-1228.	3.3	71
50	Signature-Tagged Transposon Mutagenesis Identifies Novel <i>Mycobacterium tuberculosis</i> Genes Involved in the Parasitism of Human Macrophages. <i>Infection and Immunity</i> , 2007, 75, 504-507.	1.0	69
51	Genetic ancestry effects on the response to viral infection are pervasive but cell type specific. <i>Science</i> , 2021, 374, 1127-1133.	6.0	68
52	Annexin1 regulates DC efferocytosis and cross-presentation during <i>Mycobacterium tuberculosis</i> infection. <i>Journal of Clinical Investigation</i> , 2015, 125, 752-768.	3.9	65
53	A multilayered immune system through the lens of unconventional T cells. <i>Nature</i> , 2021, 595, 501-510.	13.7	64
54	<i>Mycobacterium tuberculosis</i> infection induces a specific human innate immune response. <i>Scientific Reports</i> , 2015, 5, 16882.	1.6	63

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55	Common methods for fecal sample storage in field studies yield consistent signatures of individual identity in microbiome sequencing data. <i>Scientific Reports</i> , 2016, 6, 31519.	1.6	63
56	Gene-body 5-hydroxymethylation is associated with gene expression changes in the prefrontal cortex of depressed individuals. <i>Translational Psychiatry</i> , 2017, 7, e1119-e1119.	2.4	63
57	A genomic portrait of the genetic architecture and regulatory impact of microRNA expression in response to infection. <i>Genome Research</i> , 2014, 24, 850-859.	2.4	60
58	Bacterial Infection Drives the Expression Dynamics of microRNAs and Their isomiRs. <i>PLoS Genetics</i> , 2015, 11, e1005064.	1.5	60
59	Alu repeats as transcriptional regulatory platforms in macrophage responses to <i>M. tuberculosis</i> infection. <i>Nucleic Acids Research</i> , 2016, 44, 10571-10587.	6.5	52
60	Lack of Association between Genetic Polymorphisms in Enzymes Associated with Folate Metabolism and Unexplained Reduced Sperm Counts. <i>PLoS ONE</i> , 2009, 4, e6540.	1.1	51
61	Different selective pressures shape the evolution of Toll-like receptors in human and African great ape populations. <i>Human Molecular Genetics</i> , 2013, 22, 4829-4840.	1.4	49
62	Social status drives social relationships in groups of unrelated female rhesus macaques. <i>Animal Behaviour</i> , 2016, 111, 307-317.	0.8	47
63	Age-Dependent Association between Pulmonary Tuberculosis and Common TOX Variants in the 8q12-13 Linkage Region. <i>American Journal of Human Genetics</i> , 2013, 92, 407-414.	2.6	46
64	The contribution of admixture to primate evolution. <i>Current Opinion in Genetics and Development</i> , 2017, 47, 61-68.	1.5	44
65	Fetal microglial phenotype in vitro carries memory of prior in vivo exposure to inflammation. <i>Frontiers in Cellular Neuroscience</i> , 2015, 9, 294.	1.8	43
66	pncA Mutations in Pyrazinamide-Resistant Mycobacterium tuberculosis Isolates in Portugal. <i>Antimicrobial Agents and Chemotherapy</i> , 2004, 48, 2736-2738.	1.4	41
67	Evolution of the TIR Domain-Containing Adaptors in Humans: Swinging between Constraint and Adaptation. <i>Molecular Biology and Evolution</i> , 2011, 28, 3087-3097.	3.5	40
68	Genomic Evidence for Local Adaptation of Hunter-Gatherers to the African Rainforest. <i>Current Biology</i> , 2019, 29, 2926-2935.e4.	1.8	40
69	Promoter and neck region length variation of DC-SIGN is not associated with susceptibility to tuberculosis in Tunisian patients. <i>Human Immunology</i> , 2007, 68, 908-912.	1.2	39
70	Characterizing 5-hydroxymethylcytosine in human prefrontal cortex at single base resolution. <i>BMC Genomics</i> , 2015, 16, 672.	1.2	38
71	The demographic history and mutational load of African hunter-gatherers and farmers. <i>Nature Ecology and Evolution</i> , 2018, 2, 721-730.	3.4	38
72	Deciphering the genetic control of gene expression following Mycobacterium leprae antigen stimulation. <i>PLoS Genetics</i> , 2017, 13, e1006952.	1.5	37

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73	Dominance rank causally affects personality and glucocorticoid regulation in female rhesus macaques. <i>Psychoneuroendocrinology</i> , 2016, 74, 179-188.	1.3	34
74	Social history and exposure to pathogen signals modulate social status effects on gene regulation in rhesus macaques. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2020, 117, 23317-23322.	3.3	33
75	Gene Set Signature of Reversal Reaction Type I in Leprosy Patients. <i>PLoS Genetics</i> , 2013, 9, e1003624.	1.5	32
76	Polygenic adaptation and convergent evolution on growth and cardiac genetic pathways in African and Asian rainforest hunter-gatherers. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2018, 115, E11256-E11263.	3.3	30
77	Primate innate immune responses to bacterial and viral pathogens reveals an evolutionary trade-off between strength and specificity. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2021, 118, .	3.3	30
78	Functional characterization of naturally occurring genetic variants in the human TLR1-2-6 gene family. <i>Human Mutation</i> , 2011, 32, 643-652.	1.1	28
79	Human NKG2E Is Expressed and Forms an Intracytoplasmic Complex with CD94 and DAP12. <i>Journal of Immunology</i> , 2014, 193, 610-616.	0.4	28
80	Genetic and Transcriptional Analysis of Human Host Response to Healthy Gut Microbiota. <i>MSystems</i> , 2016, 1, .	1.7	28
81	Natural selection contributed to immunological differences between hunter-gatherers and agriculturalists. <i>Nature Ecology and Evolution</i> , 2019, 3, 1253-1264.	3.4	28
82	Evolutionary and population (epi)genetics of immunity to infection. <i>Human Genetics</i> , 2020, 139, 723-732.	1.8	28
83	High-Throughput SNP Genotyping: Combining Tag SNPs and Molecular Beacons. <i>Methods in Molecular Biology</i> , 2009, 578, 255-276.	0.4	27
84	DC-SIGN Interacts with <i>Mycobacterium leprae</i> but Sequence Variation in This Lectin Is Not Associated with Leprosy in the Pakistani Population. <i>Human Immunology</i> , 2006, 67, 102-107.	1.2	26
85	The role played by natural selection on Mendelian traits in humans. <i>Annals of the New York Academy of Sciences</i> , 2010, 1214, 1-17.	1.8	25
86	The epigenetically-encoded memory of the innate immune system. <i>Current Opinion in Immunology</i> , 2020, 65, 7-13.	2.4	24
87	High molecular weight DNA extraction strategies for long-read sequencing of complex metagenomes. <i>Molecular Ecology Resources</i> , 2022, 22, 1786-1802.	2.2	24
88	Identification of a $\hat{I}^3c$ Receptor Antagonist That Prevents Reprogramming of Human Tissue-resident Cytotoxic T Cells by IL15 and IL21. <i>Gastroenterology</i> , 2020, 158, 625-637.e13.	0.6	23
89	Evolutionary genetics evidence of an essential, nonredundant role of the IFN- $\hat{I}^3$ pathway in protective immunity. <i>Human Mutation</i> , 2011, 32, 633-642.	1.1	22
90	A Short-Term High-Fat Diet Alters Glutathione Levels and IL-6 Gene Expression in Oxidative Skeletal Muscles of Young Rats. <i>Frontiers in Physiology</i> , 2019, 10, 372.	1.3	22

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91	Length Variation of DC-SIGN and L-SIGN Neck-Region has no Impact on Tuberculosis Susceptibility. <i>Human Immunology</i> , 2007, 68, 106-112.	1.2	21
92	Genetic and evolutionary determinants of human population variation in immune responses. <i>Current Opinion in Genetics and Development</i> , 2018, 53, 28-35.	1.5	20
93	Transposable elements have contributed human regulatory regions that are activated upon bacterial infection. <i>Philosophical Transactions of the Royal Society B: Biological Sciences</i> , 2020, 375, 20190332.	1.8	20
94	Pre-existing chromatin accessibility and gene expression differences among naive CD4+ T cells influence effector potential. <i>Cell Reports</i> , 2021, 37, 110064.	2.9	20
95	Alveolar macrophages from persons living with HIV show impaired epigenetic response to <i>Mycobacterium tuberculosis</i> . <i>Journal of Clinical Investigation</i> , 2021, 131, .	3.9	19
96	Extracellular Adenosine Triphosphate Affects the Response of Human Macrophages Infected With <i>Mycobacterium tuberculosis</i> . <i>Journal of Infectious Diseases</i> , 2014, 210, 824-833.	1.9	18
97	Synchrony and idiosyncrasy in the gut microbiome of wild baboons. <i>Nature Ecology and Evolution</i> , 2022, 6, 955-964.	3.4	18
98	Proteomic Characterization of Phagosomal Membrane Microdomains During Phagolysosome Biogenesis and Evolution. <i>Molecular and Cellular Proteomics</i> , 2012, 11, 1365-1377.	2.5	17
99	Lack of evidence for intergenerational inheritance of immune resistance to infections. <i>Nature Immunology</i> , 2022, 23, 203-207.	7.0	17
100	Quantitative Trait Loci (QTL) Study Identifies Novel Genomic Regions Associated to Chiari-Like Malformation in Griffon Bruxellois Dogs. <i>PLoS ONE</i> , 2014, 9, e89816.	1.1	16
101	DC-SIGNR Neck-Region Polymorphisms and HIV-1 Susceptibility: From Population Stratification to a Possible Advantage of the 7/5 Heterozygous Genotype. <i>Journal of Infectious Diseases</i> , 2006, 194, 1184-1185.	1.9	14
102	Protective Role of DC-SIGN(CD209) Neck-Region Alleles with <5 Repeat Units in HIV-1 Transmission. <i>Journal of Infectious Diseases</i> , 2008, 198, 68-71.	1.9	13
103	When genetics meets epigenetics: deciphering the mechanisms controlling inter-individual variation in immune responses to infection. <i>Current Opinion in Immunology</i> , 2014, 29, 119-126.	2.4	13
104	Holy Immune Tolerance, Batman!. <i>Immunity</i> , 2018, 48, 1074-1076.	6.6	13
105	Agonism and grooming behaviour explain social status effects on physiology and gene regulation in rhesus macaques. <i>Philosophical Transactions of the Royal Society B: Biological Sciences</i> , 2022, 377, 20210132.	1.8	13
106	RNAseq profiling of primary microglia and astrocyte cultures in near-term ovine fetus: A glial in vivo-in vitro multi-hit paradigm in large mammalian brain. <i>Journal of Neuroscience Methods</i> , 2017, 276, 23-32.	1.3	11
107	Molecular Signature of CAID Syndrome: Noncanonical Roles of SGO1 in Regulation of TGF- $\beta^2$ Signaling and Epigenomics. <i>Cellular and Molecular Gastroenterology and Hepatology</i> , 2019, 7, 411-431.	2.3	11
108	Lung Epithelial Signaling Mediates Early Vaccine-Induced CD4 <sup>+</sup> T Cell Activation and <i>Mycobacterium tuberculosis</i> Control. <i>MBio</i> , 2021, 12, e0146821.	1.8	11

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109	Don't move: LRRK2 arrests NFAT in the cytoplasm. <i>Nature Immunology</i> , 2011, 12, 1029-1030.	7.0	8
110	Predicting susceptibility to tuberculosis based on gene expression profiling in dendritic cells. <i>Scientific Reports</i> , 2017, 7, 5702.	1.6	8
111	Social affiliation predicts mitochondrial DNA copy number in female rhesus macaques. <i>Biology Letters</i> , 2019, 15, 20180643.	1.0	8
112	A signature of Neanderthal introgression on molecular mechanisms of environmental responses. <i>PLoS Genetics</i> , 2021, 17, e1009493.	1.5	5
113	Mitochondrial cyclophilin D promotes disease tolerance by licensing NK cell development and IL-22 production against influenza virus. <i>Cell Reports</i> , 2022, 39, 110974.	2.9	5
114	Epidemiologia molecular de <i>Mycobacterium tuberculosis</i> em Lisboa. <i>Revista Portuguesa De Pneumologia</i> , 2008, 14, 239-259.	0.7	4
115	Getting under and through the skin: ecological genomics of chytridiomycosis infection in frogs. <i>Molecular Ecology</i> , 2012, 21, 3095-3097.	2.0	2
116	Editorial Overview: Immunogenetics and transplantation: Bringing evolution and genomics to human immunology. <i>Current Opinion in Immunology</i> , 2014, 30, v-vii.	2.4	0
117	My Old World chap, this gal is not for you. <i>Cell Host and Microbe</i> , 2021, 29, 315-317.	5.1	0
118	The macrophage IRF8/IRF1 regulome is required for protection against infections and is associated with chronic inflammation. <i>Journal of Cell Biology</i> , 2016, 212, 2127OIA59.	2.3	0