Frank D Gilliland

List of Publications by Citations

126 papers	6,994 citations	42 h-index	82 g-index
144 ext. papers	8,653 ext. citations	8.5 avg, IF	5.54 L-index

#	Paper	IF	Citations
126	Meta-analysis of genome-wide association studies of asthma in ethnically diverse North American populations. *Nature Genetics*, **2011**, 43, 887-92	36.3	605
125	Asthma in exercising children exposed to ozone: a cohort study. *Lancet, The*, **2002**, 359, 386-91	40	553
124	Traffic, susceptibility, and childhood asthma. *Environmental Health Perspectives*, **2006**, 114, 766-72	8.4	459
123	Childhood incident asthma and traffic-related air pollution at home and school. *Environmental Health Perspectives*, **2010**, 118, 1021-6	8.4	389
122	Association of improved air quality with lung development in children. *New England Journal of Medicine*, **2015**, 372, 905-13	59.2	371
121	Obesity and the risk of newly diagnosed asthma in school-age children. *American Journal of Epidemiology*, **2003**, 158, 406-15	3.8	289
120	Effect of glutathione-S-transferase M1 and P1 genotypes on xenobiotic enhancement of allergic responses: randomised, placebo-controlled crossover study. *Lancet, The*, **2004**, 363, 119-25	40	270
119	Multiancestry association study identifies new asthma risk loci that colocalize with immune-cell enhancer marks. *Nature Genetics*, **2018**, 50, 42-53	36.3	246
118	Quality-of-life outcomes after primary androgen deprivation therapy: results from the Prostate Cancer Outcomes Study. *Journal of Clinical Oncology*, **2001**, 19, 3750-7	2.2	201
117	The effects of ambient air pollution on school absenteeism due to respiratory illnesses. *Epidemiology*, **2001**, 12, 43-54	3.1	174
116	Regular smoking and asthma incidence in adolescents. *American Journal of Respiratory and Critical Care Medicine*, **2006**, 174, 1094-100	10.2	135
115	Children's lung function and antioxidant vitamin, fruit, juice, and vegetable intake. *American Journal of Epidemiology*, **2003**, 158, 576-84	3.8	107
114	Associations of children's lung function with ambient air pollution: joint effects of regional and near-roadway pollutants. *Thorax*, **2014**, 69, 540-7	7.3	98
113	Prenatal tobacco smoke exposure is associated with childhood DNA CpG methylation. *PLoS ONE*, **2014**, 9, e99716	3.7	94
112	Epigenome-wide meta-analysis of DNA methylation and childhood asthma. *Journal of Allergy and Clinical Immunology*, **2019**, 143, 2062-2074	11.5	87
111	Genetic ancestry influences asthma susceptibility and lung function among Latinos. *Journal of Allergy and Clinical Immunology*, **2015**, 135, 228-35	11.5	85
110	Genome-wide association study and admixture mapping identify different asthma-associated loci in Latinos: the Genes-environments & Admixture in Latino Americans study. *Journal of Allergy and Clinical Immunology*, **2014**, 134, 295-305	11.5	84

109	Longitudinal Associations Between Ambient Air Pollution With Insulin Sensitivity, β-Cell Function, and Adiposity in Los Angeles Latino Children. *Diabetes*, **2017**, 66, 1789-1796	0.9	82
108	Air pollution affects lung cancer survival. *Thorax*, **2016**, 71, 891-8	7.3	79
107	Transforming growth factor- 1 C-509T polymorphism, oxidant stress, and early-onset childhood asthma. *American Journal of Respiratory and Critical Care Medicine*, **2007**, 176, 1192-9	10.2	77
106	Stress and Bronchodilator Response in Children with Asthma. *American Journal of Respiratory and Critical Care Medicine*, **2015**, 192, 47-56	10.2	71
105	Effects of Childhood Asthma on the Development of Obesity among School-aged Children. *American Journal of Respiratory and Critical Care Medicine*, **2017**, 195, 1181-1188	10.2	68
104	Microsomal epoxide hydrolase, glutathione S-transferase P1, traffic and childhood asthma. *Thorax*, **2007**, 62, 1050-7	7.3	68
103	Air pollution exposure assessment for epidemiologic studies of pregnant women and children: lessons learned from the Centers for Children's Environmental Health and Disease Prevention Research. *Environmental Health Perspectives*, **2005**, 113, 1447-54	8.4	66
102	Association of Changes in Air Quality With Bronchitic Symptoms in Children in California, 1993-2012. *JAMA - Journal of the American Medical Association*, **2016**, 315, 1491-501	27.4	64
101	Outdoor air pollution, genetic susceptibility, and asthma management: opportunities for intervention to reduce the burden of asthma. *Pediatrics*, **2009**, 123 Suppl 3, S168-73	7.4	63
100	Association of Changes in Air Quality With Incident Asthma in Children in California, 1993-2014. *JAMA - Journal of the American Medical Association*, **2019**, 321, 1906-1915	27.4	62
99	Noninvasive analysis of the sputum transcriptome discriminates clinical phenotypes of asthma. *American Journal of Respiratory and Critical Care Medicine*, **2015**, 191, 1116-25	10.2	62
98	Chronic effects of air pollution on respiratory health in Southern California children: findings from the Southern California Children's Health Study. *Journal of Thoracic Disease*, **2015**, 7, 46-58	2.6	60
97	Glutathione s-transferases M1 and P1 prevent aggravation of allergic responses by secondhand smoke. *American Journal of Respiratory and Critical Care Medicine*, **2006**, 174, 1335-41	10.2	57
96	Ethnic-specific associations of rare and low-frequency DNA sequence variants with asthma. *Nature Communications*, **2015**, 6, 5965	17.4	56
95	Short-term effects of airport-associated ultrafine particle exposure on lung function and inflammation in adults with asthma. *Environment International*, **2018**, 118, 48-59	12.9	56
94	Dietary Fiber-Induced Microbial Short Chain Fatty Acids Suppress ILC2-Dependent Airway Inflammation. *Frontiers in Immunology*, **2019**, 10, 2051	8.4	55
93	Perfluoroalkyl substances, metabolomic profiling, and alterations in glucose homeostasis among overweight and obese Hispanic children: A proof-of-concept analysis. *Environment International*, **2019**, 126, 445-453	12.9	54
92	Exposure to traffic-related air pollution and the composition of the gut microbiota in overweight and obese adolescents. *Environmental Research*, **2018**, 161, 472-478	7.9	53

91	Genome-wide association and HLA fine-mapping studies identify risk loci and genetic pathways underlying allergic rhinitis. *Nature Genetics*, **2018**, 50, 1072-1080	36.3	52
90	Associations of air pollution, obesity and cardiometabolic health in young adults: The Meta-AIR study. *Environment International*, **2019**, 133, 105180	12.9	52
89	Outdoor Air Pollution and New-Onset Airway Disease. An Official American Thoracic Society Workshop Report. *Annals of the American Thoracic Society*, **2020**, 17, 387-398	4.7	52
88	Genome-wide interaction studies reveal sex-specific asthma risk alleles. *Human Molecular Genetics*, **2014**, 23, 5251-9	5.6	50
87	Particulate matter air pollution and liver cancer survival. *International Journal of Cancer*, **2017**, 141, 744-749	7.9	48
86	High intake of dietary fructose in overweight/obese teenagers associated with depletion of and in gut microbiome. *Gut Microbes*, **2019**, 10, 712-719	8.8	48
85	Longitudinal associations of in utero and early life near-roadway air pollution with trajectories of childhood body mass index. *Environmental Health*, **2018**, 17, 64	6	44
84	Air Pollution and Lung Function in Minority Youth with Asthma in the GALA II (Genes-Environments and Admixture in Latino Americans) and SAGE II (Study of African Americans, Asthma, Genes, and Environments) Studies. *American Journal of Respiratory and Critical Care Medicine*, **2016**, 193, 1271-80	10.2	41
83	Costimulation of type-2 innate lymphoid cells by GITR promotes effector function and ameliorates type 2 diabetes. *Nature Communications*, **2019**, 10, 713	17.4	41
82	A genome-wide survey of CD4(+) lymphocyte regulatory genetic variants identifies novel asthma genes. *Journal of Allergy and Clinical Immunology*, **2014**, 134, 1153-62	11.5	40
81	Relationship between free and total malondialdehyde, a well-established marker of oxidative stress, in various types of human biospecimens. *Journal of Thoracic Disease*, **2018**, 10, 3088-3097	2.6	40
80	Gene Expression Profiling in Blood Provides Reproducible Molecular Insights into Asthma Control. *American Journal of Respiratory and Critical Care Medicine*, **2017**, 195, 179-188	10.2	37
79	Effects of glutathione S-transferase P1, M1, and T1 on acute respiratory illness in school children. *American Journal of Respiratory and Critical Care Medicine*, **2002**, 166, 346-51	10.2	37
78	Glutathione S-transferase P1 and NADPH quinone oxidoreductase polymorphisms are associated with aberrant promoter methylation of P16(INK4a) and O(6)-methylguanine-DNA methyltransferase in sputum. *Cancer Research*, **2002**, 62, 2248-52	10.1	36
77	Spatiotemporal Imputation of MAIAC AOD Using Deep Learning with Downscaling. *Remote Sensing of Environment*, **2020**, 237,	13.2	35
76	Ambient Air Pollution Is Associated With the Severity of Coronary Atherosclerosis and Incident Myocardial Infarction in Patients Undergoing Elective Cardiac Evaluation. *Journal of the American Heart Association*, **2016**, 5,	6	35
75	Ambient and Traffic-Related Air Pollution Exposures as Novel Risk Factors for Metabolic Dysfunction and Type 2 Diabetes. *Current Epidemiology Reports*, **2018**, 5, 79-91	2.9	34
74	Longitudinal effects of air pollution on exhaled nitric oxide: the Children's Health Study. *Occupational and Environmental Medicine*, **2014**, 71, 507-13	2.1	33

73	Exhaled NO: Determinants and Clinical Application in Children With Allergic Airway Disease. *Allergy, Asthma and Immunology Research*, **2016**, 8, 12-21	5.3	33
72	Genome-wide analysis highlights contribution of immune system pathways to the genetic architecture of asthma. *Nature Communications*, **2020**, 11, 1776	17.4	33
71	Traffic-related air pollution and alveolar nitric oxide in southern California children. *European Respiratory Journal*, **2016**, 47, 1348-56	13.6	32
70	Increasing incidence of colon and rectal cancer among Hispanics and American Indians in New Mexico (United States), 1969-94. *Cancer Causes and Control*, **1998**, 9, 137-44	2.8	31
69	A trans-ancestral meta-analysis of genome-wide association studies reveals loci associated with childhood obesity. *Human Molecular Genetics*, **2019**, 28, 3327-3338	5.6	30
68	Dietary magnesium, potassium, sodium, and children's lung function. *American Journal of Epidemiology*, **2002**, 155, 125-31	3.8	30
67	Does early onset asthma increase childhood obesity risk? A pooled analysis of 16 European cohorts. *European Respiratory Journal*, **2018**, 52,	13.6	30
66	Prenatal Air Pollution Exposure and Early Cardiovascular Phenotypes in Young Adults. *PLoS ONE*, **2016**, 11, e0150825	3.7	27
65	Spatial Variation in Particulate Matter Components over a Large Urban Area. *Atmospheric Environment*, **2014**, 83, 211-219	5.3	25
64	Association of Prenatal Exposure to Ambient and Traffic-Related Air Pollution With Newborn Thyroid Function: Findings From the Children's Health Study. *JAMA Network Open*, **2018**, 1, e182172	10.4	25
63	Elucidation of causal direction between asthma and obesity: a bi-directional Mendelian randomization study. *International Journal of Epidemiology*, **2019**, 48, 899-907	7.8	23
62	Ensemble-based deep learning for estimating PM over California with multisource big data including wildfire smoke. *Environment International*, **2020**, 145, 106143	12.9	21
61	Indoor and Outdoor Air Pollution- related Health Problem in Ethiopia: Review of Related Literature. *Ethiopian Journal of Health Development*, **2016**, 30, 5-16		20
60	An admixture mapping meta-analysis implicates genetic variation at 18q21 with asthma susceptibility in Latinos. *Journal of Allergy and Clinical Immunology*, **2019**, 143, 957-969	11.5	20
59	Estimation of parameters in the two-compartment model for exhaled nitric oxide. *PLoS ONE*, **2014**, 9, e85471	3.7	19
58	Particulate matter, the newborn methylome, and cardio-respiratory health outcomes in childhood. *Environmental Epigenetics*, **2016**, 2, dvw005	2.4	19
57	Study Design, Protocol and Profile of the Maternal And Developmental Risks from Environmental and Social Stressors (MADRES) Pregnancy Cohort: a Prospective Cohort Study in Predominantly Low-Income Hispanic Women in Urban Los Angeles. *BMC Pregnancy and Childbirth*, **2019**, 19, 189	3.2	18
56	Multiple-flow exhaled nitric oxide, allergy, and asthma in a population of older children. *Pediatric Pulmonology*, **2013**, 48, 885-96	3.5	18

55	Applying Multivariate Segmentation Methods to Human Activity Recognition From Wearable SensorsRData. *JMIR MHealth and UHealth*, **2019**, 7, e11201	5.5	18
54	Role of local CpG DNA methylation in mediating the 17q21 asthma susceptibility gasdermin B (GSDMB)/ORMDL sphingolipid biosynthesis regulator 3 (ORMDL3) expression quantitative trait locus. *Journal of Allergy and Clinical Immunology*, **2018**, 141, 2282-2286.e6	11.5	17
53	Analysis of bisphenol A diglycidyl ether (BADGE) and its hydrolytic metabolites in biological specimens by high-performance liquid chromatography and tandem mass spectrometry. *Journal of Chromatography B: Analytical Technologies in the Biomedical and Life Sciences*, **2014**, 965, 33-8	3.2	17
52	Regional and traffic-related air pollutants are associated with higher consumption of fast food and trans fat among adolescents. *American Journal of Clinical Nutrition*, **2019**, 109, 99-108	7	17
51	15q12 variants, sputum gene promoter hypermethylation, and lung cancer risk: a GWAS in smokers. *Journal of the National Cancer Institute*, **2015**, 107,	9.7	16
50	Cluster-based bagging of constrained mixed-effects models for high spatiotemporal resolution nitrogen oxides prediction over large regions. *Environment International*, **2019**, 128, 310-323	12.9	14
49	Linkage Analysis of Urine Arsenic Species Patterns in the Strong Heart Family Study. *Toxicological Sciences*, **2015**, 148, 89-100	4.4	14
48	Genetic and epigenetic susceptibility of airway inflammation to PM in school children: new insights from quantile regression. *Environmental Health*, **2017**, 16, 88	6	14
47	Constrained Mixed-Effect Models with Ensemble Learning for Prediction of Nitrogen Oxides Concentrations at High Spatiotemporal Resolution. *Environmental Science & Technology*, **2017**, 51, 9920-9929	10.3	13
46	Extended exhaled nitric oxide analysis in field surveys of schoolchildren: a pilot test. *Pediatric Pulmonology*, **2009**, 44, 1033-42	3.5	13
45	COVID-19 mortality in California based on death certificates: disproportionate impacts across racial/ethnic groups and nativity. *Annals of Epidemiology*, **2021**, 58, 69-75	6.4	13
44	Determinants of the Spatial Distributions of Elemental Carbon and Particulate Matter in Eight Southern Californian Communities. *Atmospheric Environment*, **2014**, 86, 84-92	5.3	12
43	Occupational Health and Safety in Ethiopia: A review of Situational Analysis and Needs Assessment. *Ethiopian Journal of Health Development*, **2016**, 30, 17-27		12
42	Contribution of tailpipe and non-tailpipe traffic sources to quasi-ultrafine, fine and coarse particulate matter in southern California. *Journal of the Air and Waste Management Association*, **2021**, 71, 209-230	2.4	12
41	Within-subject effects of environmental and social stressors on pre- and post-partum obesity-related biobehavioral responses in low-income Hispanic women: protocol of an intensive longitudinal study. *BMC Public Health*, **2019**, 19, 253	4.1	11
40	Effects of policy-driven hypothetical air pollutant interventions on childhood asthma incidence in southern California. *Proceedings of the National Academy of Sciences of the United States of America*, **2019**, 116, 15883-15888	11.5	11
39	The Dynamic Relationship Between Asthma and Obesity in Schoolchildren. *American Journal of Epidemiology*, **2020**, 189, 583-591	3.8	11
38	Asthma Disease Status, COPD, and COVID-19 Severity in a Large Multiethnic Population. *Journal of Allergy and Clinical Immunology: in Practice*, **2021**, 9, 3621-3628.e2	5.4	10

37	Biomedical REAl-Time Health Evaluation (BREATHE): toward an mHealth informatics platform. *JAMIA Open*, **2020**, 3, 190-200	2.9	9
36	Gene Coexpression Networks in Whole Blood Implicate Multiple Interrelated Molecular Pathways in Obesity in People with Asthma. *Obesity*, **2018**, 26, 1938-1948	8	9
35	Single-Cell Digital Lysates Generated by Phase-Switch Microfluidic Device Reveal Transcriptome Perturbation of Cell Cycle. *ACS Nano*, **2018**, 12, 4687-4694	16.7	8
34	Gene Promoter Hypermethylation Detected in Sputum Predicts FEV Decline and All-Cause Mortality in Smokers. *American Journal of Respiratory and Critical Care Medicine*, **2018**, 198, 187-196	10.2	7
33	The Potential Effects of Policy-driven Air Pollution Interventions on Childhood Lung Development. *American Journal of Respiratory and Critical Care Medicine*, **2020**, 201, 438-444	10.2	7
32	Exposure measurement error in air pollution studies: A framework for assessing shared, multiplicative measurement error in ensemble learning estimates of nitrogen oxides. *Environment International*, **2019**, 125, 97-106	12.9	6
31	Exposure Measurement Error in Air Pollution Studies: The Impact of Shared, Multiplicative Measurement Error on Epidemiological Health Risk Estimates. *Air Quality, Atmosphere and Health*, **2020**, 13, 631-643	5.6	6
30	RISK EFFECTS OF NEAR-ROADWAY POLLUTANTS AND ASTHMA STATUS ON BRONCHITIC SYMPTOMS IN CHILDREN. *Environmental Epidemiology*, **2018**, 2,	0.2	6
29	Understanding the importance of key risk factors in predicting chronic bronchitic symptoms using a machine learning approach. *BMC Medical Research Methodology*, **2019**, 19, 70	4.7	5
28	Implication of a Chromosome 15q15.2 Locus in Regulating UBR1 and Predisposing Smokers to MGMT Methylation in Lung. *Cancer Research*, **2015**, 75, 3108-17	10.1	5
27	Genetic Ancestry and Asthma and Rhinitis Occurrence in Hispanic Children: Findings from the Southern California Children's Health Study. *PLoS ONE*, **2015**, 10, e0135384	3.7	5
26	Mapping the 17q12-21.1 Locus for Variants Associated with Early-Onset Asthma in African Americans. *American Journal of Respiratory and Critical Care Medicine*, **2021**, 203, 424-436	10.2	5
25	US Childhood Asthma Incidence Rate Patterns From the ECHO Consortium to Identify High-risk Groups for Primary Prevention. *JAMA Pediatrics*, **2021**, 175, 919-927	8.3	5
24	Asthma Bridge: The Asthma Biorepository For Integrative Genomic Exploration **2011**,		4
23	Chemical Characterization and Seasonality of Ambient Particles (PM) in the City Centre of Addis Ababa. *International Journal of Environmental Research and Public Health*, **2020**, 17,	4.6	4
22	A GWAS approach identifies Dapp1 as a determinant of air pollution-induced airway hyperreactivity. *PLoS Genetics*, **2019**, 15, e1008528	6	4
21	Dietary Nutrient Intake, Ethnicity, and Epigenetic Silencing of Lung Cancer Genes Detected in Sputum in New Mexican Smokers. *Cancer Prevention Research*, **2018**, 11, 93-102	3.2	4
20	Lung Function in African American Children with Asthma Is Associated with Novel Regulatory Variants of the KIT Ligand and Gene-By-Air-Pollution Interaction. *Genetics*, **2020**, 215, 869-886	4	3

19	Exposure to Perfluoroalkyl Substances and Glucose Homeostasis in Youth. *Environmental Health Perspectives*, **2021**, 129, 97002	8.4	3
18	Near-roadway air pollution associated with COVID-19 severity and mortality - Multiethnic cohort study in Southern California. *Environment International*, **2021**, 157, 106862	12.9	3
17	Determinants of Children's Exhaled Nitric Oxide: New Insights from Quantile Regression. *PLoS ONE*, **2015**, 10, e0130505	3.7	2
16	Ambient air pollution and COVID-19 incidence during four 2020-2021 case surges.. *Environmental Research*, **2022**, 208, 112758	7.9	2
15	Asthma and its relationship to mitochondrial copy number: Results from the Asthma Translational Genomics Collaborative (ATGC) of the Trans-Omics for Precision Medicine (TOPMed) program. *PLoS ONE*, **2020**, 15, e0242364	3.7	2
14	Patterns and determinants of exhaled nitric oxide trajectories in schoolchildren over a 7-year period. *European Respiratory Journal*, **2020**, 56,	13.6	1
13	Genetic determinants of telomere length from 109,122 ancestrally diverse whole-genome sequences in TOPMed.. *Cell Genomics*, **2022**, 2, 100084-100084		1
12	Transcriptomic and metabolomic associations with exposures to air pollutants among young adults with childhood asthma history.. *Environmental Pollution*, **2022**, 299, 118903	9.3	1
11	A prospective and retrospective analysis of smoking behavior changes in ever smokers with high risk for lung cancer from New Mexico and Pennsylvania. *International Journal of Molecular Epidemiology and Genetics*, **2016**, 7, 95-104	0.9	1
10	Exhaled NO: Determinants and Clinical Application in Children With Allergic Airway Disease. *Allergy, Asthma and Immunology Research*, **2016**, 8, 12	5.3	1
9	Long-term air pollution and COVID-19 mortality rates in California: Findings from the Spring/Summer and Winter surges of COVID-19. *Environmental Pollution*, **2022**, 292, 118396	9.3	1
8	Long-term exposures to air pollutants affect in children: a longitudinal study. *European Respiratory Journal*, **2021**, 58,	13.6	1
7	Plasma concentrations of lipophilic persistent organic pollutants and glucose homeostasis in youth populations.. *Environmental Research*, **2022**, 212, 113296	7.9	1
6	Characteristics associated with COVID-19 vaccination status among staff and faculty of a large, diverse University in Los Angeles: The Trojan Pandemic Response Initiative.. *Preventive Medicine Reports*, **2022**, 27, 101802	2.6	1
5	Asthma clustering methods: a literature-informed application to the children's health study data. *Journal of Asthma*, **2021**, 1-14	1.9	0
4	Hierarchical Bayesian estimation of covariate effects on airway and alveolar nitric oxide. *Scientific Reports*, **2021**, 11, 17180	4.9	0
3	The Role of Childhood Asthma in Obesity Development: A Nationwide US Multicohort Study. *Epidemiology*, **2022**, 33, 131-140	3.1	0
2	Meta-Analysis of Hodgkin Lymphoma and Asthma Genome-Wide Association Scans reveals common variants in GATA3. *Blood*, **2014**, 124, 135-135	2.2	

List of Publications

1 Stem Cells in the Real World: Environmental Impacts **2015**, 485-496