Nir Barzilai

List of Publications by Year in Descending Order

123 papers	9,381 citations	48 h-index	96 g-index
140 ext. papers	12,324 ext. citations	10.1 avg, IF	6.2 L-index

#	Paper	IF	Citations
123	Geroscience-guided repurposing of FDA-approved drugs to target aging: A proposed process and prioritization.. *Aging Cell*, **2022**, e13596	9.9	1
122	Effect of longevity genetic variants on the molecular aging rate. *GeroScience*, **2021**, 43, 1237-1251	8.9	3
121	The Hypothalamic-Pituitary-Testicular Axis in Exceptionally Old Men. *Journal of the Endocrine Society*, **2021**, 5, A727-A727	0.4	78
120	Novel ultra-rare exonic variants identified in a founder population implicate cadherins in schizophrenia. *Neuron*, **2021**, 109, 1465-1478.e4	13.9	8
119	Determinants of penetrance and variable expressivity in monogenic metabolic conditions across 77,184 exomes. *Nature Communications*, **2021**, 12, 3505	17.4	5
118	A Compendium of Age-Related PheWAS and GWAS Traits for Human Genetic Association Studies, Their Networks and Genetic Correlations. *Frontiers in Genetics*, **2021**, 12, 680560	4.5	
117	Modulation of Glucose Production by Central Insulin Requires IGF-1 Receptors in AgRP Neurons. *Diabetes*, **2021**, 70, 2237-2249	0.9	2
116	Genetic signature of human longevity in PKC and NF-B signaling. *Aging Cell*, **2021**, 20, e13362	9.9	2
115	Greater effect of polygenic risk score for Alzheimer's disease among younger cases who are apolipoprotein E-4 carriers. *Neurobiology of Aging*, **2021**, 99, 101.e1-101.e9	5.6	1
114	A geroscience perspective on immune resilience and infectious diseases: a potential case for metformin. *GeroScience*, **2021**, 43, 1093-1112	8.9	8
113	Trajectories of frailty in aging: Prospective cohort study. *PLoS ONE*, **2021**, 16, e0253976	3.7	2
112	The antagonistic pleiotropy of insulin-like growth factor 1. *Aging Cell*, **2021**, 20, e13443	9.9	2
111	Einstein-Nathan Shock Center: translating the hallmarks of aging to extend human health span. *GeroScience*, **2021**, 43, 2167-2182	8.9	1
110	Rare genetic coding variants associated with human longevity and protection against age-related diseases. *Nature Aging*, **2021**, 1, 783-794		4
109	Undulating changes in human plasma proteome profiles across the lifespan are linked to disease. *Alzheimer's and Dementia*, **2020**, 16, e043868	1.2	0
108	Prevalent skin cancer and conservative faith may be linked with cognitive impairment in Ashkenazi Jewish exceptionally long-lived individuals. *Alzheimer's and Dementia*, **2020**, 16, e046002	1.2	
107	Insulin-like Growth Factor-1 and IGF Binding Proteins Predict All-Cause Mortality and Morbidity in Older Adults. *Cells*, **2020**, 9,	7.9	14

106	Benefits of Metformin in Attenuating the Hallmarks of Aging. *Cell Metabolism*, **2020**, 32, 15-30	24.6	149
105	The mitochondrial derived peptide humanin is a regulator of lifespan and healthspan. *Aging*, **2020**, 12, 11185-11199	5.6	26
104	Metformin alters skeletal muscle transcriptome adaptations to resistance training in older adults. *Aging*, **2020**, 12, 19852-19866	5.6	10
103	ARDD 2020: from aging mechanisms to interventions. *Aging*, **2020**, 12, 24484-24503	5.6	11
102	Effect of Longevity Genetic Variants on the Molecular Aging Rate. *Innovation in Aging*, **2020**, 4, 852-852	0.1	78
101	Redox-mediated regulation of aging and healthspan by an evolutionarily conserved transcription factor HLH-2/Tcf3/E2A. *Redox Biology*, **2020**, 32, 101448	11.3	5
100	Plasma proteomic profile of frailty. *Aging Cell*, **2020**, 19, e13193	9.9	10
99	Genetics of extreme human longevity to guide drug discovery for healthy ageing. *Nature Metabolism*, **2020**, 2, 663-672	14.6	9
98	Plasma proteomic profile of age, health span, and all-cause mortality in older adults. *Aging Cell*, **2020**, 19, e13250	9.9	16
97	Similar burden of pathogenic coding variants in exceptionally long-lived individuals and individuals without exceptional longevity. *Aging Cell*, **2020**, 19, e13216	9.9	3
96	Frailty and Risk of Incident Motoric Cognitive Risk Syndrome. *Journal of Alzheimer's Disease*, **2019**, 71, S85-S93	4.3	13
95	Exome sequencing of 20,791 cases of type 2 diabetes and 24,440 controls. *Nature*, **2019**, 570, 71-76	50.4	129
94	APOE Alleles and Extreme Human Longevity. *Journals of Gerontology - Series A Biological Sciences and Medical Sciences*, **2019**, 74, 44-51	6.4	55
93	A meta-analysis of genome-wide association studies identifies multiple longevity genes. *Nature Communications*, **2019**, 10, 3669	17.4	102
92	Creating the Next Generation of Translational Geroscientists. *Journal of the American Geriatrics Society*, **2019**, 67, 1934-1939	5.6	7
91	INVESTIGATING DYNAMICS OF AGE-ASSOCIATED TRANSCRIPTIONAL NETWORKS WITH INTERVENTIONS TARGETING AGING. *Innovation in Aging*, **2019**, 3, S559-S559	0.1	78
90	BIOMARKER STRATEGIES FOR GEROSCIENCE-GUIDED CLINICAL TRIALS. *Innovation in Aging*, **2019**, 3, S745-S746	0.1	1
89	Latest advances in aging research and drug discovery. *Aging*, **2019**, 11, 9971-9981	5.6	6

88	Varying Effects of APOE Alleles on Extreme Longevity in European Ethnicities. *Journals of Gerontology - Series A Biological Sciences and Medical Sciences*, **2019**, 74, S45-S51	6.4	10
87	Screening Human Embryos for Polygenic Traits Has Limited Utility. *Cell*, **2019**, 179, 1424-1435.e8	56.2	34
86	Undulating changes in human plasma proteome profiles across the lifespan. *Nature Medicine*, **2019**, 25, 1843-1850	50.5	195
85	Chronic inflammation in the etiology of disease across the life span. *Nature Medicine*, **2019**, 25, 1822-1832	50.5	830
84	PopCluster: an algorithm to identify genetic variants with ethnicity-dependent effects. *Bioinformatics*, **2019**, 35, 3046-3054	7.2	2
83	Metformin regulates metabolic and nonmetabolic pathways in skeletal muscle and subcutaneous adipose tissues of older adults. *Aging Cell*, **2018**, 17, e12723	9.9	72
82	Functional variants in the gene confer shared effects on risk for Crohn's disease and Parkinson's disease. *Science Translational Medicine*, **2018**, 10,	17.5	165
81	High-depth whole genome sequencing of an Ashkenazi Jewish reference panel: enhancing sensitivity, accuracy, and imputation. *Human Genetics*, **2018**, 137, 343-355	6.3	16
80	Effects of FOXO3 Polymorphisms on Survival to Extreme Longevity in Four Centenarian Studies. *Journals of Gerontology - Series A Biological Sciences and Medical Sciences*, **2018**, 73, 1439-1447	6.4	18
79	Targeting senescence. *Nature Medicine*, **2018**, 24, 1092-1094	50.5	12
78	Genetic Insights Into Frailty: Association of 9p21-23 Locus With Frailty. *Frontiers in Medicine*, **2018**, 5, 105	4.9	11
77	Insights into the genetic epidemiology of Crohn's and rare diseases in the Ashkenazi Jewish population. *PLoS Genetics*, **2018**, 14, e1007329	6	41
76	Late-life targeting of the IGF-1 receptor improves healthspan and lifespan in female mice. *Nature Communications*, **2018**, 9, 2394	17.4	57
75	Development of Clinical Trials to Extend Healthy Lifespan. *Cardiovascular Endocrinology and Metabolism*, **2018**, 7, 80-83	2.5	35
74	Sarcosine Is Uniquely Modulated by Aging and Dietary Restriction in Rodents and Humans. *Cell Reports*, **2018**, 25, 663-676.e6	10.6	24
73	Aging as a Biological Target for Prevention and Therapy. *JAMA - Journal of the American Medical Association*, **2018**, 320, 1321-1322	27.4	53
72	A framework for selection of blood-based biomarkers for geroscience-guided clinical trials: report from the TAME Biomarkers Workgroup. *GeroScience*, **2018**, 40, 419-436	8.9	111
71	Activation-Induced Autophagy Is Preserved in CD4+ T-Cells in Familial Longevity. *Journals of Gerontology - Series A Biological Sciences and Medical Sciences*, **2017**, 72, 1201-1206	6.4	27

70	The GH receptor exon 3 deletion is a marker of male-specific exceptional longevity associated with increased GH sensitivity and taller stature. *Science Advances*, **2017**, 3, e1602025	14.3	38
69	Resveratrol Improves Vascular Function and Mitochondrial Number but Not Glucose Metabolism in Older Adults. *Journals of Gerontology - Series A Biological Sciences and Medical Sciences*, **2017**, 72, 1703-1709	6.4	52
68	Association of Family History of Exceptional Longevity With Decline in Physical Function in Aging. *Journals of Gerontology - Series A Biological Sciences and Medical Sciences*, **2017**, 72, 1649-1655	6.4	6
67	A Low-Frequency Inactivating Variant Enriched in the Finnish Population Is Associated With Fasting Insulin Levels and Type 2 Diabetes Risk. *Diabetes*, **2017**, 66, 2019-2032	0.9	29
66	System-wide Benefits of Intermeal Fasting by Autophagy. *Cell Metabolism*, **2017**, 26, 856-871.e5	24.6	66
65	Effect of Exceptional Parental Longevity and Lifestyle Factors on Prevalence of Cardiovascular Disease in Offspring. *American Journal of Cardiology*, **2017**, 120, 2170-2175	3	13
64	Clinical Trials Targeting Aging and Age-Related Multimorbidity. *Journals of Gerontology - Series A Biological Sciences and Medical Sciences*, **2017**, 72, 355-361	6.4	26
63	Association of anti-inflammatory cytokine IL10 polymorphisms with motoric cognitive risk syndrome in an Ashkenazi Jewish population. *Neurobiology of Aging*, **2017**, 58, 238.e1-238.e8	5.6	9
62	The role of dietary patterns and exceptional parental longevity in healthy aging. *Nutrition and Healthy Aging*, **2017**, 4, 247-254	1.3	3
61	Sequence data and association statistics from 12,940 type 2 diabetes cases and controls. *Scientific Data*, **2017**, 4, 170179	8.2	22
60	[P3118]: INCREASED BURDEN OF RARE LOSS-OF-FUNCTION VARIANTS IN ALZHEIMER'S DISEASE PATIENTS COMPARED TO CENTENARIANS **2017**, 13, P980-P980		
59	Association between Sleep Patterns and Health in Families with Exceptional Longevity. *Frontiers in Medicine*, **2017**, 4, 214	4.9	4
58	Symptoms of Apathy Independently Predict Incident Frailty and Disability in Community-Dwelling Older Adults. *Journal of Clinical Psychiatry*, **2017**, 78, e529-e536	4.6	33
57	Positive attitude toward life, emotional expression, self-rated health, and depressive symptoms among centenarians and near-centenarians. *Aging and Mental Health*, **2016**, 20, 930-9	3.5	29
56	Evaluating Health Span in Preclinical Models of Aging and Disease: Guidelines, Challenges, and Opportunities for Geroscience. *Journals of Gerontology - Series A Biological Sciences and Medical Sciences*, **2016**, 71, 1395-1406	6.4	32
55	Compression of Morbidity Is Observed Across Cohorts with Exceptional Longevity. *Journal of the American Geriatrics Society*, **2016**, 64, 1583-91	5.6	52
54	Genome-wide analysis identifies 12 loci influencing human reproductive behavior. *Nature Genetics*, **2016**, 48, 1462-1472	36.3	198
53	Differential burden of rare protein truncating variants in Alzheimer's disease patients compared to centenarians. *Human Molecular Genetics*, **2016**, 25, 3096-3105	5.6	7

52	ICC-dementia (International Centenarian Consortium - dementia): an international consortium to determine the prevalence and incidence of dementia in centenarians across diverse ethnoracial and sociocultural groups. *BMC Neurology*, **2016**, 16, 52	3.1	18
51	Metformin as a Tool to Target Aging. *Cell Metabolism*, **2016**, 23, 1060-1065	24.6	513
50	The Somatotropic Axis in Human Aging: Framework for the Current State of Knowledge and Future Research. *Cell Metabolism*, **2016**, 23, 980-989	24.6	81
49	Central insulin-like growth factor-1 (IGF-1) restores whole-body insulin action in a model of age-related insulin resistance and IGF-1 decline. *Aging Cell*, **2016**, 15, 181-6	9.9	29
48	Lower circulating insulin-like growth factor-I is associated with better cognition in females with exceptional longevity without compromise to muscle mass and function. *Aging*, **2016**, 8, 2414-2424	5.6	20
47	Naturally occurring mitochondrial-derived peptides are age-dependent regulators of apoptosis, insulin sensitivity, and inflammatory markers. *Aging*, **2016**, 8, 796-809	5.6	125
46	The genetic architecture of type 2 diabetes. *Nature*, **2016**, 536, 41-47	50.4	704
45	A Frameshift in CSF2RB Predominant Among Ashkenazi Jews Increases Risk for Crohn's Disease and Reduces Monocyte Signaling via GM-CSF. *Gastroenterology*, **2016**, 151, 710-723.e2	13.3	40
44	Motoric Cognitive Risk Syndrome and Falls Risk: A Multi-Center Study. *Journal of Alzheimer's Disease*, **2016**, 53, 1043-52	4.3	48
43	Disease drivers of aging. *Annals of the New York Academy of Sciences*, **2016**, 1386, 45-68	6.5	72
42	Genetic landscape of APOE in human longevity revealed by high-throughput sequencing. *Mechanisms of Ageing and Development*, **2016**, 155, 7-9	5.6	27
41	New Locus for Skin Intrinsic Fluorescence in Type 1 Diabetes Also Associated With Blood and Skin Glycated Proteins. *Diabetes*, **2016**, 65, 2060-71	0.9	7
40	Advanced aging phenotype is revealed by epigenetic modifications in rat liver after in utero malnutrition. *Aging Cell*, **2016**, 15, 964-72	9.9	17
39	Genetics, lifestyle and longevity: Lessons from centenarians. *Applied & Translational Genomics*, **2015**, 4, 23-32		69
38	Dissecting the Mechanisms Underlying Unusually Successful Human Health Span and Life Span. *Cold Spring Harbor Perspectives in Medicine*, **2015**, 6, a025098	5.4	25
37	Interventions to Slow Aging in Humans: Are We Ready?. *Aging Cell*, **2015**, 14, 497-510	9.9	373
36	Genome-Wide Scan Informed by Age-Related Disease Identifies Loci for Exceptional Human Longevity. *PLoS Genetics*, **2015**, 11, e1005728	6	86
35	Genetic variation in Sirtuin 1 (SIRT1) is associated with lipid profiles but not with longevity in Ashkenazi Jews. *Translational Research*, **2015**, 165, 480-1	11	7

34	The influence of gender on inheritance of exceptional longevity. *Aging*, **2015**, 7, 412-8	5.6	9
33	Association of exceptional parental longevity and physical function in aging. *Age*, **2014**, 36, 9677		15
32	Sequencing an Ashkenazi reference panel supports population-targeted personal genomics and illuminates Jewish and European origins. *Nature Communications*, **2014**, 5, 4835	17.4	115
31	Disrupting mitochondrial-nuclear coevolution affects OXPHOS complex I integrity and impacts human health. *Genome Biology and Evolution*, **2014**, 6, 2665-80	3.9	56
30	Identification of genes promoting skin youthfulness by genome-wide association study. *Journal of Investigative Dermatology*, **2014**, 134, 651-657	4.3	23
29	Motoric cognitive risk syndrome: Multicenter incidence study. *Neurology*, **2014**, 83, 2278-84	6.5	93
28	Motoric cognitive risk syndrome: multicountry prevalence and dementia risk. *Neurology*, **2014**, 83, 718-26	6.5	233
27	Phenotypes and genotypes of high density lipoprotein cholesterol in exceptional longevity. *Current Vascular Pharmacology*, **2014**, 12, 690-7	3.3	20
26	The place of genetics in ageing research. *Nature Reviews Genetics*, **2012**, 13, 589-94	30.1	36
25	The critical role of metabolic pathways in aging. *Diabetes*, **2012**, 61, 1315-22	0.9	489
24	The rationale for delaying aging and the prevention of age-related diseases. *Rambam Maimonides Medical Journal*, **2012**, 3, e0020	1.8	9
23	Lifestyle factors of people with exceptional longevity. *Journal of the American Geriatrics Society*, **2011**, 59, 1509-12	5.6	79
22	Genetic studies reveal the role of the endocrine and metabolic systems in aging. *Journal of Clinical Endocrinology and Metabolism*, **2010**, 95, 4493-500	5.6	46
21	Experimental intrauterine growth restriction induces alterations in DNA methylation and gene expression in pancreatic islets of rats. *Journal of Biological Chemistry*, **2010**, 285, 15111-15118	5.4	126
20	Exceptional parental longevity associated with lower risk of Alzheimer's disease and memory decline. *Journal of the American Geriatrics Society*, **2010**, 58, 1043-9	5.6	35
19	Biological approaches to mechanistically understand the healthy life span extension achieved by calorie restriction and modulation of hormones. *Journals of Gerontology - Series A Biological Sciences and Medical Sciences*, **2009**, 64, 187-91	6.4	57
18	Humanin: a novel central regulator of peripheral insulin action. *PLoS ONE*, **2009**, 4, e6334	3.7	160
17	Novel neuro-regulation of peripheral metabolism in aging. *FASEB Journal*, **2009**, 23, 425.2	0.9	

16	Enhanced activation of a "nutrient-sensing" pathway with age contributes to insulin resistance. *FASEB Journal*, **2008**, 22, 3450-7	0.9	41
15	Buffering mechanisms in aging: a systems approach toward uncovering the genetic component of aging. *PLoS Computational Biology*, **2007**, 3, e170	5	93
14	The insulin/IGF-1 signaling in mammals and its relevance to human longevity. *Experimental Gerontology*, **2005**, 40, 873-7	4.5	94
13	Buffering Mechanisms in Aging: A systems approach towards uncovering the genetic component of aging. *PLoS Computational Biology*, **2005**, preprint, e170	5	1
12	Einstein® Institute for Aging Research: collaborative and programmatic approaches in the search for successful aging. *Experimental Gerontology*, **2004**, 39, 151-7	4.5	5
11	Unique lipoprotein phenotype and genotype associated with exceptional longevity. *JAMA - Journal of the American Medical Association*, **2003**, 290, 2030-40	27.4	433
10	Removal of visceral fat prevents insulin resistance and glucose intolerance of aging: an adipokine-mediated process?. *Diabetes*, **2002**, 51, 2951-8	0.9	442
9	Aging is associated with resistance to effects of leptin on fat distribution and insulin action. *Journals of Gerontology - Series A Biological Sciences and Medical Sciences*, **2002**, 57, B225-31	6.4	60
8	Leptin resistance during aging is independent of fat mass. *Diabetes*, **2002**, 51, 1016-21	0.9	128
7	Offspring of centenarians have a favorable lipid profile. *Journal of the American Geriatrics Society*, **2001**, 49, 76-9	5.6	97
6	Aging does not contribute to the decline in insulin action on storage of muscle glycogen in rats. *American Journal of Physiology - Regulatory Integrative and Comparative Physiology*, **2000**, 278, R111-7	3.2	23
5	Ability of insulin to modulate hepatic glucose production in aging rats is impaired by fat accumulation. *American Journal of Physiology - Endocrinology and Metabolism*, **2000**, 278, E985-91	6	48
4	The effect of leptin on Lep expression is tissue-specific and nutritionally regulated. *Nature Medicine* , **1999**, 5, 895-9	50.5	65
3	Interaction between aging and syndrome X: new insights on the pathophysiology of fat distribution. *Annals of the New York Academy of Sciences*, **1999**, 892, 58-72	6.5	61
2	A nutrient-sensing pathway regulates leptin gene expression in muscle and fat. *Nature*, **1998**, 393, 684-8	50.4	676
1	Intracellular pathways of insulin-mediated glucose uptake before and after puberty in conscious rats. *Pediatric Research*, **1997**, 41, 340-5	3.2	7