Nathan K Lebrasseur

List of Publications by Citations

126 papers	14,856 citations	55 h-index	121 g-index
139 ext. papers	18,490 ext. citations	7.8 avg, IF	6.3 L-index

#	Paper	IF	Citations
126	Clearance of p16Ink4a-positive senescent cells delays ageing-associated disorders. *Nature*, **2011**, 479, 232-6	50.4	2098
125	Adverse events associated with testosterone administration. *New England Journal of Medicine*, **2010**, 363, 109-22	59.2	1065
124	The Achilles' heel of senescent cells: from transcriptome to senolytic drugs. *Aging Cell*, **2015**, 14, 644-58	9.9	987
123	Senolytics improve physical function and increase lifespan in old age. *Nature Medicine*, **2018**, 24, 1246-1256	36.5	776
122	Cellular senescence mediates fibrotic pulmonary disease. *Nature Communications*, **2017**, 8, 14532	17.4	616
121	Targeting cellular senescence prevents age-related bone loss in mice. *Nature Medicine*, **2017**, 23, 1072-1079	36.5	464
120	Skeletal muscle fiber-type switching, exercise intolerance, and myopathy in PGC-1alpha muscle-specific knock-out animals. *Journal of Biological Chemistry*, **2007**, 282, 30014-21	5.4	443
119	Senolytics in idiopathic pulmonary fibrosis: Results from a first-in-human, open-label, pilot study. *EBioMedicine*, **2019**, 40, 554-563	8.8	425
118	JAK inhibition alleviates the cellular senescence-associated secretory phenotype and frailty in old age. *Proceedings of the National Academy of Sciences of the United States of America*, **2015**, 112, E6301-10	11.5	357
117	Senolytics decrease senescent cells in humans: Preliminary report from a clinical trial of Dasatinib plus Quercetin in individuals with diabetic kidney disease. *EBioMedicine*, **2019**, 47, 446-456	8.8	356
116	High-velocity resistance training increases skeletal muscle peak power in older women. *Journal of the American Geriatrics Society*, **2002**, 50, 655-62	5.6	319
115	The transcriptional coactivator PGC-1beta drives the formation of oxidative type IIX fibers in skeletal muscle. *Cell Metabolism*, **2007**, 5, 35-46	24.6	300
114	Targeting senescent cells enhances adipogenesis and metabolic function in old age. *ELife*, **2015**, 4, e12997	8.9	299
113	Fast/Glycolytic muscle fiber growth reduces fat mass and improves metabolic parameters in obese mice. *Cell Metabolism*, **2008**, 7, 159-72	24.6	282
112	Deletion of Cavin/PTRF causes global loss of caveolae, dyslipidemia, and glucose intolerance. *Cell Metabolism*, **2008**, 8, 310-7	24.6	277
111	High-intensity resistance training improves muscle strength, self-reported function, and disability in long-term stroke survivors. *Stroke*, **2004**, 35, 1404-9	6.7	237
110	Thiazolidinediones can rapidly activate AMP-activated protein kinase in mammalian tissues. *American Journal of Physiology - Endocrinology and Metabolism*, **2006**, 291, E175-81	6	227

109	Targeting senescent cells alleviates obesity-induced metabolic dysfunction. *Aging Cell*, **2019**, 18, e12950	9.9	218
108	Identification of Senescent Cells in the Bone Microenvironment. *Journal of Bone and Mineral Research*, **2016**, 31, 1920-1929	6.3	214
107	Cellular Senescence in Type 2 Diabetes: A Therapeutic Opportunity. *Diabetes*, **2015**, 64, 2289-98	0.9	211
106	Length-independent telomere damage drives post-mitotic cardiomyocyte senescence. *EMBO Journal*, **2019**, 38,	13	159
105	Shear wave elastography of passive skeletal muscle stiffness: influences of sex and age throughout adulthood. *Clinical Biomechanics*, **2015**, 30, 22-7	2.2	156
104	Cardiac endothelial cells regulate reactive oxygen species-induced cardiomyocyte apoptosis through neuregulin-1beta/erbB4 signaling. *Journal of Biological Chemistry*, **2004**, 279, 51141-7	5.4	141
103	Quantification of GDF11 and Myostatin in Human Aging and Cardiovascular Disease. *Cell Metabolism*, **2016**, 23, 1207-1215	24.6	139
102	Exercise Prevents Diet-Induced Cellular Senescence in Adipose Tissue. *Diabetes*, **2016**, 65, 1606-15	0.9	137
101	Brd2 disruption in mice causes severe obesity without Type 2 diabetes. *Biochemical Journal*, **2009**, 425, 71-83	3.8	135
100	Myostatin inhibition enhances the effects of exercise on performance and metabolic outcomes in aged mice. *Journals of Gerontology - Series A Biological Sciences and Medical Sciences*, **2009**, 64, 940-8	6.4	128
99	Effects of dihydrotestosterone on differentiation and proliferation of human mesenchymal stem cells and preadipocytes. *Molecular and Cellular Endocrinology*, **2008**, 296, 32-40	4.4	125
98	Oleate prevents palmitate-induced cytotoxic stress in cardiac myocytes. *Biochemical and Biophysical Research Communications*, **2005**, 336, 309-15	3.4	118
97	Clinical meaningfulness of the changes in muscle performance and physical function associated with testosterone administration in older men with mobility limitation. *Journals of Gerontology - Series A Biological Sciences and Medical Sciences*, **2011**, 66, 1090-9	6.4	117
96	Myostatin and sarcopenia: opportunities and challenges - a mini-review. *Gerontology*, **2014**, 60, 289-93	5.5	100
95	Contraction-mediated mTOR, p70S6k, and ERK1/2 phosphorylation in aged skeletal muscle. *Journal of Applied Physiology*, **2004**, 97, 243-8	3.7	100
94	Habitual physical activity levels are associated with performance in measures of physical function and mobility in older men. *Journal of the American Geriatrics Society*, **2010**, 58, 1727-33	5.6	96
93	Liver-specific GH receptor gene-disrupted (LiGHRKO) mice have decreased endocrine IGF-I, increased local IGF-I, and altered body size, body composition, and adipokine profiles. *Endocrinology* , **2014**, 155, 1793-805	4.8	95
92	Influence of fish oil on skeletal muscle mitochondrial energetics and lipid metabolites during high-fat diet. *American Journal of Physiology - Endocrinology and Metabolism*, **2013**, 304, E1391-403	6	91

91	Growth hormone action predicts age-related white adipose tissue dysfunction and senescent cell burden in mice. *Aging*, **2014**, 6, 575-86	5.6	91
90	Neuregulin-1alpha and beta isoform expression in cardiac microvascular endothelial cells and function in cardiac myocytes in vitro. *Experimental Cell Research*, **2005**, 311, 135-46	4.2	90
89	Cellular Senescence and the Biology of Aging, Disease, and Frailty. *Nestle Nutrition Institute Workshop Series*, **2015**, 83, 11-8	1.9	86
88	Biology of premature ageing in survivors of cancer. *ESMO Open*, **2017**, 2, e000250	6	85
87	Differential activation of mTOR signaling by contractile activity in skeletal muscle. *American Journal of Physiology - Regulatory Integrative and Comparative Physiology*, **2003**, 285, R1086-90	3.2	84
86	The A2b adenosine receptor modulates glucose homeostasis and obesity. *PLoS ONE*, **2012**, 7, e40584	3.7	83
85	Skeletal muscle mass is associated with bone geometry and microstructure and serum insulin-like growth factor binding protein-2 levels in adult women and men. *Journal of Bone and Mineral Research*, **2012**, 27, 2159-69	6.3	79
84	Metabolic benefits of resistance training and fast glycolytic skeletal muscle. *American Journal of Physiology - Endocrinology and Metabolism*, **2011**, 300, E3-10	6	79
83	Regulation of neuregulin/ErbB signaling by contractile activity in skeletal muscle. *American Journal of Physiology - Cell Physiology*, **2003**, 284, C1149-55	5.4	78
82	TRAIL receptor deletion in mice suppresses the inflammation of nutrient excess. *Journal of Hepatology*, **2015**, 62, 1156-63	13.4	73
81	Disease drivers of aging. *Annals of the New York Academy of Sciences*, **2016**, 1386, 45-68	6.5	72
80	Cellular Senescence Biomarker p16INK4a+ Cell Burden in Thigh Adipose is Associated With Poor Physical Function in Older Women. *Journals of Gerontology - Series A Biological Sciences and Medical Sciences*, **2018**, 73, 939-945	6.4	70
79	Muscle impairments and behavioral factors mediate functional limitations and disability following stroke. *Physical Therapy*, **2006**, 86, 1342-50	3.3	69
78	CXCL10-Mediates Macrophage, but not Other Innate Immune Cells-Associated Inflammation in Murine Nonalcoholic Steatohepatitis. *Scientific Reports*, **2016**, 6, 28786	4.9	68
77	17β-Estradiol Alleviates Age-related Metabolic and Inflammatory Dysfunction in Male Mice Without Inducing Feminization. *Journals of Gerontology - Series A Biological Sciences and Medical Sciences*, **2017**, 72, 3-15	6.4	61
76	Senolytics reduce coronavirus-related mortality in old mice. *Science*, **2021**, 373,	33.3	60
75	Acute exercise activates AMPK and eNOS in the mouse aorta. *American Journal of Physiology - Heart and Circulatory Physiology*, **2011**, 301, H1255-65	5.2	59
74	Tests of muscle strength and physical function: reliability and discrimination of performance in younger and older men and older men with mobility limitations. *Journal of the American Geriatrics Society*, **2008**, 56, 2118-23	5.6	59

73	The senescence-associated secretome as an indicator of age and medical risk. *JCI Insight*, **2020**, 5,	9.9	57
72	Measuring gait speed in the out-patient clinic: methodology and feasibility. *Respiratory Care*, **2014**, 59, 531-7	2.1	55
71	Myostatin as a mediator of sarcopenia versus homeostatic regulator of muscle mass: insights using a new mass spectrometry-based assay. *Skeletal Muscle*, **2015**, 5, 21	5.1	54
70	Glycolytic fast-twitch muscle fiber restoration counters adverse age-related changes in body composition and metabolism. *Aging Cell*, **2014**, 13, 80-91	9.9	53
69	Postnatal PPARdelta activation and myostatin inhibition exert distinct yet complimentary effects on the metabolic profile of obese insulin-resistant mice. *PLoS ONE*, **2010**, 5, e11307	3.7	53
68	Senolytic Drugs: Reducing Senescent Cell Viability to Extend Health Span. *Annual Review of Pharmacology and Toxicology*, **2021**, 61, 779-803	17.9	52
67	Peroxisome proliferator-activated receptor alpha-independent actions of fenofibrate exacerbates left ventricular dilation and fibrosis in chronic pressure overload. *Hypertension*, **2007**, 49, 1084-94	8.5	51
66	Changes in function and disability after resistance training: does velocity matter?: a pilot study. *American Journal of Physical Medicine and Rehabilitation*, **2003**, 82, 605-13	2.6	51
65	Circulating levels of monocyte chemoattractant protein-1 as a potential measure of biological age in mice and frailty in humans. *Aging Cell*, **2018**, 17, e12706	9.9	48
64	Whole-body senescent cell clearance alleviates age-related brain inflammation and cognitive impairment in mice. *Aging Cell*, **2021**, 20, e13296	9.9	47
63	Effects of fenofibrate on cardiac remodeling in aldosterone-induced hypertension. *Hypertension*, **2007**, 50, 489-96	8.5	46
62	Targeting Senescent Cells in Fibrosis: Pathology, Paradox, and Practical Considerations. *Current Rheumatology Reports*, **2018**, 20, 3	4.9	44
61	Determinants of gait speed in COPD. *Chest*, **2014**, 146, 104-110	5.3	40
60	Body composition during childhood and adolescence: relations to bone strength and microstructure. *Journal of Clinical Endocrinology and Metabolism*, **2014**, 99, 4641-8	5.6	38
59	Hyperoxia-induced Cellular Senescence in Fetal Airway Smooth Muscle Cells. *American Journal of Respiratory Cell and Molecular Biology*, **2019**, 61, 51-60	5.7	37
58	Cellular senescence: Implications for metabolic disease. *Molecular and Cellular Endocrinology*, **2017**, 455, 93-102	4.4	35
57	Association of Infant Antibiotic Exposure With Childhood Health Outcomes. *Mayo Clinic Proceedings* , **2021**, 96, 66-77	6.4	33
56	A longitudinal study of whole body, tissue, and cellular physiology in a mouse model of fibrosing NASH with high fidelity to the human condition. *American Journal of Physiology - Renal Physiology*, **2017**, 312, G666-G680	5.1	31

55	High fat diet and exercise lead to a disrupted and pathogenic DNA methylome in mouse liver. *Epigenetics*, **2017**, 12, 55-69	5.7	31
54	Frailty and Clinical Outcomes in Chronic Obstructive Pulmonary Disease. *Annals of the American Thoracic Society*, **2019**, 16, 217-224	4.7	31
53	Building muscle, browning fat and preventing obesity by inhibiting myostatin. *Diabetologia*, **2012**, 55, 13-7	10.3	30
52	Energetic interventions for healthspan and resiliency with aging. *Experimental Gerontology*, **2016**, 86, 73-83	4.5	29
51	Substitution at carbon 2 of 19-nor-1,25-dihydroxyvitamin D3 with 3-hydroxypropyl group generates an analogue with enhanced chemotherapeutic potency in PC-3 prostate cancer cells. *Journal of Steroid Biochemistry and Molecular Biology*, **2011**, 127, 269-75	5.1	27
50	TFAM Enhances Fat Oxidation and Attenuates High-Fat Diet-Induced Insulin Resistance in Skeletal Muscle. *Diabetes*, **2019**, 68, 1552-1564	0.9	26
49	Effects of testosterone therapy on muscle performance and physical function in older men with mobility limitations (The TOM Trial): design and methods. *Contemporary Clinical Trials*, **2009**, 30, 133-40	2.3	25
48	Transcriptional profiling of testosterone-regulated genes in the skeletal muscle of human immunodeficiency virus-infected men experiencing weight loss. *Journal of Clinical Endocrinology and Metabolism*, **2007**, 92, 2793-802	5.6	24
47	The Impact of Frailty on Patient-Centered Outcomes Following Aortic Valve Replacement. *Journals of Gerontology - Series A Biological Sciences and Medical Sciences*, **2017**, 72, 917-921	6.4	23
46	Relationship between pre-transplant physical function and outcomes after kidney transplant. *Clinical Transplantation*, **2017**, 31, e12952	3.8	22
45	The clinical impact and biological mechanisms of skeletal muscle aging. *Bone*, **2019**, 127, 26-36	4.7	22
44	Loss of Ovarian Hormones and Accelerated Somatic and Mental Aging. *Physiology*, **2018**, 33, 374-383	9.8	21
43	Preclinical studies on neurobehavioral and neuromuscular effects of cocaine hydrolase gene therapy in mice. *Journal of Molecular Neuroscience*, **2014**, 53, 409-16	3.3	20
42	Physiologic and metabolic safety of butyrylcholinesterase gene therapy in mice. *Vaccine*, **2014**, 32, 4155-62	4.1	20
41	Serum Neuregulin-1beta as a Biomarker of Cardiovascular Fitness. *Open Biomarkers Journal*, **2009**, 2, 1-5	1	20
40	The expression of neuregulin and erbB receptors in human skeletal muscle: effects of progressive resistance training. *European Journal of Applied Physiology*, **2005**, 94, 371-5	3.4	19
39	Physical Resilience: Opportunities and Challenges in Translation. *Journals of Gerontology - Series A Biological Sciences and Medical Sciences*, **2017**, 72, 978-979	6.4	18
38	Palmitate alters neuregulin signaling and biology in cardiac myocytes. *Biochemical and Biophysical Research Communications*, **2009**, 379, 32-7	3.4	17

37	Exercise Intolerance in Older Adults With Heart Failure With Preserved Ejection Fraction: JACC State-of-the-Art Review. *Journal of the American College of Cardiology*, **2021**, 78, 1166-1187	15.1	17
36	The influence of GDF11 on brain fate and function. *GeroScience*, **2019**, 41, 1-11	8.9	16
35	A rationale for SDS-PAGE of MHC isoforms as a gold standard for determining contractile phenotype. *Journal of Applied Physiology*, **2010**, 108, 222-2; author reply 226	3.7	16
34	Regenerating skeletal muscle in the face of aging and disease. *American Journal of Physical Medicine and Rehabilitation*, **2014**, 93, S88-96	2.6	15
33	The Relationship Between Frailty and Decreased Physical Performance With Death on the Kidney Transplant Waiting List. *Progress in Transplantation*, **2019**, 29, 108-114	1.1	13
32	Plasma Sphingolipids are Associated With Gait Parameters in the Mayo Clinic Study of Aging. *Journals of Gerontology - Series A Biological Sciences and Medical Sciences*, **2018**, 73, 960-965	6.4	13
31	Conditional deletion of Hdac3 in osteoprogenitor cells attenuates diet-induced systemic metabolic dysfunction. *Molecular and Cellular Endocrinology*, **2015**, 410, 42-51	4.4	12
30	High fat diet consumption results in mitochondrial dysfunction, oxidative stress, and oligodendrocyte loss in the central nervous system. *Biochimica Et Biophysica Acta - Molecular Basis of Disease*, **2020**, 1866, 165630	6.9	12
29	Late-life time-restricted feeding and exercise differentially alter healthspan in obesity. *Aging Cell*, **2019**, 18, e12966	9.9	11
28	Frailty in Patients With Mild Autonomous Cortisol Secretion is Higher Than in Patients with Nonfunctioning Adrenal Tumors. *Journal of Clinical Endocrinology and Metabolism*, **2020**, 105,	5.6	9
27	Fisetin for COVID-19 in skilled nursing facilities: Senolytic trials in the COVID era. *Journal of the American Geriatrics Society*, **2021**, 69, 3023-3033	5.6	9
26	A Western diet impairs CNS energy homeostasis and recovery after spinal cord injury: Link to astrocyte metabolism. *Neurobiology of Disease*, **2020**, 141, 104934	7.5	8
25	Mice deficient in phosphofructokinase-M have greatly decreased fat stores. *Obesity*, **2010**, 18, 434-40	8	8
24	Exercise reduces circulating biomarkers of cellular senescence in humans. *Aging Cell*, **2021**, 20, e13415	9.9	8
23	Dietary carbohydrates modulate metabolic and cell adaptation to high-fat diet-induced obesity. *American Journal of Physiology - Endocrinology and Metabolism*, **2020**, 318, E856-E865	6	6
22	Identifying Biomarkers for Biological Age: Geroscience and the ICFSR Task Force. *Journal of Frailty & Aging,the*, **2021**, 10, 196-201	2.6	6
21	Frailty in CKD and Transplantation. *Kidney International Reports*, **2021**, 6, 2270-2280	4.1	5
20	Mechanisms in the pathogenesis of diabetic cardiomyopathy. *Current Opinion in Endocrinology, Diabetes and Obesity*, **2003**, 10, 251-255		4

19	Time-restricted feeding prevents deleterious metabolic effects of circadian disruption through epigenetic control of β-cell function.. *Science Advances*, **2021**, 7, eabg6856	14.3	4
18	Novel small molecule inhibition of IKK/NF-κB activation reduces markers of senescence and improves healthspan in mouse models of aging. *Aging Cell*, **2021**, e13486	9.9	4
17	Ascertainment of delirium status using natural language processing from electronic health records. *Journals of Gerontology - Series A Biological Sciences and Medical Sciences*, **2020**,	6.4	3
16	Frailty is a determinant of suboptimal chemotherapy in women with advanced ovarian cancer. *Gynecologic Oncology*, **2020**, 158, 646-652	4.9	3
15	Knockout of sulfatase 2 is associated with decreased steatohepatitis and fibrosis in a mouse model of nonalcoholic fatty liver disease. *American Journal of Physiology - Renal Physiology*, **2020**, 319, G333-G344	5.1	3
14	Targeted clearance of p21- but not p16-positive senescent cells prevents radiation-induced osteoporosis and increased marrow adiposity.. *Aging Cell*, **2022**, e13602	9.9	3
13	. *American Journal of Physical Medicine and Rehabilitation*, **2003**, 82, 605-613	2.6	2
12	Harnessing the effects of endurance exercise to optimize cognitive health: Fundamental insights from Dr. Mark P. Mattson. *Ageing Research Reviews*, **2020**, 64, 101147	12	2
11	The point of no return? Functional disability transitions in patients with and without rheumatoid arthritis: A population-based cohort study.. *Seminars in Arthritis and Rheumatism*, **2021**,	5.3	1
10	Skeletal muscle aging, cellular senescence, and senotherapeutics: Current knowledge and future directions. *Mechanisms of Ageing and Development*, **2021**, 200, 111595	5.6	1
9	Length-independent telomere damage drives cardiomyocyte senescence		1
8	A hybrid model to identify fall occurrence from electronic health records.. *International Journal of Medical Informatics*, **2022**, 162, 104736	5.3	1
7	Effect of menopausal hormone therapy on proteins associated with senescence and inflammation. *Physiological Reports*, **2020**, 8, e14535	2.6	0
6	Resilience to aging is a heterogeneous characteristic defined by physical stressors.. *Aging Pathobiology and Therapeutics*, **2022**, 4, 19-22	2.4	0
5	Association between high fat consumption, myelin loss, and mitochondrial dynamics. *FASEB Journal* , **2018**, 32, 543.15	0.9	
4	Effects of exercise on vasomotor function and vascular distensibility in angiotensin II-induced hypertension. *FASEB Journal*, **2015**, 29, 994.25	0.9	
3	The Biology of Aging: Role in Cancer, Metabolic Dysfunction, and Health Disparities **2014**, 91-118		
2	Development of Respercise□ a Digital Application for Standardizing Home Exercise in COPD Clinical Trials. *Chronic Obstructive Pulmonary Diseases (Miami, Fla)*, **2021**, 8, 269-276	2.7	

1	To the editor: Response to Kao et al.. *Seminars in Arthritis and Rheumatism*, **2022**, 55, 151990	5.3