

Rochelle Buffenstein

List of Publications by Year in descending order

Source: <https://exaly.com/author-pdf/8753631/publications.pdf>

Version: 2024-02-01

114
papers

8,978
citations

41258

49
h-index

45213

90
g-index

122
all docs

122
docs citations

122
times ranked

7516
citing authors

#	ARTICLE	IF	CITATIONS
1	Life and Death: Metabolic Rate, Membrane Composition, and Life Span of Animals. <i>Physiological Reviews</i> , 2007, 87, 1175-1213.	13.1	732
2	Genome sequencing reveals insights into physiology and longevity of the naked mole rat. <i>Nature</i> , 2011, 479, 223-227.	13.7	517
3	Negligible senescence in the longest living rodent, the naked mole-rat: insights from a successfully aging species. <i>Journal of Comparative Physiology B: Biochemical, Systemic, and Environmental Physiology</i> , 2008, 178, 439-445.	0.7	403
4	The Naked Mole-Rat: A New Long-Living Model for Human Aging Research. <i>Journals of Gerontology - Series A Biological Sciences and Medical Sciences</i> , 2005, 60, 1369-1377.	1.7	375
5	Protein stability and resistance to oxidative stress are determinants of longevity in the longest-living rodent, the naked mole-rat. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2009, 106, 3059-3064.	3.3	368
6	High oxidative damage levels in the longest-living rodent, the naked mole-rat. <i>Aging Cell</i> , 2006, 5, 463-471.	3.0	318
7	Evidence for hormonal control of heart regenerative capacity during endothermy acquisition. <i>Science</i> , 2019, 364, 184-188.	6.0	252
8	Low rates of hydrogen peroxide production by isolated heart mitochondria associate with long maximum lifespan in vertebrate homeotherms. <i>Aging Cell</i> , 2007, 6, 607-618.	3.0	238
9	Nrf2, a Guardian of Healthspan and Gatekeeper of Species Longevity. <i>Integrative and Comparative Biology</i> , 2010, 50, 829-843.	0.9	200
10	Regulation of Nrf2 signaling and longevity in naturally long-lived rodents. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2015, 112, 3722-3727.	3.3	198
11	Naked mole-rat mortality rates defy Gompertzian laws by not increasing with age. <i>ELife</i> , 2018, 7, .	2.8	192
12	Is the naked mole-rat <i>Heterocephalus glaber</i> an endothermic yet poikilothermic mammal?. <i>Journal of Thermal Biology</i> , 1991, 16, 227-232.	1.1	176
13	Successful Aging and Sustained Good Health in the Naked Mole Rat: A Long-Lived Mammalian Model for Biogerontology and Biomedical Research. <i>ILAR Journal</i> , 2011, 52, 41-53.	1.8	169
14	Oxidative stress and life histories: unresolved issues and current needs. <i>Ecology and Evolution</i> , 2015, 5, 5745-5757.	0.8	169
15	Adaptations to a Subterranean Environment and Longevity Revealed by the Analysis of Mole Rat Genomes. <i>Cell Reports</i> , 2014, 8, 1354-1364.	2.9	162
16	Resistance to experimental tumorigenesis in cells of a long-lived mammal, the naked mole-rat (<i>Heterocephalus glaber</i>). <i>Aging Cell</i> , 2010, 9, 626-635.	3.0	158
17	The oxidative stress theory of aging: embattled or invincible? Insights from non-traditional model organisms. <i>Age</i> , 2008, 30, 99-109.	3.0	151
18	Membrane phospholipid composition may contribute to exceptional longevity of the naked mole-rat (<i>Heterocephalus glaber</i>): A comparative study using shotgun lipidomics. <i>Experimental Gerontology</i> , 2007, 42, 1053-1062.	1.2	146

#	ARTICLE	IF	CITATIONS
19	Antioxidants do not explain the disparate longevity between mice and the longest-living rodent, the naked mole-rat. <i>Mechanisms of Ageing and Development</i> , 2005, 126, 1206-1212.	2.2	145
20	Prolonged longevity in naked mole-rats: age-related changes in metabolism, body composition and gastrointestinal function. <i>Comparative Biochemistry and Physiology Part A, Molecular & Integrative Physiology</i> , 2002, 133, 835-842.	0.8	118
21	Fibroblasts From Naked Mole-Rats Are Resistant to Multiple Forms of Cell Injury, But Sensitive to Peroxide, Ultraviolet Light, and Endoplasmic Reticulum Stress. <i>Journals of Gerontology - Series A Biological Sciences and Medical Sciences</i> , 2008, 63, 232-241.	1.7	112
22	Disparate patterns of age-related changes in lipid peroxidation in long-lived naked mole-rats and shorter-lived mice. <i>Aging Cell</i> , 2006, 5, 525-532.	3.0	111
23	Organization of the Mammalian Metabolome according to Organ Function, Lineage Specialization, and Longevity. <i>Cell Metabolism</i> , 2015, 22, 332-343.	7.2	104
24	Vascular aging in the longest-living rodent, the naked mole rat. <i>American Journal of Physiology - Heart and Circulatory Physiology</i> , 2007, 293, H919-H927.	1.5	103
25	The Naked Mole Rat—A New Record for the Oldest Living Rodent. <i>Science of Aging Knowledge Environment: SAGE KE</i> , 2002, 2002, 7pe-7.	0.9	100
26	The Naked Mole-Rat Response to Oxidative Stress: Just Deal with It. <i>Antioxidants and Redox Signaling</i> , 2013, 19, 1388-1399.	2.5	99
27	Altered Composition of Liver Proteasome Assemblies Contributes to Enhanced Proteasome Activity in the Exceptionally Long-Lived Naked Mole-Rat. <i>PLoS ONE</i> , 2012, 7, e35890.	1.1	96
28	Oxidation-Resistant Membrane Phospholipids Can Explain Longevity Differences Among the Longest-Living Rodents and Similarly-Sized Mice. <i>Journals of Gerontology - Series A Biological Sciences and Medical Sciences</i> , 2006, 61, 1009-1018.	1.7	95
29	RNA Sequencing Reveals Differential Expression of Mitochondrial and Oxidation Reduction Genes in the Long-Lived Naked Mole-Rat When Compared to Mice. <i>PLoS ONE</i> , 2011, 6, e26729.	1.1	91
30	Comparison of endothelial function, O ₂ • ⁻ and H ₂ O ₂ production, and vascular oxidative stress resistance between the longest-living rodent, the naked mole rat, and mice. <i>American Journal of Physiology - Heart and Circulatory Physiology</i> , 2006, 291, H2698-H2704.	1.5	90
31	Stress Resistance in the Naked Mole-Rat: The Bare Essentials “A Mini-Review. <i>Gerontology</i> , 2012, 58, 453-462.	1.4	88
32	Huddling Behavior Facilitates Homeothermy in the Naked Mole Rat <i>Heterocephalus glaber</i> . <i>Physiological Zoology</i> , 1991, 64, 871-884.	1.5	80
33	Single-cell transcriptomics of the naked mole-rat reveals unexpected features of mammalian immunity. <i>PLoS Biology</i> , 2019, 17, e3000528.	2.6	80
34	Oxidative stress in vascular senescence: lessons from successfully aging species. <i>Frontiers in Bioscience - Landmark</i> , 2008, Volume, 5056.	3.0	77
35	Amyloid beta and the longest-lived rodent: the naked mole-rat as a model for natural protection from Alzheimer's disease. <i>Neurobiology of Aging</i> , 2013, 34, 2352-2360.	1.5	76
36	Extended longevity of wild-derived mice is associated with peroxidation-resistant membranes. <i>Mechanisms of Ageing and Development</i> , 2006, 127, 653-657.	2.2	72

#	ARTICLE	IF	CITATIONS
37	Endocrine function and neurobiology of the longest-living rodent, the naked mole-rat. <i>Experimental Gerontology</i> , 2011, 46, 116-123.	1.2	72
38	Sustained high levels of neuregulin-1 in the longest-lived rodents; a key determinant of rodent longevity. <i>Aging Cell</i> , 2012, 11, 213-222.	3.0	72
39	Long-lived species have improved proteostasis compared to phylogenetically-related shorter-lived species. <i>Biochemical and Biophysical Research Communications</i> , 2015, 457, 669-675.	1.0	71
40	Thermoregulation in the Angolan Free-tailed Bat <i>Mops condylurus</i> : A Small Mammal That Uses Hot Roosts. <i>Physiological and Biochemical Zoology</i> , 1999, 72, 385-396.	0.6	70
41	Mechanisms of oxidative stress resistance in the brain: Lessons learned from hypoxia tolerant extremophilic vertebrates. <i>Archives of Biochemistry and Biophysics</i> , 2015, 576, 8-16.	1.4	69
42	The mitochondrial derived peptide humanin is a regulator of lifespan and healthspan. <i>Aging</i> , 2020, 12, 11185-11199.	1.4	67
43	Mammalian target of rapamycin hyperactivity mediates the detrimental effects of a high sucrose diet on Alzheimer's disease pathology. <i>Neurobiology of Aging</i> , 2014, 35, 1233-1242.	1.5	66
44	Cutting back on the essentials: Can manipulating intake of specific amino acids modulate health and lifespan?. <i>Ageing Research Reviews</i> , 2017, 39, 87-95.	5.0	65
45	Endocrine function in naturally long-living small mammals. <i>Molecular and Cellular Endocrinology</i> , 2009, 299, 101-111.	1.6	63
46	The naked truth: a comprehensive clarification and classification of current "myths" in naked mole-rat biology. <i>Biological Reviews</i> , 2022, 97, 115-140.	4.7	62
47	Blunted Neuronal Calcium Response to Hypoxia in Naked Mole-Rat Hippocampus. <i>PLoS ONE</i> , 2012, 7, e31568.	1.1	61
48	From yeast to human: exploring the comparative biology of methionine restriction in extending eukaryotic life span. <i>Annals of the New York Academy of Sciences</i> , 2016, 1363, 155-170.	1.8	59
49	A window into extreme longevity; the circulating metabolomic signature of the naked mole-rat, a mammal that shows negligible senescence. <i>GeroScience</i> , 2018, 40, 105-121.	2.1	59
50	Organization of the Mammalian Ionome According to Organ Origin, Lineage Specialization, and Longevity. <i>Cell Reports</i> , 2015, 13, 1319-1326.	2.9	56
51	Sympatric speciation revealed by genome-wide divergence in the blind mole rat <i>Spalax</i> . <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2015, 112, 11905-11910.	3.3	53
52	Cold-induced changes in thyroid function in a poikilothermic mammal, the naked mole-rat. <i>American Journal of Physiology - Regulatory Integrative and Comparative Physiology</i> , 2001, 280, R149-R155.	0.9	50
53	A cytosolic protein factor from the naked mole-rat activates proteasomes of other species and protects these from inhibition. <i>Biochimica Et Biophysica Acta - Molecular Basis of Disease</i> , 2014, 1842, 2060-2072.	1.8	49
54	Age-related changes in the proteostasis network in the brain of the naked mole-rat: Implications promoting healthy longevity. <i>Biochimica Et Biophysica Acta - Molecular Basis of Disease</i> , 2015, 1852, 2213-2224.	1.8	47

#	ARTICLE	IF	CITATIONS
55	And the beat goes on: maintained cardiovascular function during aging in the longest-lived rodent, the naked mole-rat. <i>American Journal of Physiology - Heart and Circulatory Physiology</i> , 2014, 307, H284-H291.	1.5	46
56	The effect of diet on microfaunal population and function in the caecum of a subterranean naked mole-rat, <i>Heterocephalus glaber</i> . <i>British Journal of Nutrition</i> , 1991, 65, 249-258.	1.2	44
57	Skin morphology and its role in thermoregulation in mole-rats, <i>Heterocephalus glaber</i> and <i>Cryptomys hottentotus</i> . <i>Journal of Anatomy</i> , 1998, 193, 495-502.	0.9	44
58	Comparative Studies of Oxidative Stress and Mitochondrial Function in Aging. <i>Integrative and Comparative Biology</i> , 2010, 50, 869-879.	0.9	44
59	Walking the Oxidative Stress Tightrope: A Perspective from the Naked Mole-Rat, the Longest-Living Rodent. <i>Current Pharmaceutical Design</i> , 2011, 17, 2290-2307.	0.9	44
60	Noradrenaline induces nonshivering thermogenesis in both the naked mole-rat (<i>Heterocephalus</i>) and the long-lived rodent, the naked mole-rat (<i>Heterocephalus glaber</i>). <i>Journal of Thermal Biology</i> , 1994, 19, 25-32.	1.1	41
61	Survival tactics within thermally-challenging roosts: heat tolerance and cold sensitivity in the Angolan free-tailed bat, <i>Mops condylurus</i> . <i>South African Journal of Zoology</i> , 1999, 34, 1-10.	0.5	38
62	The pancreas of the naked mole-rat (<i>Heterocephalus glaber</i>): an ultrastructural and immunocytochemical study of the endocrine component of thermoneutral and cold acclimated animals. <i>General and Comparative Endocrinology</i> , 2004, 139, 206-214.	0.8	38
63	Unraveling the message: insights into comparative genomics of the naked mole-rat. <i>Mammalian Genome</i> , 2016, 27, 259-278.	1.0	38
64	Extended Postnatal Brain Development in the Longest-Lived Rodent: Prolonged Maintenance of Neonatal Traits in the Naked Mole-Rat Brain. <i>Frontiers in Neuroscience</i> , 2016, 10, 504.	1.4	37
65	Beneficial physiological and performance responses to a month of restricted energy intake in healthy overweight women. <i>Physiology and Behavior</i> , 2000, 68, 439-444.	1.0	35
66	Thermogenic changes with chronic cold exposure in the naked mole-rat (<i>Heterocephalus glaber</i>). <i>Comparative Biochemistry and Physiology Part A, Molecular & Integrative Physiology</i> , 2002, 133, 827-834.	0.8	35
67	Elevated protein carbonylation and oxidative stress do not affect protein structure and function in the long-living naked-mole rat: A proteomic approach. <i>Biochemical and Biophysical Research Communications</i> , 2013, 434, 815-819.	1.0	35
68	Determinants of rodent longevity in the chaperone-protein degradation network. <i>Cell Stress and Chaperones</i> , 2016, 21, 453-466.	1.2	34
69	Getting to the Heart of the Matter: Age-related Changes in Diastolic Heart Function in the Longest-lived Rodent, the Naked Mole Rat. <i>Journals of Gerontology - Series A Biological Sciences and Medical Sciences</i> , 2012, 67A, 384-394.	1.7	33
70	Cardiac function of the naked mole-rat: ecophysiological responses to working underground. <i>American Journal of Physiology - Heart and Circulatory Physiology</i> , 2014, 306, H730-H737.	1.5	32
71	Oxidative damage and amyloid- β metabolism in brain regions of the longest-lived rodents. <i>Journal of Neuroscience Research</i> , 2014, 92, 195-205.	1.3	31
72	The Idiosyncratic Physiological Traits of the Naked Mole-Rat; a Resilient Animal Model of Aging, Longevity, and Healthspan. <i>Advances in Experimental Medicine and Biology</i> , 2021, 1319, 221-254.	0.8	31

#	ARTICLE	IF	CITATIONS
73	Sustained high levels of neuroprotective, high molecular weight, phosphorylated tau in the longest-lived rodent. <i>Neurobiology of Aging</i> , 2015, 36, 1496-1504.	1.5	30
74	Naked Mole Rat. , 2012, , 1055-1074.		26
75	The Naked Mole-Rat. , 2016, , 179-204.		25
76	Subterranean mole-rats naturally have an impoverished calcium status, yet synthesize calcium metabolites and calbindins. <i>European Journal of Endocrinology</i> , 1994, 130, 402-409.	1.9	24
77	Vitamin D metabolism in a frugivorous nocturnal mammal, the Egyptian fruit bat (<i>Rousettus</i>). <i>Journal of Endocrinology</i> , 2011, 168, 107-114.	0.8	24
78	Automated 16-Plex Plasma Proteomics with Real-Time Search and Ion Mobility Mass Spectrometry Enables Large-Scale Profiling in Naked Mole-Rats and Mice. <i>Journal of Proteome Research</i> , 2021, 20, 1280-1295.	1.8	24
79	Catecholaminergic innervation of interscapular brown adipose tissue in the naked mole-rat (<i>Heterocephalus glaber</i>). <i>Journal of Anatomy</i> , 1997, 190, 321-326.	0.9	22
80	Probing Pedomorphy and Prolonged Lifespan in Naked Mole-Rats and Dwarf Mice. <i>Physiology</i> , 2020, 35, 96-111.	1.6	22
81	The naked mole-rat exhibits an unusual cardiac myofibrillar protein profile providing new insights into heart function of this naturally subterranean rodent. <i>Pflügers Archiv European Journal of Physiology</i> , 2017, 469, 1603-1613.	1.3	20
82	Attenuation of liver insoluble protein carbonyls: indicator of a longevity determinant?. <i>Aging Cell</i> , 2011, 10, 720-723.	3.0	18
83	Unprovoked Stabilization and Nuclear Accumulation of the Naked Mole-Rat p53 Protein. <i>Scientific Reports</i> , 2020, 10, 6966.	1.6	18
84	Opportunities for new insight into aging from the naked mole-rat and other non-traditional models. <i>Nature Aging</i> , 2021, 1, 3-4.	5.3	18
85	Divergent tissue and sex effects of rapamycin on the proteasome-chaperone network of old mice. <i>Frontiers in Molecular Neuroscience</i> , 2014, 7, 83.	1.4	17
86	The First International Mini-Symposium on Methionine Restriction and Lifespan. <i>Frontiers in Genetics</i> , 2014, 5, 122.	1.1	16
87	Questioning the preclinical paradigm: natural, extreme biology as an alternative discovery platform. <i>Aging</i> , 2014, 6, 913-920.	1.4	16
88	Metabolic clues to salubrious longevity in the brain of the longest-lived rodent: the naked mole-rat. <i>Journal of Neurochemistry</i> , 2015, 134, 538-550.	2.1	15
89	Hemoglobin oxygen-affinity and acid-base properties of blood from the fossorial mole-rat, <i>Cryptomys hottentotus pretoriae</i> . <i>Comparative Biochemistry and Physiology Part A, Molecular & Integrative Physiology</i> , 2007, 147, 50-56.	0.8	14
90	Caecal function provides the energy of fermentation without liberating heat in the poikilothermic mammal, <i>Heterocephalus glaber</i> . <i>Journal of Comparative Physiology B: Biochemical, Systemic, and Environmental Physiology</i> , 1992, 162, 216-218.	0.7	13

#	ARTICLE	IF	CITATIONS
91	Managed Care of Naked Mole-Rats. <i>Advances in Experimental Medicine and Biology</i> , 2021, 1319, 381-407.	0.8	13
92	Aging through an epitranscriptomic lens. <i>Nature Aging</i> , 2021, 1, 335-346.	5.3	13
93	The Unusual Immune System of the Naked Mole-Rat. <i>Advances in Experimental Medicine and Biology</i> , 2021, 1319, 315-327.	0.8	13
94	Glucose tolerance and insulin sensitivity in an extremely long-living rodent, the naked mole-rat. <i>FASEB Journal</i> , 2007, 21, A1423.	0.2	12
95	Dietary Calcium Content, Calcium Balance and Mode of Uptake in a Subterranean Mammal, the Damara Mole-Rat. <i>Journal of Nutrition</i> , 1992, 122, 108-114.	1.3	11
96	Seasonal and daily variation in blood and urine concentrations of free-ranging Angolan free-tailed bats (<i>Mops condylurus</i>) in hot roosts in southern Africa. <i>South African Journal of Zoology</i> , 1999, 34, 11-18.	0.5	11
97	Multifactorial processes to slowing the biological clock: Insights from a comparative approach. <i>Experimental Gerontology</i> , 2015, 71, 27-37.	1.2	10
98	Spontaneous Disease and Pathology of Naked Mole-Rats. <i>Advances in Experimental Medicine and Biology</i> , 2021, 1319, 353-380.	0.8	10
99	Calcium and Inorganic Phosphorus Metabolism in Naked Mole Rats <i>Heterocephalus glaber</i> Is Only Indirectly Affected by Cholecalciferol. <i>General and Comparative Endocrinology</i> , 1993, 89, 161-166.	0.8	9
100	Naked mole-rats maintain cardiac function and body composition well into their fourth decade of life. <i>GeroScience</i> , 2022, , 1.	2.1	9
101	Mechanisms regulating proteostasis are involved in sympatric speciation of the blind mole rat, <i>Spalax galili</i> . <i>Autophagy</i> , 2016, 12, 703-704.	4.3	8
102	Reaching Out to Send a Message: Proteins Associated with Neurite Outgrowth and Neurotransmission are Altered with Age in the Long-Lived Naked Mole-Rat. <i>Neurochemical Research</i> , 2016, 41, 1625-1634.	1.6	7
103	Response to comment on 'Naked mole-rat mortality rates defy Gompertzian laws by not increasing with age'. <i>ELife</i> , 2019, 8, .	2.8	6
104	Naked mole-rat and Damaraland mole-rat exhibit lower respiration in mitochondria, cellular and organismal levels. <i>Biochimica Et Biophysica Acta - Bioenergetics</i> , 2022, 1863, 148582.	0.5	6
105	Cholecalciferol supplementation alters gut function and improves digestibility in an underground inhabitant, the naked mole rat (<i>Heterocephalus gluber</i>), when fed on a carrot diet. <i>British Journal of Nutrition</i> , 1993, 69, 233-241.	1.2	5
106	It's about time; divergent circadian clocks in livers of mice and naked mole-rats. <i>FASEB Journal</i> , 2021, 35, e21590.	0.2	5
107	Insights into the Molecular Basis of Genome Stability and Pristine Proteostasis in Naked Mole-Rats. <i>Advances in Experimental Medicine and Biology</i> , 2021, 1319, 287-314.	0.8	4
108	Naked Mole-Rat, a Rodent with an Apolipoprotein A-II Dimer. <i>Lipids</i> , 2021, 56, 269-278.	0.7	3

#	ARTICLE	IF	CITATIONS
109	Colony-specific dialects of naked mole-rats. <i>Science</i> , 2021, 371, 461-462.	6.0	2
110	Some Exciting Future Directions for Work on Naked Mole-Rats. <i>Advances in Experimental Medicine and Biology</i> , 2021, 1319, 409-420.	0.8	1
111	Slow Aging: Insights from an Exceptionally Long-Lived Rodent, the Naked Mole-Rat. , 2009, , 141-156.		1
112	Mitochondria, Oxidative Damage and Longevity: What Can Comparative Biology Teach Us?. , 2010, , 163-190.		1
113	Skin morphology and its role in thermoregulation in mole-rats, <i>Heterocephalus glaber</i> and <i>Cryptomys hottentotus</i> . , 0, .		1
114	Comparison of endothelial function, O ₂ • and H ₂ O ₂ production and vascular oxidative stress resistance between the longest-living rodent, the naked mole-rat and mice. <i>FASEB Journal</i> , 2007, 21, A1237.	0.2	0