

Mark W Hamrick

List of Publications by Year in descending order

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Version: 2024-02-01

104
papers

4,838
citations

117625

34
h-index

102487

66
g-index

105
all docs

105
docs citations

105
times ranked

7181
citing authors

#	ARTICLE	IF	CITATIONS
1	A Comparative Study of Serum Exosome Isolation Using Differential Ultracentrifugation and Three Commercial Reagents. <i>PLoS ONE</i> , 2017, 12, e0170628.	2.5	452
2	Fatty Infiltration of Skeletal Muscle: Mechanisms and Comparisons with Bone Marrow Adiposity. <i>Frontiers in Endocrinology</i> , 2016, 7, 69.	3.5	254
3	Leptin Treatment Induces Loss of Bone Marrow Adipocytes and Increases Bone Formation in Leptin-Deficient <i>ob/ob</i> Mice. <i>Journal of Bone and Mineral Research</i> , 2005, 20, 994-1001.	2.8	245
4	Extracellular vesicles in the pathogenesis of rheumatoid arthritis and osteoarthritis. <i>Arthritis Research and Therapy</i> , 2016, 18, 286.	3.5	210
5	Recent advances in hyaluronic acid based therapy for osteoarthritis. <i>Clinical and Translational Medicine</i> , 2018, 7, 6.	4.0	193
6	MicroRNA-183-5p Increases with Age in Bone-Derived Extracellular Vesicles, Suppresses Bone Marrow Stromal (Stem) Cell Proliferation, and Induces Stem Cell Senescence. <i>Tissue Engineering - Part A</i> , 2017, 23, 1231-1240.	3.1	182
7	Gender-specific differential expression of exosomal miRNA in synovial fluid of patients with osteoarthritis. <i>Scientific Reports</i> , 2017, 7, 2029.	3.3	168
8	A Role for Myokines in Muscle-Bone Interactions. <i>Exercise and Sport Sciences Reviews</i> , 2011, 39, 43-47.	3.0	152
9	The adipokine leptin increases skeletal muscle mass and significantly alters skeletal muscle miRNA expression profile in aged mice. <i>Biochemical and Biophysical Research Communications</i> , 2010, 400, 379-383.	2.1	141
10	Age-related loss of muscle mass and bone strength in mice is associated with a decline in physical activity and serum leptin. <i>Bone</i> , 2006, 39, 845-853.	2.9	131
11	Muscle-derived miR-34a increases with age in circulating extracellular vesicles and induces senescence of bone marrow stem cells. <i>Aging</i> , 2019, 11, 1791-1803.	3.1	119
12	Caloric Restriction Decreases Cortical Bone Mass but Spares Trabecular Bone in the Mouse Skeleton: Implications for the Regulation of Bone Mass by Body Weight. <i>Journal of Bone and Mineral Research</i> , 2008, 23, 870-878.	2.8	113
13	The skeletal muscle secretome: an emerging player in muscle-bone crosstalk. <i>BoneKEy Reports</i> , 2012, 1, 60.	2.7	109
14	Increased bone mineral density in the femora of GDF8 knockout mice. <i>The Anatomical Record</i> , 2003, 272A, 388-391.	1.8	108
15	Kynurenine, a Tryptophan Metabolite That Accumulates With Age, Induces Bone Loss. <i>Journal of Bone and Mineral Research</i> , 2017, 32, 2182-2193.	2.8	89
16	Emerging role of extracellular vesicles in musculoskeletal diseases. <i>Molecular Aspects of Medicine</i> , 2018, 60, 123-128.	6.4	86
17	Leptin, Bone Mass, and the Thrifty Phenotype. <i>Journal of Bone and Mineral Research</i> , 2004, 19, 1607-1611.	2.8	77
18	Bone architecture and disc degeneration in the lumbar spine of mice lacking GDF-8 (myostatin). <i>Journal of Orthopaedic Research</i> , 2003, 21, 1025-1032.	2.3	76

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19	The Senolytic Drug Navitoclax (ABT-263) Causes Trabecular Bone Loss and Impaired Osteoprogenitor Function in Aged Mice. <i>Frontiers in Cell and Developmental Biology</i> , 2020, 8, 354.	3.7	69
20	Stem Cell-Derived Exosomes: A Potential Alternative Therapeutic Agent in Orthopaedics. <i>Stem Cells International</i> , 2016, 2016, 1-6.	2.5	67
21	Injections of leptin into rat ventromedial hypothalamus increase adipocyte apoptosis in peripheral fat and in bone marrow. <i>Cell and Tissue Research</i> , 2006, 327, 133-141.	2.9	64
22	Oxidation of the aromatic amino acids tryptophan and tyrosine disrupts their anabolic effects on bone marrow mesenchymal stem cells. <i>Molecular and Cellular Endocrinology</i> , 2015, 410, 87-96.	3.2	62
23	Aging and the Muscle-Bone Relationship. <i>Physiology</i> , 2015, 30, 8-16.	3.1	62
24	Recombinant Myostatin (GDF-8) Propeptide Enhances the Repair and Regeneration of Both Muscle and Bone in a Model of Deep Penetrant Musculoskeletal Injury. <i>Journal of Trauma</i> , 2010, 69, 579-583.	2.3	61
25	Therapeutic potential of mesenchymal stem cell based therapy for osteoarthritis. <i>Clinical and Translational Medicine</i> , 2016, 5, 27.	4.0	59
26	Kynurenine inhibits autophagy and promotes senescence in aged bone marrow mesenchymal stem cells through the aryl hydrocarbon receptor pathway. <i>Experimental Gerontology</i> , 2020, 130, 110805.	2.8	59
27	Role of the Cytokine-like Hormone Leptin in Muscle-bone Crosstalk with Aging. <i>Journal of Bone Metabolism</i> , 2017, 24, 1.	1.3	54
28	Very Long-Chain C24:1 Ceramide Is Increased in Serum Extracellular Vesicles with Aging and Can Induce Senescence in Bone-Derived Mesenchymal Stem Cells. <i>Cells</i> , 2019, 8, 37.	4.1	54
29	Kynurenine, a Tryptophan Metabolite That Increases with Age, Induces Muscle Atrophy and Lipid Peroxidation. <i>Oxidative Medicine and Cellular Longevity</i> , 2019, 2019, 1-9.	4.0	50
30	Evolution and development of mammalian limb integumentary structures. <i>The Journal of Experimental Zoology</i> , 2003, 298B, 152-163.	1.4	46
31	Kynurenine signaling through the aryl hydrocarbon receptor: Implications for aging and healthspan. <i>Experimental Gerontology</i> , 2020, 130, 110797.	2.8	45
32	The Detrimental Effects of Kynurenine, a Tryptophan Metabolite, on Human Bone Metabolism. <i>Journal of Clinical Endocrinology and Metabolism</i> , 2019, 104, 2334-2342.	3.6	44
33	Freeze-Dried Extracellular Vesicles From Adipose-Derived Stem Cells Prevent Hypoxia-Induced Muscle Cell Injury. <i>Frontiers in Cell and Developmental Biology</i> , 2020, 8, 181.	3.7	42
34	Targeting the Mitochondrial Permeability Transition Pore to Prevent Age-Associated Cell Damage and Neurodegeneration. <i>Oxidative Medicine and Cellular Longevity</i> , 2021, 2021, 1-15.	4.0	40
35	A Tryptophan-Deficient Diet Induces Gut Microbiota Dysbiosis and Increases Systemic Inflammation in Aged Mice. <i>International Journal of Molecular Sciences</i> , 2021, 22, 5005.	4.1	40
36	Impact of targeted PPAR β disruption on bone remodeling. <i>Molecular and Cellular Endocrinology</i> , 2015, 410, 27-34.	3.2	35

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37	Amino acids as signaling molecules modulating bone turnover. <i>Bone</i> , 2018, 115, 15-24.	2.9	35
38	Mechanical loading disrupts osteocyte plasma membranes which initiates mechanosensation events in bone. <i>Journal of Orthopaedic Research</i> , 2018, 36, 653-662.	2.3	34
39	Lower hand grip strength in older adults with non-alcoholic fatty liver disease: a nationwide population-based study. <i>Aging</i> , 2019, 11, 4547-4560.	3.1	34
40	MicroRNAs-141 and 200a regulate the SVCT2 transporter in bone marrow stromal cells. <i>Molecular and Cellular Endocrinology</i> , 2015, 410, 19-26.	3.2	32
41	Whole-Body Vibration Mimics the Metabolic Effects of Exercise in Male Leptin Receptor-Deficient Mice. <i>Endocrinology</i> , 2017, 158, 1160-1171.	2.8	32
42	Function of microRNAs in the Osteogenic Differentiation and Therapeutic Application of Adipose-Derived Stem Cells (ASCs). <i>International Journal of Molecular Sciences</i> , 2017, 18, 2597.	4.1	31
43	Stromal cell-derived factor-1 (CXCL12) and its role in bone and muscle biology. <i>Cytokine</i> , 2019, 123, 154783.	3.2	29
44	MicroRNA-141-3p Negatively Modulates SDF-1 Expression in Age-Dependent Pathophysiology of Human and Murine Bone Marrow Stromal Cells. <i>Journals of Gerontology - Series A Biological Sciences and Medical Sciences</i> , 2019, 74, 1368-1374.	3.6	28
45	Role of myostatin (GDF8) signaling in the human anterior cruciate ligament. <i>Journal of Orthopaedic Research</i> , 2010, 28, 1113-1118.	2.3	25
46	Meta-Analysis and Evidence Base for the Efficacy of Autologous Bone Marrow Mesenchymal Stem Cells in Knee Cartilage Repair: Methodological Guidelines and Quality Assessment. <i>Stem Cells International</i> , 2019, 2019, 1-15.	2.5	25
47	Kynurenine Promotes RANKL-Induced Osteoclastogenesis In Vitro by Activating the Aryl Hydrocarbon Receptor Pathway. <i>International Journal of Molecular Sciences</i> , 2020, 21, 7931.	4.1	25
48	Chronic alcohol exposure induces muscle atrophy (myopathy) in zebrafish and alters the expression of microRNAs targeting the Notch pathway in skeletal muscle. <i>Biochemical and Biophysical Research Communications</i> , 2016, 479, 590-595.	2.1	24
49	What doesn't kill you makes you stranger: Dipeptidyl peptidase-4 (CD26) proteolysis differentially modulates the activity of many peptide hormones and cytokines generating novel cryptic bioactive ligands. , 2019, 198, 90-108.		24
50	Knockdown of SVCT2 impairs in-vitro cell attachment, migration and wound healing in bone marrow stromal cells. <i>Stem Cell Research</i> , 2014, 12, 354-363.	0.7	23
51	Protein/amino-acid modulation of bone cell function. <i>BoneKEy Reports</i> , 2016, 5, 827.	2.7	23
52	Age-Dependent Oxidative Stress Elevates Arginase 1 and Uncoupled Nitric Oxide Synthesis in Skeletal Muscle of Aged Mice. <i>Oxidative Medicine and Cellular Longevity</i> , 2019, 2019, 1-9.	4.0	22
53	Association of Plasma SDF-1 with Bone Mineral Density, Body Composition, and Hip Fractures in Older Adults: The Cardiovascular Health Study. <i>Calcified Tissue International</i> , 2017, 100, 599-608.	3.1	21
54	Bone Marrow Derived Extracellular Vesicles Activate Osteoclast Differentiation in Traumatic Brain Injury Induced Bone Loss. <i>Cells</i> , 2019, 8, 63.	4.1	21

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55	MicroRNAs are critical regulators of senescence and aging in mesenchymal stem cells. <i>Bone</i> , 2021, 142, 115679.	2.9	21
56	<i>Porphyromonas gingivalis</i> Provokes Exosome Secretion and Paracrine Immune Senescence in Bystander Dendritic Cells. <i>Frontiers in Cellular and Infection Microbiology</i> , 2021, 11, 669989.	3.9	21
57	Insulin Resistance and the IGF-I-Cortical Bone Relationship in Children Ages 9 to 13 Years. <i>Journal of Bone and Mineral Research</i> , 2017, 32, 1537-1545.	2.8	20
58	Modulation of miRNAs by Vitamin C in Human Bone Marrow Stromal Cells. <i>Nutrients</i> , 2018, 10, 186.	4.1	20
59	The crucial role of vitamin C and its transporter (SVCT2) in bone marrow stromal cell autophagy and apoptosis. <i>Stem Cell Research</i> , 2015, 15, 312-321.	0.7	19
60	Role of MicroRNA-141 in the Aging Musculoskeletal System: A Current Overview. <i>Mechanisms of Ageing and Development</i> , 2019, 178, 9-15.	4.6	19
61	The association of circulating kynurenine, a tryptophan metabolite, with frailty in older adults. <i>Aging</i> , 2020, 12, 22253-22265.	3.1	19
62	Stromal cell-derived factor-1 as a potential therapeutic target for osteoarthritis and rheumatoid arthritis. <i>Therapeutic Advances in Chronic Disease</i> , 2019, 10, 204062231988253.	2.5	18
63	Decreased pericellular matrix production and selection for enhanced cell membrane repair may impair osteocyte responses to mechanical loading in the aging skeleton. <i>Aging Cell</i> , 2020, 19, e13056.	6.7	18
64	The Role of Tryptophan Metabolites in Musculoskeletal Stem Cell Aging. <i>International Journal of Molecular Sciences</i> , 2020, 21, 6670.	4.1	18
65	Aromatic Amino Acid Activation of Signaling Pathways in Bone Marrow Mesenchymal Stem Cells Depends on Oxygen Tension. <i>PLoS ONE</i> , 2014, 9, e91108.	2.5	17
66	Kynurenine suppresses osteoblastic cell energetics in vitro and osteoblast numbers in vivo. <i>Experimental Gerontology</i> , 2020, 130, 110818.	2.8	17
67	Age-related increase of kynurenine enhances miR29b-1-5p to decrease both CXCL12 signaling and the epigenetic enzyme Hdac3 in bone marrow stromal cells. <i>Bone Reports</i> , 2020, 12, 100270.	0.4	17
68	Elevated ceramides 18:0 and 24:1 with aging are associated with hip fracture risk through increased bone resorption. <i>Aging</i> , 2019, 11, 9388-9404.	3.1	17
69	Association of Serum TSH With Handgrip Strength in Community-Dwelling Euthyroid Elderly. <i>Journal of Clinical Endocrinology and Metabolism</i> , 2018, 103, 3986-3992.	3.6	16
70	Accumulation of kynurenine elevates oxidative stress and alters microRNA profile in human bone marrow stromal cells. <i>Experimental Gerontology</i> , 2020, 130, 110800.	2.8	14
71	Metabolic regulation of aging and age-related disease. <i>Ageing Research Reviews</i> , 2020, 64, 101175.	10.9	14
72	Kynurenine induces an age-related phenotype in bone marrow stromal cells. <i>Mechanisms of Ageing and Development</i> , 2021, 195, 111464.	4.6	13

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73	The glucocorticoid receptor in osteoprogenitors regulates bone mass and marrow fat. <i>Journal of Endocrinology</i> , 2019, 243, 27-42.	2.6	13
74	Caloric restriction and the adipokine leptin alter the SDF-1 signaling axis in bone marrow and in bone marrow derived mesenchymal stem cells. <i>Molecular and Cellular Endocrinology</i> , 2015, 410, 64-72.	3.2	12
75	The effects of myokines on osteoclasts and osteoblasts. <i>Biochemical and Biophysical Research Communications</i> , 2019, 517, 749-754.	2.1	12
76	Inverse relationship between serum hsCRP concentration and hand grip strength in older adults: a nationwide population-based study. <i>Aging</i> , 2018, 10, 2051-2061.	3.1	12
77	The Developmental Origins of Mosaic Evolution in the Primate Limb Skeleton. <i>Evolutionary Biology</i> , 2012, 39, 447-455.	1.1	10
78	Picolinic acid, a tryptophan oxidation product, does not impact bone mineral density but increases marrow adiposity. <i>Experimental Gerontology</i> , 2020, 133, 110885.	2.8	10
79	Tryptophan-Kynurenine Pathway in COVID-19-Dependent Musculoskeletal Pathology: A Minireview. <i>Mediators of Inflammation</i> , 2021, 2021, 1-6.	3.0	10
80	Reply to TJ Cole et al. <i>American Journal of Clinical Nutrition</i> , 2008, 87, 1959-1960.	4.7	9
81	Role of fibro-adipogenic progenitor cells in muscle atrophy and musculoskeletal diseases. <i>Current Opinion in Pharmacology</i> , 2021, 58, 1-7.	3.5	9
82	Age-associated changes in microRNAs affect the differentiation potential of human mesenchymal stem cells: Novel role of miR-29b-1-5p expression. <i>Bone</i> , 2021, 153, 116154.	2.9	9
83	The Glucocorticoid Receptor in Osterix-Expressing Cells Regulates Bone Mass, Bone Marrow Adipose Tissue, and Systemic Metabolism in Female Mice During Aging. <i>Journal of Bone and Mineral Research</i> , 2020, 37, 285-302.	2.8	8
84	Long Non-coding RNA MALAT1 Is Depleted With Age in Skeletal Muscle in vivo and MALAT1 Silencing Increases Expression of TGF- β 1 in vitro. <i>Frontiers in Physiology</i> , 2021, 12, 742004.	2.8	8
85	Synergistic Effects of Multiple Factors Involved in COVID-19-dependent Muscle Loss. , 2022, 13, 344.		8
86	Body Fat as a Regulator of Bone Mass: Experimental Evidence from Animal Models. <i>Clinical Reviews in Bone and Mineral Metabolism</i> , 2009, 7, 224-229.	0.8	7
87	Therapeutic application of extracellular vesicles for musculoskeletal repair & regeneration. <i>Connective Tissue Research</i> , 2021, 62, 99-114.	2.3	7
88	Blocking Bone Loss with I-BAIBA. <i>Trends in Endocrinology and Metabolism</i> , 2018, 29, 284-286.	7.1	6
89	Lack of association between circulating apelin level and frailty-related functional parameters in older adults: a cross-sectional study. <i>BMC Geriatrics</i> , 2020, 20, 420.	2.7	6
90	The cyclophilin inhibitor NIM-811 increases muscle cell survival with hypoxia in vitro and improves gait performance following ischemia-reperfusion in vivo. <i>Scientific Reports</i> , 2021, 11, 6152.	3.3	6

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91	MicroRNA cargo of extracellular vesicles released by skeletal muscle fibro-adipogenic progenitor cells is significantly altered with disuse atrophy and IL-1 ^β deficiency. <i>Physiological Genomics</i> , 2022, 54, 296-304.	2.3	4
92	Noncoding RNAs and Stem Cell Function and Therapy. <i>Stem Cells International</i> , 2018, 2018, 1-2.	2.5	3
93	Control of Bone Homeostasis by the Wnt Inhibitor Sclerostin. <i>Current Molecular Biology Reports</i> , 2016, 2, 141-148.	1.6	1
94	Changes in the activin A-myostatin-follistatin system within bone and muscle of aging mice. <i>FASEB Journal</i> , 2012, 26, 914.4.	0.5	1
95	Reduction of muscle fiber size, muscle IGF-1, and increased myostatin in the leptin receptor-deficient POUND mouse. <i>FASEB Journal</i> , 2012, 26, 730.1.	0.5	1
96	Editorial: Mesenchymal Stem Cell Senescence and Rejuvenation. <i>Frontiers in Cell and Developmental Biology</i> , 2021, 9, 772476.	3.7	1
97	Central nervous system controls of adipose tissue apoptosis. , 2008, , 285-301.		0
98	Increased sensitivity of bone to unloading in mice lacking myostatin (GDF8). <i>FASEB Journal</i> , 2006, 20, A23.	0.5	0
99	CNS Ghrelin and leptin have opposing functions for the regulation of food intake and bone formation in rats. <i>FASEB Journal</i> , 2007, 21, A461.	0.5	0
100	Preventing bone loss & weight gain with combinations of Vitamin D & phytochemicals. <i>FASEB Journal</i> , 2010, 24, 540.3.	0.5	0
101	Kynurenine, a tryptophan metabolite that increases with age, induces skeletal muscle atrophy and reactive oxygen species.. <i>FASEB Journal</i> , 2018, 32, .	0.5	0
102	Diet and Stress Impair Ovarian Function in Mid-life, Increasing Risk of Chronic Diseases of Aging in Primates. <i>Innovation in Aging</i> , 2021, 5, 682-682.	0.1	0
103	Depletion of the miR-34a sponge-MALAT1 in aging skeletal muscle: Implications for age-related muscle loss. <i>Innovation in Aging</i> , 2021, 5, 684-685.	0.1	0
104	The Kynurenine Pathway Metabolites QA and KYNA induce senescence in Bone Marrow Stem Cells through the AhR Pathway. <i>Innovation in Aging</i> , 2021, 5, 45-45.	0.1	0