Charlotte L Phillips

List of Publications by Citations

58 papers	1,768 citations	24 h-index	41 g-index
62 ext. papers	1,998 ext. citations	4.8 avg, IF	4.1 L-index

#	Paper	IF	Citations
58	Effects of ascorbic acid on proliferation and collagen synthesis in relation to the donor age of human dermal fibroblasts. *Journal of Investigative Dermatology*, **1994**, 103, 228-32	4.3	135
57	Structural changes in human type I collagen fibrils investigated by force spectroscopy. *Experimental Cell Research*, **2004**, 299, 335-42	4.2	125
56	Murine model of the Ehlers-Danlos syndrome. col5a1 haploinsufficiency disrupts collagen fibril assembly at multiple stages. *Journal of Biological Chemistry*, **2006**, 281, 12888-95	5.4	120
55	Transplanted bone marrow mononuclear cells and MSCs impart clinical benefit to children with osteogenesis imperfecta through different mechanisms. *Blood*, **2012**, 120, 1933-41	2.2	105
54	Molecular mechanism of type I collagen homotrimer resistance to mammalian collagenases. *Journal of Biological Chemistry*, **2010**, 285, 22276-81	5.4	87
53	Variable bone fragility associated with an Amish COL1A2 variant and a knock-in mouse model. *Journal of Bone and Mineral Research*, **2010**, 25, 247-61	6.3	74
52	Ascorbic acid and transforming growth factor-beta 1 increase collagen biosynthesis via different mechanisms: coordinate regulation of pro alpha 1(I) and Pro alpha 1(III) collagens. *Archives of Biochemistry and Biophysics*, **1992**, 295, 397-403	4.1	73
51	Carcinomas contain a matrix metalloproteinase-resistant isoform of type I collagen exerting selective support to invasion. *Cancer Research*, **2010**, 70, 4366-74	10.1	71
50	Oim mice exhibit altered femur and incisor mineral composition and decreased bone mineral density. *Bone*, **2000**, 27, 219-26	4.7	66
49	17 Beta-estradiol and progesterone inhibit transcription of the genes encoding the subunits of ovine follicle-stimulating hormone. *Molecular Endocrinology*, **1988**, 2, 641-9		63
48	Alpha 2(I) collagen deficient oim mice have altered biomechanical integrity, collagen content, and collagen crosslinking of their thoracic aorta. *Matrix Biology*, **2005**, 24, 451-8	11.4	52
47	Osteoblast Malfunction Caused by Cell Stress Response to Procollagen Misfolding in ⍰(I)-G610C Mouse Model of Osteogenesis Imperfecta. *Journal of Bone and Mineral Research*, **2016**, 31, 1608-1616	6.3	51
46	The role of type I collagen in aortic wall strength with a homotrimeric. *Journal of Vascular Surgery*, **2001**, 33, 1263-70	3.5	46
45	Gender-dependence of bone structure and properties in adult osteogenesis imperfecta murine model. *Annals of Biomedical Engineering*, **2013**, 41, 1139-49	4.7	44
44	Hindlimb skeletal muscle function in myostatin-deficient mice. *Muscle and Nerve*, **2011**, 43, 49-57	3.4	44
43	Skeletal muscle weakness in osteogenesis imperfecta mice. *Matrix Biology*, **2010**, 29, 638-44	11.4	43
42	The effects of different cysteine for glycine substitutions within alpha 2(I) chains. Evidence of distinct structural domains within the type I collagen triple helix. *Journal of Biological Chemistry*, **1991**, 266, 2590-2594	5.4	41

41	The effects of different cysteine for glycine substitutions within alpha 2(I) chains. Evidence of distinct structural domains within the type I collagen triple helix. *Journal of Biological Chemistry*, **1991**, 266, 2590-4	5.4	37
40	Role of genetic background in determining phenotypic severity throughout postnatal development and at peak bone mass in Col1a2 deficient mice (oim). *Bone*, **2008**, 42, 681-94	4.7	34
39	Live Imaging of Type I Collagen Assembly Dynamics in Osteoblasts Stably Expressing GFP and mCherry-Tagged Collagen Constructs. *Journal of Bone and Mineral Research*, **2018**, 33, 1166-1182	6.3	30
38	Developmental exposure to xenoestrogens at low doses alters femur length and tensile strength in adult mice. *Biology of Reproduction*, **2012**, 86, 69	3.9	30
37	Transfer of proalpha2(I) cDNA into cells of a murine model of human Osteogenesis Imperfecta restores synthesis of type I collagen comprised of alpha1(I) and alpha2(I) heterotrimers in vitro and in vivo. *Journal of Cellular Biochemistry*, **2001**, 83, 84-91	4.7	29
36	A substitution at a non-glycine position in the triple-helical domain of pro alpha 2(I) collagen chains present in an individual with a variant of the Marfan syndrome. *Journal of Clinical Investigation*, **1990**, 86, 1723-8	15.9	29
35	Transgenic over-expression of plasminogen activator inhibitor-1 results in age-dependent and gender-specific increases in bone strength and mineralization. *Bone*, **2007**, 41, 995-1004	4.7	25
34	Effect of food restriction and leptin supplementation on fetal programming in mice. *Endocrinology*, **2012**, 153, 4556-67	4.8	23
33	Novel collagen glomerulopathy in a homotrimeric type I collagen mouse (oim). *Kidney International*, **2002**, 62, 383-91	9.9	23
32	Myostatin deficiency partially rescues the bone phenotype of osteogenesis imperfecta model mice. *Osteoporosis International*, **2016**, 27, 161-70	5.3	21
31	The gene encoding ovine follicle-stimulating hormone beta: isolation, characterization, and comparison to a related ovine genomic sequence. *DNA and Cell Biology*, **1991**, 10, 593-601	3.6	21
30	Sequence analysis of a full-length cDNA for the murine pro alpha 2(I) collagen chain: comparison of the derived primary structure with human pro alpha 2(I) collagen. *Genomics*, **1992**, 13, 1345-6	4.3	21
29	Homozygosity and Heterozygosity for Null Col5a2 Alleles Produce Embryonic Lethality and a Novel Classic Ehlers-Danlos Syndrome-Related Phenotype. *American Journal of Pathology*, **2015**, 185, 2000-11	5.8	19
28	Skeletal Response to Soluble Activin Receptor Type IIB in Mouse Models of Osteogenesis Imperfecta. *Journal of Bone and Mineral Research*, **2018**, 33, 1760-1772	6.3	18
27	Soluble activin receptor type IIB decoy receptor differentially impacts murine osteogenesis imperfecta muscle function. *Muscle and Nerve*, **2018**, 57, 294-304	3.4	16
26	Hindlimb Skeletal Muscle Function and Skeletal Quality and Strength in +/G610C Mice With and Without Weight-Bearing Exercise. *Journal of Bone and Mineral Research*, **2015**, 30, 1874-86	6.3	15
25	Construction of a full-length murine pro alpha 2(I) collagen cDNA by the polymerase chain reaction. *Journal of Investigative Dermatology*, **1991**, 97, 980-4	4.3	13
24	Compromised Exercise Capacity and Mitochondrial Dysfunction in the Osteogenesis Imperfecta Murine (oim) Mouse Model. *Journal of Bone and Mineral Research*, **2019**, 34, 1646-1659	6.3	11

23	Type I collagen glomerulopathy: postnatal collagen deposition follows glomerular maturation. *Kidney International*, **2007**, 71, 985-93	9.9	11
22	Carrier detection and rapid newborn diagnostic test for the common Y393N maple syrup urine disease allele by PCR-RFLP: culturally permissible testing in the Mennonite community. *Journal of Inherited Metabolic Disease*, **2001**, 24, 393-403	5.4	10
21	Immunological similarity of milk sulfhydryl oxidase and kidney glutathione oxidase. *Archives of Biochemistry and Biophysics*, **1984**, 228, 681-5	4.1	10
20	Osteogenesis Imperfecta Type IV. *Annals of the New York Academy of Sciences*, **1990**, 580, 546-548	6.5	9
19	Osteogenesis Imperfecta: Muscle-Bone Interactions when Bi-directionally Compromised. *Current Osteoporosis Reports*, **2018**, 16, 478-489	5.4	8
18	Deficient degradation of homotrimeric type I collagen, α1(I)3 glomerulopathy in oim mice. *Molecular Genetics and Metabolism*, **2011**, 104, 373-82	3.7	8
17	Evidence of common ancestry for the maple syrup urine disease (MSUD) Y438N allele in non-Mennonite MSUD patients. *Molecular Genetics and Metabolism*, **2002**, 75, 79-90	3.7	8
16	DNA carrier testing and newborn screening for maple syrup urine disease in Old Order Mennonite communities. *Genetic Testing and Molecular Biomarkers*, **2010**, 14, 205-8	1.6	7
15	Mutations in the COL1A2 gene of type I collagen that result in nonlethal forms of osteogenesis imperfecta. *American Journal of Medical Genetics Part A*, **1993**, 45, 228-32		7
14	Transforming growth factor-β1/Smad3-independent epithelial-mesenchymal transition in type I collagen glomerulopathy. *International Journal of Nephrology and Renovascular Disease*, **2017**, 10, 251-259	2.5	6
13	Potential modifier role of the R618Q variant of proalpha2(I)collagen in type I collagen fibrillogenesis: in vitro assembly analysis. *Molecular Genetics and Metabolism*, **2004**, 82, 144-53	3.7	6
12	Decreasing maternal myostatin programs adult offspring bone strength in a mouse model of osteogenesis imperfecta. *Proceedings of the National Academy of Sciences of the United States of America*, **2016**, 113, 13522-13527	11.5	5
11	Characterization of the MPS I-H knock-in mouse reveals increased femoral biomechanical integrity with compromised material strength and altered bone geometry. *Molecular Genetics and Metabolism Reports*, **2015**, 5, 3-11	1.8	5
10	Multi-element analysis of bone from the osteogenesis imperfecta model (OIM) mouse using thermal and fast neutron activation analysis. *Journal of Radioanalytical and Nuclear Chemistry*, **2008**, 276, 65-69	1.5	4
9	Impact of Genetic and Pharmacologic Inhibition of Myostatin in a Murine Model of Osteogenesis Imperfecta. *Journal of Bone and Mineral Research*, **2021**, 36, 739-756	6.3	3
8	DNA Sequence Analysis of Alpha 2(I) Collagen from an Individual with the Marfan Phenotype. *Annals of the New York Academy of Sciences*, **1990**, 580, 560-561	6.5	2
7	Deciphering Myostatin's Regulatory, Metabolic, and Developmental Influence in Skeletal Diseases. *Frontiers in Genetics*, **2021**, 12, 662908	4.5	2
6	Dietary fluoride restriction does not alter femoral biomechanical strength in col1a2-deficient (oim) mice with type I collagen glomerulopathy. *Journal of Nutrition*, **2010**, 140, 1752-6	4.1	1

List of Publications

5	Skeletal muscle specific mitochondrial dysfunction and altered energy metabolism in a murine model (oim/oim) of severe osteogenesis imperfecta. *Molecular Genetics and Metabolism*, **2021**, 132, 244-253	3.7	1
4	Animal Models of Osteogenesis Imperfecta **2014**, 197-207		
3	Potential mitochondrial dysfunction in skeletal muscle of mouse models of Osteogenesis imperfecta.. *FASEB Journal*, **2018**, 32, 543.20	0.9	
2	Effect of impact exercise on skeletal muscle and bone in OI model mice. *FASEB Journal*, **2009**, 23, LB170	0.9	
1	Fecundity is impaired in a mouse model of osteogenesis imperfecta. *Molecular Reproduction and Development*, **2020**, 87, 927-929	2.6	