

# Jefferson C Frisbee

## List of Publications by Year in descending order

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100  
papers

2,335  
citations

172457

29  
h-index

223800

46  
g-index

100  
all docs

100  
docs citations

100  
times ranked

2139  
citing authors

#	ARTICLE	IF	CITATIONS
1	Chronic stress impacts the cardiovascular system: animal models and clinical outcomes. American Journal of Physiology - Heart and Circulatory Physiology, 2015, 308, H1476-H1498.	3.2	158
2	Impaired NO-dependent dilation of skeletal muscle arterioles in hypertensive diabetic obese Zucker rats. American Journal of Physiology - Heart and Circulatory Physiology, 2001, 281, H1304-H1311.	3.2	136
3	Reduced nitric oxide bioavailability contributes to skeletal muscle microvessel rarefaction in the metabolic syndrome. American Journal of Physiology - Regulatory Integrative and Comparative Physiology, 2005, 289, R307-R316.	1.8	107
4	Aerobic exercise training reduces arterial stiffness in metabolic syndrome. Journal of Applied Physiology, 2014, 116, 1396-1404.	2.5	92
5	Oxidant stress-induced increase in myogenic activation of skeletal muscle resistance arteries in obese Zucker rats. American Journal of Physiology - Heart and Circulatory Physiology, 2002, 283, H2160-H2168.	3.2	90
6	Hypertension-independent Microvascular Rarefaction in the Obese Zucker Rat Model of the Metabolic Syndrome. Microcirculation, 2005, 12, 383-392.	1.8	89
7	Augmented adrenergic vasoconstriction in hypertensive diabetic obese Zucker rats. American Journal of Physiology - Heart and Circulatory Physiology, 2002, 282, H816-H820.	3.2	85
8	Exercise training blunts microvascular rarefaction in the metabolic syndrome. American Journal of Physiology - Heart and Circulatory Physiology, 2006, 291, H2483-H2492.	3.2	78
9	Remodeling of the skeletal muscle microcirculation increases resistance to perfusion in obese Zucker rats. American Journal of Physiology - Heart and Circulatory Physiology, 2003, 285, H104-H111.	3.2	77
10	Low-flow vascular remodeling in the metabolic syndrome X. American Journal of Physiology - Heart and Circulatory Physiology, 2004, 286, H964-H970.	3.2	74
11	Impaired skeletal muscle perfusion in obese Zucker rats. American Journal of Physiology - Regulatory Integrative and Comparative Physiology, 2003, 285, R1124-R1134.	1.8	67
12	Depressive behavior and vascular dysfunction: a link between clinical depression and vascular disease?. Journal of Applied Physiology, 2010, 108, 1041-1051.	2.5	66
13	Integration of hypoxic dilation signaling pathways for skeletal muscle resistance arteries. American Journal of Physiology - Regulatory Integrative and Comparative Physiology, 2002, 283, R309-R319.	1.8	54
14	Contribution of cytochrome P-450 $\beta$ -hydroxylase to altered arteriolar reactivity with high-salt diet and hypertension. American Journal of Physiology - Heart and Circulatory Physiology, 2000, 278, H1517-H1526.	3.2	52
15	Enhanced arteriolar $\beta$ -adrenergic constriction impairs dilator responses and skeletal muscle perfusion in obese Zucker rats. Journal of Applied Physiology, 2004, 97, 764-772.	2.5	50
16	Vascular function in the metabolic syndrome and the effects on skeletal muscle perfusion: lessons from the obese Zucker rat. Essays in Biochemistry, 2006, 42, 145-160.	4.7	49
17	Impaired dilation of skeletal muscle microvessels to reduced oxygen tension in diabetic obese Zucker rats. American Journal of Physiology - Heart and Circulatory Physiology, 2001, 281, H1568-H1574.	3.2	46
18	Obesity, Insulin Resistance, and Microvessel Density. Microcirculation, 2007, 14, 289-298.	1.8	44

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19	20-HETE modulates myogenic response of skeletal muscle resistance arteries from hypertensive Dahl-SS rats. <i>American Journal of Physiology - Heart and Circulatory Physiology</i> , 2001, 280, H1066-H1074.	3.2	43
20	Spatial heterogeneity in skeletal muscle microvascular blood flow distribution is increased in the metabolic syndrome. <i>American Journal of Physiology - Regulatory Integrative and Comparative Physiology</i> , 2011, 301, R975-R986.	1.8	36
21	Microvascular perfusion heterogeneity contributes to peripheral vascular disease in metabolic syndrome. <i>Journal of Physiology</i> , 2016, 594, 2233-2243.	2.9	35
22	Increased vascular thromboxane generation impairs dilation of skeletal muscle arterioles of obese Zucker rats with reduced oxygen tension. <i>American Journal of Physiology - Heart and Circulatory Physiology</i> , 2008, 295, H1522-H1528.	3.2	33
23	Distinct temporal phases of microvascular rarefaction in skeletal muscle of obese Zucker rats. <i>American Journal of Physiology - Heart and Circulatory Physiology</i> , 2014, 307, H1714-H1728.	3.2	33
24	Metabolic syndrome impairs reactivity and wall mechanics of cerebral resistance arteries in obese Zucker rats. <i>American Journal of Physiology - Heart and Circulatory Physiology</i> , 2015, 309, H1846-H1859.	3.2	33
25	Altered Mechanisms Underlying Hypoxic Dilation of Skeletal Muscle Resistance Arteries of Hypertensive versus Normotensive Dahl Rats. <i>Microcirculation</i> , 2001, 8, 115-127.	1.8	32
26	Oxidant stress and skeletal muscle microvasculopathy in the metabolic syndrome. <i>Vascular Pharmacology</i> , 2012, 57, 150-159.	2.1	32
27	High-salt diet impairs hypoxia-induced cAMP production and hyperpolarization in rat skeletal muscle arteries. <i>American Journal of Physiology - Heart and Circulatory Physiology</i> , 2001, 281, H1808-H1815.	3.2	31
28	Divergence between arterial perfusion and fatigue resistance in skeletal muscle in the metabolic syndrome. <i>Experimental Physiology</i> , 2011, 96, 369-383.	2.0	31
29	Increased peripheral vascular disease risk progressively constrains perfusion adaptability in the skeletal muscle microcirculation. <i>American Journal of Physiology - Heart and Circulatory Physiology</i> , 2016, 310, H488-H504.	3.2	30
30	Integration of skeletal muscle resistance arteriolar reactivity for perfusion responses in the metabolic syndrome. <i>American Journal of Physiology - Regulatory Integrative and Comparative Physiology</i> , 2009, 296, R1771-R1782.	1.8	29
31	20-HETE Contributes to Myogenic Activation of Skeletal Muscle Resistance Arteries in Brown Norway and Sprague-Dawley Rats. <i>Microcirculation</i> , 2001, 8, 45-55.	1.8	27
32	Vascular adrenergic tone and structural narrowing constrain reactive hyperemia in skeletal muscle of obese Zucker rats. <i>American Journal of Physiology - Heart and Circulatory Physiology</i> , 2006, 290, H2066-H2074.	3.2	26
33	Blunted temporal activity of microvascular perfusion heterogeneity in metabolic syndrome: a new attractor for peripheral vascular disease?. <i>American Journal of Physiology - Heart and Circulatory Physiology</i> , 2013, 304, H547-H558.	3.2	26
34	Aortic dysfunction in metabolic syndrome mediated by perivascular adipose tissue TNF $\alpha$ and NOX2-dependent pathway. <i>Experimental Physiology</i> , 2018, 103, 590-603.	2.0	26
35	Protection from vascular dysfunction in female rats with chronic stress and depressive symptoms. <i>American Journal of Physiology - Heart and Circulatory Physiology</i> , 2018, 314, H1070-H1084.	3.2	25
36	Exercise training prevents the perivascular adipose tissue-induced aortic dysfunction with metabolic syndrome. <i>Redox Biology</i> , 2019, 26, 101285.	9.0	24

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37	Impaired hemorrhage tolerance in the obese Zucker rat model of metabolic syndrome. <i>Journal of Applied Physiology</i> , 2006, 100, 465-473.	2.5	23
38	Quantification of Mitochondrial Oxidative Phosphorylation in Metabolic Disease: Application to Type 2 Diabetes. <i>International Journal of Molecular Sciences</i> , 2019, 20, 5271.	4.1	23
39	Regulation of In Situ Skeletal Muscle Arteriolar Tone: Interactions Between Two Parameters. <i>Microcirculation</i> , 2002, 9, 443-462.	1.8	21
40	Vascular Dysfunction in Obesity and Insulin Resistance. <i>Microcirculation</i> , 2007, 14, 269-271.	1.8	21
41	Impaired Tissue Oxygenation in Metabolic Syndrome Requires Increased Microvascular Perfusion Heterogeneity. <i>Journal of Cardiovascular Translational Research</i> , 2017, 10, 69-81.	2.4	20
42	Role of Chronic Stress and Exercise on Microvascular Function in Metabolic Syndrome. <i>Medicine and Science in Sports and Exercise</i> , 2018, 50, 957-966.	0.4	20
43	Arterial Function in Cardio-Metabolic Diseases: From the Microcirculation to the Large Conduits. <i>Progress in Cardiovascular Diseases</i> , 2015, 57, 489-496.	3.1	18
44	Psychological stress-induced cerebrovascular dysfunction: the role of metabolic syndrome and exercise. <i>Experimental Physiology</i> , 2018, 103, 761-776.	2.0	18
45	Skeletal muscle performance in metabolic disease: Microvascular or mitochondrial limitation or both?. <i>Microcirculation</i> , 2019, 26, e12517.	1.8	18
46	Differential Impact of Dilator Stimuli on Increased Myogenic Activation of Cerebral and Skeletal Muscle Resistance Arterioles in Obese Zucker Rats. <i>Microcirculation</i> , 2013, 20, 579-589.	1.8	16
47	A conceptual framework for predicting and addressing the consequences of disease-related microvascular dysfunction. <i>Microcirculation</i> , 2017, 24, e12359.	1.8	16
48	Computational analyses of intravascular tracer washout reveal altered capillary-level flow distributions in obese Zucker rats. <i>Journal of Physiology</i> , 2011, 589, 4527-4543.	2.9	15
49	Impact of Increased Intramuscular Perfusion Heterogeneity on Skeletal Muscle Microvascular Hematocrit in the Metabolic Syndrome. <i>Microcirculation</i> , 2014, 21, 677-687.	1.8	15
50	Protection from chronic stress- and depressive symptom-induced vascular endothelial dysfunction in female rats is abolished by preexisting metabolic disease. <i>American Journal of Physiology - Heart and Circulatory Physiology</i> , 2018, 314, H1085-H1097.	3.2	12
51	Chronic atorvastatin and exercise can partially reverse established skeletal muscle microvasculopathy in metabolic syndrome. <i>American Journal of Physiology - Heart and Circulatory Physiology</i> , 2018, 315, H855-H870.	3.2	12
52	Type 2 diabetes mellitus in the Goto-Kakizaki rat impairs microvascular function and contributes to premature skeletal muscle fatigue. <i>Journal of Applied Physiology</i> , 2019, 126, 626-637.	2.5	12
53	Altered post-capillary and collecting venular reactivity in skeletal muscle with metabolic syndrome. <i>Journal of Physiology</i> , 2017, 595, 5159-5174.	2.9	9
54	Chronic stress induced perivascular adipose tissue impairment of aortic function and the therapeutic effect of exercise. <i>Experimental Physiology</i> , 2021, 106, 1343-1358.	2.0	9

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55	Parenchymal Tissue Cytochrome P450 4A Enzymes Contribute to Oxygen-Induced Alterations in Skeletal Muscle Arteriolar Tone. <i>Microvascular Research</i> , 2002, 63, 340-343.	2.5	8
56	Angiostatin Does Not Contribute to Skeletal Muscle Microvascular Rarefaction with Low Nitric Oxide Bioavailability. <i>Microcirculation</i> , 2007, 14, 145-153.	1.8	8
57	Insidious incrementalism: The silent failure of the microcirculation with increasing peripheral vascular disease risk. <i>Microcirculation</i> , 2017, 24, e12332.	1.8	8
58	Endothelium-dependent impairments to cerebral vascular reactivity with type 2 diabetes mellitus in the Goto-Kakizaki rat. <i>American Journal of Physiology - Regulatory Integrative and Comparative Physiology</i> , 2019, 317, R149-R159.	1.8	8
59	Skeletal muscle energetics are compromised only during high-intensity contractions in the Goto-Kakizaki rat model of type 2 diabetes. <i>American Journal of Physiology - Regulatory Integrative and Comparative Physiology</i> , 2019, 317, R356-R368.	1.8	7
60	Beneficial Pleiotropic Antidepressive Effects of Cardiovascular Disease Risk Factor Interventions in the Metabolic Syndrome. <i>Journal of the American Heart Association</i> , 2018, 7, .	3.7	6
61	Microvessel Density: Integrating Sex-Based Differences and Elevated Cardiovascular Risks in Metabolic Syndrome. <i>Journal of Vascular Research</i> , 2022, 59, 1-15.	1.4	6
62	20-HETE Contributes to Myogenic Activation of Skeletal Muscle Resistance Arteries in Brown Norway and Sprague-Dawley Rats. <i>Microcirculation</i> , 2001, 8, 45-55.	1.8	6
63	Contribution of Extrinsic Factors and Intrinsic Vascular Alterations to Reduced Arteriolar Reactivity with High-Salt Diet and Hypertension. <i>Microcirculation</i> , 2000, 7, 281-289.	1.8	4
64	Altered distribution of adrenergic constrictor responses contributes to skeletal muscle perfusion abnormalities in metabolic syndrome. <i>Microcirculation</i> , 2017, 24, e12349.	1.8	4
65	Obesity, insulin resistance, and microvascular adaptation. <i>Microcirculation</i> , 2017, 24, e12346.	1.8	2
66	The contribution of muscarinic-receptor-mediated responses to epineurial vascular diameter at the sciatic nerve. <i>Canadian Journal of Physiology and Pharmacology</i> , 2018, 96, 855-858.	1.4	1
67	Shifted vascular optimization: the emergence of a new arteriolar behaviour with chronic metabolic disease. <i>Experimental Physiology</i> , 2020, 105, 1431-1439.	2.0	1
68	Can Myogenic Tone Protect Endothelial Function? Integrating Myogenic Activation and Dilator Reactivity for Cerebral Resistance Arteries in Metabolic Disease. <i>Journal of Vascular Research</i> , 2021, 58, 286-300.	1.4	1
69	HMG-CoA reductase inhibitors improve microvascular outcomes in the metabolic syndrome independent of plasma cholesterol profile. <i>FASEB Journal</i> , 2007, 21, A849.	0.5	1
70	Special topics issue: "Complexity in the microcirculation". <i>Microcirculation</i> , 2019, 26, e12551.	1.8	0
71	Understanding complex behaviours in the microcirculation: From blood flow to oxygenation. <i>Experimental Physiology</i> , 2020, 105, 1429-1430.	2.0	0
72	MicroRNA miR-378a-3p is an Essential Regulator of Autophagy and Proliferation in Endothelial Cells. <i>FASEB Journal</i> , 2021, 35, .	0.5	0

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73	Loss of Breast Cancer Susceptibility Gene 2 Exacerbates Angiotensin-Induced Endothelial Dysfunction. FASEB Journal, 2021, 35, .	0.5	0
74	Fatty acid-binding Protein-3 (FABP3) is a Novel Regulator of Endothelial Function. FASEB Journal, 2021, 35, .	0.5	0
75	Chronic Nitric Oxide Synthase Inhibition Causes Skeletal Muscle Microvessel Rarefaction Independent of Increased Mean Arterial Pressure. FASEB Journal, 2006, 20, A711.	0.5	0
76	Growth dependent changes in the endothelial factors regulating arteriolar tone. FASEB Journal, 2006, 20, A270.	0.5	0
77	The Effects of Obesity and Exercise on Myogenic Regulatory Factors. FASEB Journal, 2007, 21, A830.	0.5	0
78	Hydrogen peroxide emerges as a regulator of arteriolar tone during microvascular network growth. FASEB Journal, 2007, 21, A494.	0.5	0
79	Increased myogenic responsiveness of skeletal muscle arterioles with juvenile growth. FASEB Journal, 2007, 21, A494.	0.5	0
80	Skeletal Muscle Mitochondrial Subpopulation Response in a Type 2 Diabetic Mouse Model. FASEB Journal, 2009, 23, LB93.	0.5	0
81	Psychological stress and endothelial dysfunction : a link between depression and vascular disease?. FASEB Journal, 2009, 23, 774.9.	0.5	0
82	Distinct Mitochondrial Subpopulation Response in a Type 2 Diabetic Model. FASEB Journal, 2009, 23, 990.22.	0.5	0
83	Protection from Diabetes-Associated Apoptosis with Heat Shock Protein 27 Overexpression. FASEB Journal, 2009, 23, 953.18.	0.5	0
84	Correlations between peripheral vascular function, inflammation and depression in human subjects. FASEB Journal, 2009, 23, 795.3.	0.5	0
85	Altered Spatio-Temporal Microvascular Blood Flow Distribution Patterns in Skeletal Muscle with Metabolic Syndrome. FASEB Journal, 2010, 24, 978.1.	0.5	0
86	Impaired Arteriolar Dilatation in a Mouse Model of Familial Hypercholesterolemia: Impact of Chronic Exercise and Anti-Cholesterol Therapy. FASEB Journal, 2010, 24, 593.5.	0.5	0
87	Effect of remote ischemic preconditioning on hepatic parenchymal and microvascular damage in obesity. FASEB Journal, 2011, 25, .	0.5	0
88	Aging Disrupts The Balance Between Positive And Negative Angiogenic Factors In Skeletal Muscle. FASEB Journal, 2011, 25, lb557.	0.5	0
89	EARLY MICROVESSEL LOSS IN THE METABOLIC SYNDROME. FASEB Journal, 2012, 26, 682.9.	0.5	0
90	DECREASED TEMPORAL ACTIVITY AT MICROVASCULAR BIFURCATIONS EXACERBATES PERFUSION HETEROGENEITY IN SKELETAL MUSCLE IN THE METABOLIC SYNDROME. FASEB Journal, 2012, 26, 860.12.	0.5	0

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91	Blunted temporal activity of microvascular perfusion heterogeneity in metabolic syndrome: a new attractor for peripheral vascular disease?. FASEB Journal, 2013, 27, 898.11.	0.5	0
92	Depressive Symptoms, Inflammation and Microvascular Dysfunction: Presence of a Gender Disparity. FASEB Journal, 2013, 27, 900.6.	0.5	0
93	Differential impact of dilator stimuli on increased myogenic activation of cerebral and skeletal muscle resistance arterioles in obese Zucker rats. FASEB Journal, 2013, 27, 901.11.	0.5	0
94	Chronic Depressive Symptoms and Gender: Impact on Conduit Vascular Outcomes. FASEB Journal, 2013, 27, 1136.10.	0.5	0
95	Effect of Gastric Bypass Surgery on Endothelial function and Heart Rate Variability. FASEB Journal, 2015, 29, LB568.	0.5	0
96	Effects of Chronic Stress on Pancreatic Beta Cell Density in Obese and Lean Zucker Rats. FASEB Journal, 2015, 29, 997.4.	0.5	0
97	Muscarinic Receptor-Mediated Regulation of Epineurial Blood Vessels of the Sciatic Nerve. FASEB Journal, 2018, 32, 705.2.	0.5	0
98	Effects of Phenylephrine and Norepinephrine on the Diameter of the Epineurial Vessels Supplying the Sciatic Nerve. FASEB Journal, 2018, 32, 705.3.	0.5	0
99	It Does Not Do to Dwell on Single Components and Forget the Importance of Complete Networks: Optimizing an Integrated Hemodynamic Model Derived from Experimental Data. FASEB Journal, 2018, 32, 704.8.	0.5	0
100	Skeletal Muscle Mitochondrial Function in Goto-Kakizaki Rat Model of Type 2 Diabetes. FASEB Journal, 2019, 33, 701.7.	0.5	0