David C Wright

List of Publications by Year
in descending order

125 papers	5,388 citations	109321 35 h-index	91884 69 g-index
127 all docs	127 docs citations	127 times ranked	7206 citing authors

#	Article	IF	Citations
1	High-fat diets cause insulin resistance despite an increase in muscle mitochondria. Proceedings of the National Academy of Sciences of the United States of America, 2008, 105, 7815-7820.	7.1	466
2	Exercise-induced Mitochondrial Biogenesis Begins before the Increase in Muscle PGC-1Î± Expression. Journal of Biological Chemistry, 2007, 282, 194-199.	3.4	406
3	The effects of glucocorticoids on adipose tissue lipid metabolism. Metabolism: Clinical and Experimental, 2011, 60, 1500-1510.	3.4	403
4	Ca2+ and AMPK Both Mediate Stimulation of Glucose Transport by Muscle Contractions. Diabetes, 2004, 53, 330-335.	0.6	329
5	Calcium Induces Increases in Peroxisome Proliferator-activated Receptor Î³ Coactivator-1Î± and Mitochondrial Biogenesis by a Pathway Leading to p38 Mitogen-activated Protein Kinase Activation. Journal of Biological Chemistry, 2007, 282, 18793-18799.	3.4	252
6	Exercise and adrenaline increase PGCâ€1Î± mRNA expression in rat adipose tissue. Journal of Physiology, 2009, 587, 1607-1617.	2.9	180
7	Evidence for the role of AMPK in regulating PGCâ€1 alpha expression and mitochondrial proteins in mouse epididymal adipose tissue. Obesity, 2014, 22, 730-738.	3.0	129
8	Activation of p38 MAP kinase enhances sensitivity of muscle glucose transport to insulin. American Journal of Physiology - Endocrinology and Metabolism, 2005, 288, E782-E788.	3.5	125
9	Time course of high-fat diet-induced reductions in adipose tissue mitochondrial proteins: potential mechanisms and the relationship to glucose intolerance. American Journal of Physiology - Endocrinology and Metabolism, 2008, 295, E1076-E1083.	3.5	119
10	Adiponectin resistance precedes the accumulation of skeletal muscle lipids and insulin resistance in high-fat-fed rats. American Journal of Physiology - Regulatory Integrative and Comparative Physiology, 2009, 296, R243-R251.	1.8	116
11	Contraction- and hypoxia-stimulated glucose transport is mediated by a Ca²⁺-dependent mechanism in slow-twitch rat soleus muscle. American Journal of Physiology - Endocrinology and Metabolism, 2005, 288, E1062-E1066.	3.5	112
12	Lipid metabolism response to a single, prolonged bout of endurance exercise in healthy young men. American Journal of Physiology - Endocrinology and Metabolism, 2006, 290, E355-E362.	3.5	105
13	Short-Term Disruption of Diurnal Rhythms After Murine Myocardial Infarction Adversely Affects Long-Term Myocardial Structure and Function. Circulation Research, 2014, 114, 1713-1722.	4.5	95
14	PGC-1Î±-mediated regulation of gene expression and metabolism: implications for nutrition and exercise prescriptions. Applied Physiology, Nutrition and Metabolism, 2008, 33, 843-862.	1.9	70
15	The day/night proteome in the murine heart. American Journal of Physiology - Regulatory Integrative and Comparative Physiology, 2014, 307, R121-R137.	1.8	69
16	Housing temperature affects the acute and chronic metabolic adaptations to exercise in mice. Journal of Physiology, 2019, 597, 4581-4600.	2.9	69
17	Changes in mechanisms proposed to mediate fat loss following an acute bout of high-intensity interval and endurance exercise. Applied Physiology, Nutrition and Metabolism, 2013, 38, 1236-1244.	1.9	66
18	Mitochondrial creatine kinase activity and phosphate shuttling are acutely regulated by exercise in human skeletal muscle. Journal of Physiology, 2012, 590, 5475-5486.	2.9	65

#	Article	IF	Citations
19	Resveratrol supplementation improves white adipose tissue function in a depot-specific manner in Zucker diabetic fatty rats. American Journal of Physiology - Regulatory Integrative and Comparative Physiology, 2013, 305, R542-R551.	1.8	64
20	Extremely rapid increase in fatty acid transport and intramyocellular lipid accumulation but markedly delayed insulin resistance after high fat feeding in rats. Diabetologia, 2015, 58, 2381-2391.	6.3	62
21	Trans-11 Vaccenic Acid Reduces Hepatic Lipogenesis and Chylomicron Secretion in JCR:LA-cp Rats. Journal of Nutrition, 2009, 139, 2049-2054.	2.9	59
22	Mechanisms of calcium-induced mitochondrial biogenesis and GLUT4 synthesis. Applied Physiology, Nutrition and Metabolism, 2007, 32, 840-845.	1.9	58
23	How muscle insulin sensitivity is regulated: testing of a hypothesis. American Journal of Physiology - Endocrinology and Metabolism, 2006, 291, E1258-E1263.	3.5	57
24	Skeletal muscle and beyond: the role of exercise as a mediator of systemic mitochondrial biogenesis. Applied Physiology, Nutrition and Metabolism, 2011, 36, 598-607.	1.9	56
25	The effects of apelin treatment on skeletal muscle mitochondrial content. American Journal of Physiology - Regulatory Integrative and Comparative Physiology, 2009, 297, R1761-R1768.	1.8	52
26	Adipose Tissue Insulin Action and IL-6 Signaling after Exercise in Obese Mice. Medicine and Science in Sports and Exercise, 2015, 47, 2034-2042.	0.4	48
27	Impairments in mitochondrial palmitoylâ€CoA respiratory kinetics that precede development of diabetic cardiomyopathy are prevented by resveratrol in ZDF rats. Journal of Physiology, 2014, 592, 2519-2533.	2.9	44
28	Subcutaneous inguinal white adipose tissue is responsive to, but dispensable for, the metabolic health benefits of exercise. American Journal of Physiology - Endocrinology and Metabolism, 2018, 314, E66-E77.	3.5	43
29	Epinephrine-mediated regulation of PDK4 mRNA in rat adipose tissue. American Journal of Physiology - Cell Physiology, 2010, 299, C1162-C1170.	4.6	41
30	Obesity exacerbates the acute metabolic side effects of olanzapine. Psychoneuroendocrinology, 2018, 88, 121-128.	2.7	41
31	IL-6 Indirectly Modulates the Induction of Glyceroneogenic Enzymes in Adipose Tissue during Exercise. PLoS ONE, 2012, 7, e41719.	2.5	40
32	Increased hypolipidemic benefits of cis-9, trans-11 conjugated linoleic acid in combination with trans-11 vaccenic acid in a rodent model of the metabolic syndrome, the JCR:LA-cp rat. Nutrition and Metabolism, 2010, 7, 60.	3.0	39
33	Exercise training protects against an acute inflammatory insult in mouse epididymal adipose tissue. Journal of Applied Physiology, 2014, 116, 1272-1280.	2.5	37
34	Evidence for fatty acids mediating CL 316,243-induced reductions in blood glucose in mice. American Journal of Physiology - Endocrinology and Metabolism, 2014, 307, E563-E570.	3.5	37
35	Interactions between the consumption of a high-fat diet and fasting in the regulation of fatty acid oxidation enzyme gene expression: an evaluation of potential mechanisms. American Journal of Physiology - Regulatory Integrative and Comparative Physiology, 2011, 300, R212-R221.	1.8	36
36	Identification of a novel malonyl-CoA IC50 for CPT-I: implications for predicting inÂvivo fatty acid oxidation rates. Biochemical Journal, 2012, 448, 13-20.	3.7	36

#	Article	IF	Citations
37	Muscle-specific differences in the response of mitochondrial proteins to Î²-GPA feeding: an evaluation of potential mechanisms. American Journal of Physiology - Endocrinology and Metabolism, 2009, 296, E1400-E1408.	3.5	35
38	Aging-Associated Reductions in Lipolytic and Mitochondrial Proteins in Mouse Adipose Tissue Are Not Rescued by Metformin Treatment. Journals of Gerontology - Series A Biological Sciences and Medical Sciences, 2014, 69, 1060-1068.	3.6	35
39	Submaximal ADPâ€stimulated respiration is impaired in ZDF rats and recovered by resveratrol. Journal of Physiology, 2013, 591, 6089-6101.	2.9	32
40	Beneficial effects of combined resveratrol and metformin therapy in treating dietâ€induced insulin resistance. Physiological Reports, 2016, 4, e12877.	1.7	32
41	High-saturated-fat diet-induced obesity causes hepatic interleukin-6 resistance via endoplasmic reticulum stress. Journal of Lipid Research, 2019, 60, 1236-1249.	4.2	32
42	IL-6 increases muscle insulin sensitivity only at superphysiological levels. American Journal of Physiology - Endocrinology and Metabolism, 2007, 292, E1842-E1846.	3.5	31
43	Microbiome and NAFLD: potential influence of aerobic fitness and lifestyle modification. Physiological Genomics, 2017, 49, 385-399.	2.3	31
44	Glucagon receptor knockout mice are protected against acute olanzapine-induced hyperglycemia. Psychoneuroendocrinology, 2017, 82, 38-45.	2.7	28
45	Loss of glucagon signaling alters white adipose tissue browning. FASEB Journal, 2019, 33, 4824-4835.	0.5	28
46	Palmitate acutely induces insulin resistance in isolated muscle from obese but not lean humans. American Journal of Physiology - Regulatory Integrative and Comparative Physiology, 2008, 294, R1205-R1212.	1.8	27
47	Lack of REDD1 reduces whole body glucose and insulin tolerance, and impairs skeletal muscle insulin signaling. Biochemical and Biophysical Research Communications, 2014, 453, 778-783.	2.1	26
48	Cycling our way to fit fat. Physiological Reports, 2017, 5, e13247.	1.7	26
49	Looking on the â€œbriteâ€•side exercise-induced browning of white adipose tissue. Pflugers Archiv European Journal of Physiology, 2019, 471, 455-465.	2.8	26
50	Dietary Î±-linolenic acid supplementation alters skeletal muscle plasma membrane lipid composition, sarcolemmal FAT/CD36 abundance, and palmitate transport rates. American Journal of Physiology - Regulatory Integrative and Comparative Physiology, 2016, 311, R1234-R1242.	1.8	25
51	Reduced ATGL-mediated lipolysis attenuates Î²-adrenergic-induced AMPK signaling, but not the induction of PKA-targeted genes, in adipocytes and adipose tissue. American Journal of Physiology - Cell Physiology, 2016, 311, C269-C276.	4.6	25
52	Voluntary wheel running attenuates lipopolysaccharide-induced liver inflammation in mice. American Journal of Physiology - Regulatory Integrative and Comparative Physiology, 2016, 310, R934-R942.	1.8	25
53	Habitual physical activity protects against lipopolysaccharide-induced inflammation in mouse adipose tissue. Adipocyte, 2017, 6, 1-11.	2.8	25
54	AMPK mediates energetic stressâ€induced liver GDF15. FASEB Journal, 2021, 35, e21218.	0.5	25

#	Article	IF	Citations
55	Heat shock proteins: in vivo heat treatments reveal adipose tissue depot-specific effects. Journal of Applied Physiology, 2015, 118, 98-106.	2.5	23
56	Acute administration of IL-6 improves indices of hepatic glucose and insulin homeostasis in lean and obese mice. American Journal of Physiology - Renal Physiology, 2019, 316, G166-G178.	3.4	23
57	IL-6 Is Not Necessary for the Regulation of Adipose Tissue Mitochondrial Content. PLoS ONE, 2012, 7, e51233.	2.5	22
58	Reduced SCD1 activity alters markers of fatty acid reesterification, glyceroneogenesis, and lipolysis in murine white adipose tissue and 3T3-L1 adipocytes. American Journal of Physiology - Cell Physiology, 2017, 313, C295-C304.	4.6	22
59	Deficiency of the autophagy gene ATG16L1 induces insulin resistance through KLHL9/KLHL13/CUL3-mediated IRS1 degradation. Journal of Biological Chemistry, 2019, 294, 16172-16185.	3.4	22
60	FAT/CD36 regulates PEPCK expression in adipose tissue. American Journal of Physiology - Cell Physiology, 2013, 304, C478-C484.	4.6	21
61	Prior exercise training improves cold tolerance independent of indices associated with nonâ€shivering thermogenesis. Journal of Physiology, 2018, 596, 4375-4391.	2.9	21
62	Antioxidant supplemention in the treatment of skeletal muscle insulin resistance: potential mechanisms and clinical relevance. Applied Physiology, Nutrition and Metabolism, 2008, 33, 21-31.	1.9	20
63	Dietary supplementation with vitamin E and C attenuates dexamethasone-induced glucose intolerance in rats. American Journal of Physiology - Regulatory Integrative and Comparative Physiology, 2012, 302, R49-R58.	1.8	20
64	Exercise Protects Against Olanzapine-Induced Hyperglycemia in Male C57BL/6J Mice. Scientific Reports, 2018, 8, 772.	3.3	20
65	AICAR Prevents Acute Olanzapine-Induced Disturbances in Glucose Homeostasis. Journal of Pharmacology and Experimental Therapeutics, 2018, 365, 526-535.	2.5	20
66	Epinephrine and AICAR-induced PGC-1Î± mRNA expression is intact in skeletal muscle from rats fed a high-fat diet. American Journal of Physiology - Cell Physiology, 2012, 302, C1772-C1779.	4.6	19
67	â€œWeighingâ€•the effects of exercise and intrinsic aerobic capacity: are there beneficial effects independent of changes in weight?. Applied Physiology, Nutrition and Metabolism, 2016, 41, 911-916.	1.9	19
68	Preclinical and Clinical Sex Differences in Antipsychotic-Induced Metabolic Disturbances: A Narrative Review of Adiposity and Glucose Metabolism. Journal of Psychiatry and Brain Science, 2019, 4, .	0.5	19
69	Reductions in RIP140 are not required for exercise- and AICAR-mediated increases in skeletal muscle mitochondrial content. Journal of Applied Physiology, 2011, 111, 688-695.	2.5	18
70	The contribution of IL-6 to beta 3 adrenergic receptor mediated adipose tissue remodeling. Physiological Reports, 2015, 3, e12312.	1.7	18
71	Sarcolipin knockout mice fed a highâ€fat diet exhibit altered indices of adipose tissue inflammation and remodeling. Obesity, 2016, 24, 1499-1505.	3.0	18
72	Female mice are protected against acute olanzapine-induced hyperglycemia. Psychoneuroendocrinology, 2019, 110, 104413.	2.7	18

#	Article	IF	Citations
73	AMPK Î²1 activation suppresses antipsychoticâ€induced hyperglycemia in mice. FASEB Journal, 2019, 33, 14010-14021.	0.5	18
74	Exercise-mediated IL-6 signaling occurs independent of inflammation and is amplified by training in mouse adipose tissue. Journal of Applied Physiology, 2015, 119, 1347-1354.	2.5	17
75	Central-acting therapeutics alleviate respiratory weakness caused by heart failureâ€“induced ventilatory overdrive. Science Translational Medicine, 2017, 9, .	12.4	17
76	Biochemical adaptations in white adipose tissue following aerobic exercise: from mitochondrial biogenesis to browning. Biochemical Journal, 2020, 477, 1061-1081.	3.7	17
77	Are tyrosine kinases involved in mediating contraction-stimulated muscle glucose transport?. American Journal of Physiology - Endocrinology and Metabolism, 2006, 290, E123-E128.	3.5	16
78	IL-6 is not essential for exercise-induced increases in glucose uptake. Journal of Applied Physiology, 2013, 114, 1151-1157.	2.5	16
79	Reactive oxygen species-dependent regulation of pyruvate dehydrogenase kinase-4 in white adipose tissue. American Journal of Physiology - Cell Physiology, 2020, 318, C137-C149.	4.6	16
80	New Horizon: Exercise and a Focus on Tissue-Brain Crosstalk. Journal of Clinical Endocrinology and Metabolism, 2021, 106, 2147-2163.	3.6	15
81	Phorbol esters affect skeletal muscle glucose transport in a fiber type-specific manner. American Journal of Physiology - Endocrinology and Metabolism, 2004, 287, E305-E309.	3.5	14
82	Epinephrine Induces PDK4 mRNA Expression in Adipose Tissue From Obese, Insulin Resistant Rats. Obesity, 2012, 20, 453-456.	3.0	14
83	Adiponectin is sufficient, but not required, for exerciseâ€induced increases in the expression of skeletal muscle mitochondrial enzymes. Journal of Physiology, 2014, 592, 2653-2665.	2.9	14
84	Prior exercise training blunts short-term high-fat diet-induced weight gain. American Journal of Physiology - Regulatory Integrative and Comparative Physiology, 2016, 311, R315-R324.	1.8	13
85	Exercise restores insulin, but not adiponectin, response in skeletal muscle of high-fat fed rodents. American Journal of Physiology - Regulatory Integrative and Comparative Physiology, 2012, 303, R1062-R1070.	1.8	12
86	Combined highâ€fatâ€resveratrol diet and RIP140 knockout mice reveal a novel relationship between elevated bone mitochondrial content and compromised bone microarchitecture, bone mineral mass, and bone strength in the tibia. Molecular Nutrition and Food Research, 2016, 60, 1994-2007.	3.3	12
87	Alcohol extract of North American ginseng (Panax quinquefolius) reduces fatty liver, dyslipidemia, and other complications of metabolic syndrome in a mouse model. Canadian Journal of Physiology and Pharmacology, 2017, 95, 1046-1057.	1.4	12
88	Distinct Gut Microbiota and Serum Metabolites in Response to Weight Loss Induced by Either Dairy or Exercise in a Rodent Model of Obesity. Journal of Proteome Research, 2019, 18, 3867-3875.	3.7	12
89	A blend of fatty acids, organic acids, and phytochemicals induced changes in intestinal morphology and inflammatory gene expression in coccidiosis-vaccinated broiler chickens. Poultry Science, 2019, 98, 4901-4908.	3.4	12
90	GLP1 receptor agonism protects against acute olanzapine-induced hyperglycemia. American Journal of Physiology - Endocrinology and Metabolism, 2020, 319, E1101-E1111.	3.5	12

#	Article	IF	Citations
91	Novel effects of rosiglitazone on SMAD2 and SMAD3 signaling in white adipose tissue of diabetic rats. Obesity, 2014, 22, 1632-1642.	3.0	11
92	Respiratory muscle weakness in the Zucker diabetic fatty rat. American Journal of Physiology - Regulatory Integrative and Comparative Physiology, 2015, 309, R780-R787.	1.8	11
93	Recent advances in the role of interleukin-6 in health and disease. Current Opinion in Pharmacology, 2020, 52, 47-51.	3.5	11
94	Topical application of the pharmacological cold mimetic menthol stimulates brown adipose tissue thermogenesis through a TRPM8, UCP1, and norepinephrine dependent mechanism in mice housed at thermoneutrality. FASEB Journal, 2022, 36, e22205.	0.5	11
95	IL-6 and epinephrine have divergent fiber type effects on intramuscular lipolysis. Journal of Applied Physiology, 2013, 115, 1457-1463.	2.5	10
96	Dietary Mannoheptulose Does Not Significantly Alter Daily Energy Expenditure in Adult Labrador Retrievers. PLoS ONE, 2015, 10, e0143324.	2.5	10
97	Dairy Attenuates Weight Gain to a Similar Extent as Exercise in Rats Fed a Highâ€Fat, Highâ€Sugar Diet. Obesity, 2017, 25, 1707-1715.	3.0	10
98	Peripheral mechanisms of acute olanzapine induced metabolic dysfunction: A review of in vivo models and treatment approaches. Behavioural Brain Research, 2021, 400, 113049.	2.2	10
99	Glucose-dependent insulinotropic polypeptide directly induces glucose transport in rat skeletal muscle. American Journal of Physiology - Regulatory Integrative and Comparative Physiology, 2015, 309, R295-R303.	1.8	9
100	Hyperactive mTORC1 signaling is unaffected by metformin treatment in aged skeletal muscle. Muscle and Nerve, 2016, 53, 107-117.	2.2	9
101	Intermittent cold exposure improves glucose homeostasis despite exacerbating dietâ€induced obesity in mice housed at thermoneutrality. Journal of Physiology, 2022, 600, 829-845.	2.9	9
102	Postprandial control of fatty acid transport proteinsâ€™ subcellular location is not dependent on insulin. FEBS Letters, 2016, 590, 2661-2670.	2.8	8
103	North American ginseng influences adipocyteâ€“macrophage crosstalk regulation of inflammatory gene expression. Journal of Ginseng Research, 2016, 40, 141-150.	5.7	8
104	Proliferative endocrine effects of adipose tissue from obese animals on MCF7 cells are ameliorated by resveratrol supplementation. PLoS ONE, 2017, 12, e0183897.	2.5	8
105	Exercise and Dairy Protein have Distinct Effects on Indices of Liver and Systemic Lipid Metabolism. Obesity, 2020, 28, 97-105.	3.0	8
106	Epinephrine responsiveness is reduced in livers from trained mice. Physiological Reports, 2020, 8, e14370.	1.7	8
107	The glucose lowering effects of CL 316,243 dissipate with repeated use and are rescued by cilostamide. Physiological Reports, 2022, 10, e15187.	1.7	8
108	Feeding butter with elevated content of trans-10, cis-12 conjugated linoleic acid to obese-prone rats impairs glucose and insulin tolerance. Lipids in Health and Disease, 2015, 14, 119.	3.0	7

#	Article	IF	Citations
109	Estradiol does not directly regulate adipose lipolysis. Adipocyte, 2017, 6, 76-86.	2.8	7
110	Fasting or the shortâ€term consumption of a ketogenic diet protects against antipsychoticâ€induced hyperglycaemia in mice. Journal of Physiology, 2022, 600, 2713-2728.	2.9	7
111	Adiponectin is not required for exercise training-induced improvements in glucose and insulin tolerance in mice. Physiological Reports, 2014, 2, e12146.	1.7	6
112	Exercise- and resveratrol-mediated alterations in adipose tissue metabolism. Applied Physiology, Nutrition and Metabolism, 2014, 39, 109-116.	1.9	6
113	The confounding effects of sub-thermoneutral housing temperatures on aerobic exercise-induced adaptations in mouse subcutaneous white adipose tissue. Biology Letters, 2021, 17, 20210171.	2.3	6
114	CHOP is dispensable for exercise-induced increases in GDF15. Journal of Applied Physiology, 2022, 132, 413-422.	2.5	6
115	Regulation of Hepatic Follistatin Expression at Rest and during Exercise in Mice. Medicine and Science in Sports and Exercise, 2019, 51, 1116-1125.	0.4	5
116	Statin Therapy Alters Lipid Storage in Diabetic Skeletal Muscle. Frontiers in Endocrinology, 2016, 7, 95.	3.5	4
117	CL 316, 243 mediated reductions in blood glucose are enhanced in RIP140â^'/â^' mice independent of alterations in lipolysis. Biochemical and Biophysical Research Communications, 2017, 486, 486-491.	2.1	4
118	Voluntary physical activity protects against olanzapine-induced hyperglycemia. Journal of Applied Physiology, 2021, 130, 466-478.	2.5	4
119	Feeding butter with elevated content of trans-10, cis-12 conjugated linoleic acid to lean rats does not impair glucose tolerance or muscle insulin response. Lipids in Health and Disease, 2014, 13, 101.	3.0	2
120	Challenging dogma: is hepatic lipid accumulation in type 2 diabetes due to mitochondrial dysfunction?. Journal of Physiology, 2016, 594, 4093-4094.	2.9	1
121	Effect of Acute High-intensity Interval Exercise on Whole-body Fat Oxidation and Subcutaneous Adipose Tissue Cell Signaling in Overweight Women. International Journal of Exercise Science, 2020, 13, 554-566.	0.5	1
122	Plant and marine N3-PUFA regulation of fatty acid trafficking along the adipose tissue-liver axis varies according to nutritional state. Journal of Nutritional Biochemistry, 2022, 102, 108940.	4.2	1
123	Enhanced glucose homeostasis in BHE/cdb rats with mutated ATP synthase. Mitochondrion, 2013, 13, 320-329.	3.4	0
124	Adipose tissue mitochondrial respiration: Key insights from <scp>RYGB</scp>â€induced weight loss. Obesity, 2015, 23, 1941-1941.	3.0	0
125	Rosiglitazone is superior to resveratrol in inducing the expression of glyceroneogenic genes in adipose tissue from obese participants. Applied Physiology, Nutrition and Metabolism, 2018, 43, 307-311.	1.9	0