Clinton R Bruce

List of Publications by Year
in descending order

103 papers	9,065 citations	47006 47 h-index	40979 93 g-index
105 all docs	105 docs citations	105 times ranked	13073 citing authors

#	Article	IF	Citations
1	Brain-derived neurotrophic factor is produced by skeletal muscle cells in response to contraction and enhances fat oxidation via activation of AMP-activated protein kinase. Diabetologia, 2009, 52, 1409-1418.	6.3	535
2	Reactive Oxygen Species Enhance Insulin Sensitivity. Cell Metabolism, 2009, 10, 260-272.	16.2	509
3	HSP72 protects against obesity-induced insulin resistance. Proceedings of the National Academy of Sciences of the United States of America, 2008, 105, 1739-1744.	7.1	477
4	Excess Lipid Availability Increases Mitochondrial Fatty Acid Oxidative Capacity in Muscle. Diabetes, 2007, 56, 2085-2092.	0.6	472
5	Distinct patterns of tissue-specific lipid accumulation during the induction of insulin resistance in mice by high-fat feeding. Diabetologia, 2013, 56, 1638-1648.	6.3	339
6	Intramuscular Heat Shock Protein 72 and Heme Oxygenase-1 mRNA Are Reduced in Patients With Type 2 Diabetes: Evidence That Insulin Resistance Is Associated With a Disturbed Antioxidant Defense Mechanism. Diabetes, 2003, 52, 2338-2345.	0.6	310
7	Overexpression of Carnitine Palmitoyltransferase-1 in Skeletal Muscle Is Sufficient to Enhance Fatty Acid Oxidation and Improve High-Fat Dietâ€"Induced Insulin Resistance. Diabetes, 2009, 58, 550-558.	0.6	295
8	Plasma Lysophosphatidylcholine Levels Are Reduced in Obesity and Type 2 Diabetes. PLoS ONE, 2012, 7, e41456.	2.5	285
9	Interleukin-6-deficient mice develop hepatic inflammation and systemic insulin resistance. Diabetologia, 2010, 53, 2431-2441.	6.3	283
10	Endurance training in obese humans improves glucose tolerance and mitochondrial fatty acid oxidation and alters muscle lipid content. American Journal of Physiology - Endocrinology and Metabolism, 2006, 291, E99-E107.	3.5	270
11	Ceramides Contained in LDL Are Elevated in Type 2 Diabetes and Promote Inflammation and Skeletal Muscle Insulin Resistance. Diabetes, 2013, 62, 401-410.	0.6	240
12	Blocking IL-6 trans-Signaling Prevents High-Fat Diet-Induced Adipose Tissue Macrophage Recruitment but Does Not Improve Insulin Resistance. Cell Metabolism, 2015, 21, 403-416.	16.2	208
13	The role of adipokines as regulators of skeletal muscle fatty acid metabolism and insulin sensitivity. Acta Physiologica, 2006, 186, 5-16.	3.8	202
14	Muscle Oxidative Capacity Is a Better Predictor of Insulin Sensitivity than Lipid Status. Journal of Clinical Endocrinology and Metabolism, 2003, 88, 5444-5451.	3.6	195
15	Fetuin B Is a Secreted Hepatocyte Factor Linking Steatosis to Impaired Glucose Metabolism. Cell Metabolism, 2015, 22, 1078-1089.	16.2	192
16	Enhancement of 2000-m rowing performance after caffeine ingestion. Medicine and Science in Sports and Exercise, 2000, 32, 1958-1963.	0.4	158
17	Fatty acid metabolism, energy expenditure and insulin resistance in muscle. Journal of Endocrinology, 2014, 220, T61-T79.	2.6	155
18	Activating HSP72 in Rodent Skeletal Muscle Increases Mitochondrial Number and Oxidative Capacity and Decreases Insulin Resistance. Diabetes, 2014, 63, 1881-1894.	0.6	153

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19	Cytokine regulation of skeletal muscle fatty acid metabolism: effect of interleukin-6 and tumor necrosis factor-Î±. American Journal of Physiology - Endocrinology and Metabolism, 2004, 287, E616-E621.	3.5	149
20	The Stimulatory Effect of Globular Adiponectin on Insulin-Stimulated Glucose Uptake and Fatty Acid Oxidation Is Impaired in Skeletal Muscle From Obese Subjects. Diabetes, 2005, 54, 3154-3160.	0.6	149
21	Disassociation of muscle triglyceride content and insulin sensitivity after exercise training in patients with Type 2 diabetes. Diabetologia, 2004, 47, 23-30.	6.3	148
22	Plasma Sphingosine-1-Phosphate Is Elevated in Obesity. PLoS ONE, 2013, 8, e72449.	2.5	139
23	Metformin counters the insulin-induced suppression of fatty acid oxidation and stimulation of triacylglycerol storage in rodent skeletal muscle. American Journal of Physiology - Endocrinology and Metabolism, 2006, 291, E182-E189.	3.5	128
24	Overexpression of Sphingosine Kinase 1 Prevents Ceramide Accumulation and Ameliorates Muscle Insulin Resistance in High-Fat Dietâ€"Fed Mice. Diabetes, 2012, 61, 3148-3155.	0.6	126
25	Identification of fatty acid translocase on human skeletal muscle mitochondrial membranes: essential role in fatty acid oxidation. American Journal of Physiology - Endocrinology and Metabolism, 2006, 290, E509-E515.	3.5	115
26	The regulation of glucose metabolism: implications and considerations for the assessment of glucose homeostasis in rodents. American Journal of Physiology - Endocrinology and Metabolism, 2014, 307, E859-E871.	3.5	115
27	Deletion of macrophage migration inhibitory factor protects the heart from severe ischemiaâ€"reperfusion injury: A predominant role of anti-inflammation. Journal of Molecular and Cellular Cardiology, 2011, 50, 991-999.	1.9	99
28	PLIN5 deletion remodels intracellular lipid composition and causes insulin resistance in muscle. Molecular Metabolism, 2014, 3, 652-663.	6.5	97
29	Adipose Triglyceride Lipase-Null Mice Are Resistant to High-Fat Dietâ€"Induced Insulin Resistance Despite Reduced Energy Expenditure and Ectopic Lipid Accumulation. Endocrinology, 2011, 152, 48-58.	2.8	94
30	A selective inhibitor of ceramide synthase 1 reveals a novel role in fat metabolism. Nature Communications, 2018, 9, 3165.	12.8	93
31	Regulation of plasma ceramide levels with fatty acid oversupply: evidence that the liver detects and secretes de novo synthesised ceramide. Diabetologia, 2012, 55, 2741-2746.	6.3	88
32	The CDP-Ethanolamine Pathway Regulates Skeletal Muscle Diacylglycerol Content and Mitochondrial Biogenesis without Altering Insulin Sensitivity. Cell Metabolism, 2015, 21, 718-730.	16.2	83
33	Improved 2000-Meter Rowing Performance in Competitive Oarswomen after Caffeine Ingestion. International Journal of Sport Nutrition and Exercise Metabolism, 2000, 10, 464-475.	2.1	78
34	Lipid and insulin infusion-induced skeletal muscle insulin resistance is likely due to metabolic feedback and not changes in IRS-1, Akt, or AS160 phosphorylation. American Journal of Physiology - Endocrinology and Metabolism, 2009, 297, E67-E75.	3.5	73
35	Regulation of fuel metabolism by preexercise muscle glycogen content and exercise intensity. Journal of Applied Physiology, 2004, 97, 2275-2283.	2.5	71
36	Interleukin-18 Activates Skeletal Muscle AMPK and Reduces Weight Gain and Insulin Resistance in Mice. Diabetes, 2013, 62, 3064-3074.	0.6	71

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37	Disruption of the Class IIa HDAC Corepressor Complex Increases Energy Expenditure and Lipid Oxidation. Cell Reports, 2016, 16, 2802-2810.	6.4	68
38	AMP kinase activation with AICAR simultaneously increases fatty acid and glucose oxidation in resting rat soleus muscle. Journal of Physiology, 2005, 565, 537-546.	2.9	67
39	PGCâ€1Î± gene expression is downâ€regulated by Aktâ€mediated phosphorylation and nuclear exclusion of FoxO1 in insulinâ€stimulated skeletal muscle. FASEB Journal, 2005, 19, 2072-2074.	0.5	65
40	Exercise alters the profile of phospholipid molecular species in rat skeletal muscle. Journal of Applied Physiology, 2004, 97, 1823-1829.	2.5	60
41	Overexpression of carnitine palmitoyltransferase I in skeletal muscle in vivo increases fatty acid oxidation and reduces triacylglycerol esterification. American Journal of Physiology - Endocrinology and Metabolism, 2007, 292, E1231-E1237.	3.5	58
42	Prolonged interleukin-6 administration enhances glucose tolerance and increases skeletal muscle PPARÎ± and UCP2 expression in rats. Journal of Endocrinology, 2008, 198, 367-374.	2.6	55
43	Treatment of type 2 diabetes with the designer cytokine IC7Fc. Nature, 2019, 574, 63-68.	27.8	55
44	Effect of carbohydrate ingestion on metabolism during running and cycling. Journal of Applied Physiology, 2001, 91, 2125-2134.	2.5	51
45	Deficiency of haematopoietic-cell-derived IL-10 does not exacerbate high-fat-diet-induced inflammation or insulin resistance in mice. Diabetologia, 2011, 54, 888-899.	6.3	50
46	Î±₂-AMPK activity is not essential for an increase in fatty acid oxidation during low-intensity exercise. American Journal of Physiology - Endocrinology and Metabolism, 2009, 296, E47-E55.	3.5	49
47	Skeletal muscle-specific overproduction of constitutively activated c-Jun N-terminal kinase (JNK) induces insulin resistance in mice. Diabetologia, 2012, 55, 2769-2778.	6.3	49
48	The Sphingosine-1-Phosphate Analog FTY720 Reduces Muscle Ceramide Content and Improves Glucose Tolerance in High Fat-Fed Male Mice. Endocrinology, 2013, 154, 65-76.	2.8	48
49	Application of dynamic metabolomics to examine inÂvivo skeletal muscle glucose metabolism in the chronically high-fat fed mouse. Biochemical and Biophysical Research Communications, 2015, 462, 27-32.	2.1	47
50	Improvements in insulin resistance with aerobic exercise training: a lipocentric approach. Medicine and Science in Sports and Exercise, 2004, 36, 1196-201.	0.4	43
51	AMP kinase activation with AICAR further increases fatty acid oxidation and blunts triacylglycerol hydrolysis in contracting rat soleus muscle. Journal of Physiology, 2005, 565, 547-553.	2.9	42
52	Glucose infusion causes insulin resistance in skeletal muscle of rats without changes in Akt and AS160 phosphorylation. American Journal of Physiology - Endocrinology and Metabolism, 2007, 293, E1358-E1364.	3.5	42
53	ATGL-mediated triglyceride turnover and the regulation of mitochondrial capacity in skeletal muscle. American Journal of Physiology - Endocrinology and Metabolism, 2015, 308, E960-E970.	3.5	42
54	Discordant gene expression in skeletal muscle and adipose tissue of patients with type 2 diabetes: effect of interleukin-6 infusion. Diabetologia, 2006, 49, 1000-1007.	6.3	39

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55	Î±-Melanocyte stimulating hormone promotes muscle glucose uptake via melanocortin 5 receptors. Molecular Metabolism, 2016, 5, 807-822.	6.5	39
56	Postprandial Aminogenic Insulin and Glucagon Secretion Can Stimulate Glucose Flux in Humans. Diabetes, 2019, 68, 939-946.	0.6	39
57	Dietary Regulation of Fat Oxidative Gene Expression in Different Skeletal Muscle Fiber Types. Obesity, 2003, 11, 1471-1479.	4.0	37
58	Adipose Triglyceride Lipase Regulation of Skeletal Muscle Lipid Metabolism and Insulin Responsiveness. Molecular Endocrinology, 2008, 22, 1200-1212.	3.7	36
59	Perilipin 5 Deletion Unmasks an Endoplasmic Reticulum Stressâ€"Fibroblast Growth Factor 21 Axis in Skeletal Muscle. Diabetes, 2018, 67, 594-606.	0.6	36
60	Effects of breaking up sitting on adolescentsâ€™ postprandial glucose after consuming meals varying in energy: a cross-over randomised trial. Journal of Science and Medicine in Sport, 2018, 21, 280-285.	1.3	35
61	Interaction of Diet and Training on Endurance Performance in Rats. Experimental Physiology, 2001, 86, 499-508.	2.0	33
62	Greater effect of diet than exercise training on the fatty acid profile of rat skeletal muscle. Journal of Applied Physiology, 2004, 96, 974-980.	2.5	33
63	Overexpression of sphingosine kinase 1 in liver reduces triglyceride content in mice fed a low but not high-fat diet. Biochimica Et Biophysica Acta - Molecular and Cell Biology of Lipids, 2015, 1851, 210-219.	2.4	33
64	Lysine postâ€translational modification of glyceraldehydeâ€3â€phosphate dehydrogenase regulates hepatic and systemic metabolism. FASEB Journal, 2017, 31, 2592-2602.	0.5	31
65	AgRP Neurons Require Carnitine Acetyltransferase to Regulate Metabolic Flexibility and Peripheral Nutrient Partitioning. Cell Reports, 2018, 22, 1745-1759.	6.4	30
66	Evaluation of follistatin as a therapeutic in models of skeletal muscle atrophy associated with denervation and tenotomy. Scientific Reports, 2015, 5, 17535.	3.3	29
67	Phosphatidylserine decarboxylase is critical for the maintenance of skeletal muscle mitochondrial integrity and muscle mass. Molecular Metabolism, 2019, 27, 33-46.	6.5	29
68	GM3 ganglioside and phosphatidylethanolamine-containing lipids are adipose tissue markers of insulin resistance in obese women. International Journal of Obesity, 2016, 40, 706-713.	3.4	28
69	Interaction of exercise and diet on GLUT-4 protein and gene expression in Type I and Type II rat skeletal muscle. Acta Physiologica Scandinavica, 2002, 175, 37-44.	2.2	26
70	Effect Of Training On Activation Of Extracellular Signal-Regulated Kinase 1/2 And P38 Mitogen-Activated Protein Kinase Pathways In Rat Soleus Muscle. Clinical and Experimental Pharmacology and Physiology, 2002, 29, 655-660.	1.9	25
71	Reversing diet-induced metabolic dysregulation by diet switching leads to altered hepatic de novo lipogenesis and glycerolipid synthesis. Scientific Reports, 2016, 6, 27541.	3.3	25
72	The Effect of Ingested Glucose Dose on the Suppression of Endogenous Glucose Production in Humans. Diabetes, 2017, 66, 2400-2406.	0.6	24

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73	Analysis of Mammalian Cell Proliferation and Macromolecule Synthesis Using Deuterated Water and Gas Chromatography-Mass Spectrometry. Metabolites, 2016, 6, 34.	2.9	23
74	Increased liver AGEs induce hepatic injury mediated through an OST48 pathway. Scientific Reports, 2017, 7, 12292.	3.3	22
75	Glucose-6-phosphate dehydrogenase contributes to the regulation of glucose uptake in skeletal muscle. Molecular Metabolism, 2016, 5, 1083-1091.	6.5	19
76	Measurement of postprandial glucose fluxes in response to acute and chronic endurance exercise in healthy humans. American Journal of Physiology - Endocrinology and Metabolism, 2018, 314, E503-E511.	3.5	19
77	Skeletal muscleâ€specific overexpression of heat shock protein 72 improves skeletal muscle insulinâ€stimulated glucose uptake but does not alter whole body metabolism. Diabetes, Obesity and Metabolism, 2018, 20, 1928-1936.	4.4	18
78	Marked phenotypic differences of endurance performance and exercise-induced oxygen consumption between AMPK and LKB1 deficiency in mouse skeletal muscle: changes occurring in the diaphragm. American Journal of Physiology - Endocrinology and Metabolism, 2013, 305, E213-E229.	3.5	17
79	Mechanisms of hyperinsulinaemia in apparently healthy non-obese young adults: role of insulin secretion, clearance and action and associations with plasma amino acids. Diabetologia, 2019, 62, 2310-2324.	6.3	17
80	Postexercise muscle glycogen resynthesis in obese insulin-resistant Zucker rats. Journal of Applied Physiology, 2001, 91, 1512-1519.	2.5	16
81	Creatine biosynthesis and transport by the term human placenta. Placenta, 2017, 52, 86-93.	1.5	16
82	Resolution of glucose intolerance in long-term high-fat, high-sucrose-fed mice. Journal of Endocrinology, 2017, 233, 269-279.	2.6	16
83	Translating glucose tolerance data from mice to humans: Insights from stable isotope labelled glucose tolerance tests. Molecular Metabolism, 2021, 53, 101281.	6.5	16
84	Placental creatine metabolism in cases of placental insufficiency and reduced fetal growth. Molecular Human Reproduction, 2019, 25, 495-505.	2.8	15
85	The Effect of Exercise on the Skeletal Muscle Phospholipidome of Rats Fed a High-Fat Diet. International Journal of Molecular Sciences, 2010, 11, 3954-3964.	4.1	14
86	The effect of insulin and exercise on c-Cbl protein abundance and phosphorylation in insulin-resistant skeletal muscle in lean and obese Zucker rats. Diabetologia, 2004, 47, 412-419.	6.3	12
87	AMP-activated protein kinase and muscle insulin resistance. Frontiers in Bioscience - Landmark, 2009, Volume, 4658.	3.0	12
88	InÂvivo cardiac glucose metabolism in the high-fat fed mouse: Comparison of euglycemicâ€"hyperinsulinemic clamp derived measures of glucose uptake with a dynamic metabolomic flux profiling approach. Biochemical and Biophysical Research Communications, 2015, 463, 818-824.	2.1	12
89	Does maternal-fetal transfer of creatine occur in pregnant sheep?. American Journal of Physiology - Endocrinology and Metabolism, 2017, 313, E75-E83.	3.5	12
90	Urinary sodium is positively associated with urinary free cortisol and total cortisol metabolites in a cross-sectional sample of Australian schoolchildren aged 5â€"12 years and their mothers. British Journal of Nutrition, 2019, 121, 164-171.	2.3	12

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91	Reduced insulin action in muscle of high fat diet rats over the diurnal cycle is not associated with defective insulin signaling. Molecular Metabolism, 2019, 25, 107-118.	6.5	11
92	Mapping the Associations of the Plasma Lipidome With Insulin Resistance and Response to an Oral Glucose Tolerance Test. Journal of Clinical Endocrinology and Metabolism, 2020, 105, e1041-e1055.	3.6	11
93	The Effects of Early-Onset Pre-Eclampsia on Placental Creatine Metabolism in the Third Trimester. International Journal of Molecular Sciences, 2020, 21, 806.	4.1	10
94	Postexercise Muscle Triacylglycerol and Glycogen Metabolism in Obese Insulinâ€Resistant Zucker Rats. Obesity, 2004, 12, 1158-1165.	4.0	6
95	It's what you do with the fat that matters!. Nature Medicine, 2007, 13, 1137-1138.	30.7	6
96	Endogenous glucose production after sequential meals in humans: evidence for more prolonged suppression after ingestion of a second meal. American Journal of Physiology - Endocrinology and Metabolism, 2018, 315, E904-E911.	3.5	6
97	Modest changes to glycemic regulation are sufficient to maintain glucose fluxes in healthy young men following overfeeding with a habitual macronutrient composition. American Journal of Physiology - Endocrinology and Metabolism, 2019, 316, E1061-E1070.	3.5	6
98	Insulin resistance in type 1 diabetes managed with metformin (INTIMET): Study protocol of a doubleâ€blind placeboâ€controlled, randomised trial. Diabetic Medicine, 2021, 38, e14564.	2.3	6
99	ÎºB kinase Î² (IKKÎ²) does not mediate feedback inhibition of the insulin signalling cascade. Biochemical Journal, 2012, 442, 723-732.	3.7	5
100	UNICORN Babies: Understanding Circulating and Cerebral Creatine Levels of the Preterm Infant. An Observational Study Protocol. Frontiers in Physiology, 2019, 10, 142.	2.8	5
101	Loss of protein kinase D activity demonstrates redundancy in cardiac glucose metabolism and preserves cardiac function in obesity. Molecular Metabolism, 2020, 42, 101105.	6.5	5
102	Autophagy is not involved in lipid accumulation and the development of insulin resistance in skeletal muscle. Biochemical and Biophysical Research Communications, 2021, 534, 533-539.	2.1	4
103	No need to sweat: is dieting enough to alleviate insulin resistance in obesity?. Journal of Physiology, 2009, 587, 5001-5002.	2.9	2