Barbara B Kahn

List of Publications by Citations

73 papers	16,472 citations	42 h-index	79 g-index
79 ext. papers	18,332 ext. citations	16.8 avg, IF	6.4 L-index

#	Paper	IF	Citations
73	AMP-activated protein kinase: ancient energy gauge provides clues to modern understanding of metabolism. *Cell Metabolism*, **2005**, 1, 15-25	24.6	2257
72	Leptin stimulates fatty-acid oxidation by activating AMP-activated protein kinase. *Nature*, **2002**, 415, 339-43	50.4	1614
71	Serum retinol binding protein 4 contributes to insulin resistance in obesity and type 2 diabetes. *Nature*, **2005**, 436, 356-62	50.4	1571
70	AMP-kinase regulates food intake by responding to hormonal and nutrient signals in the hypothalamus. *Nature*, **2004**, 428, 569-74	50.4	1295
69	Retinol-binding protein 4 and insulin resistance in lean, obese, and diabetic subjects. *New England Journal of Medicine*, **2006**, 354, 2552-63	59.2	1035
68	Glucose transporters and insulin action--implications for insulin resistance and diabetes mellitus. *New England Journal of Medicine*, **1999**, 341, 248-57	59.2	987
67	Adipose-selective targeting of the GLUT4 gene impairs insulin action in muscle and liver. *Nature*, **2001**, 409, 729-33	50.4	923
66	Exercise, glucose transport, and insulin sensitivity. *Annual Review of Medicine*, **1998**, 49, 235-61	17.4	767
65	Targeted disruption of the glucose transporter 4 selectively in muscle causes insulin resistance and glucose intolerance. *Nature Medicine*, **2000**, 6, 924-8	50.5	546
64	Discovery of a class of endogenous mammalian lipids with anti-diabetic and anti-inflammatory effects. *Cell*, **2014**, 159, 318-32	56.2	466
63	A novel ChREBP isoform in adipose tissue regulates systemic glucose metabolism. *Nature*, **2012**, 484, 333-8	50.4	390
62	Serum retinol-binding protein is more highly expressed in visceral than in subcutaneous adipose tissue and is a marker of intra-abdominal fat mass. *Cell Metabolism*, **2007**, 6, 79-87	24.6	318
61	A high-fat, ketogenic diet induces a unique metabolic state in mice. *American Journal of Physiology - Endocrinology and Metabolism*, **2007**, 292, E1724-39	6	282
60	AMPK integrates nutrient and hormonal signals to regulate food intake and energy balance through effects in the hypothalamus and peripheral tissues. *Journal of Physiology*, **2006**, 574, 73-83	3.9	245
59	Adipose tissue branched chain amino acid (BCAA) metabolism modulates circulating BCAA levels. *Journal of Biological Chemistry*, **2010**, 285, 11348-56	5.4	243
58	Glucose transport and sensing in the maintenance of glucose homeostasis and metabolic harmony. *Journal of Clinical Investigation*, **2006**, 116, 1767-75	15.9	239
57	Diet-induced obesity alters AMP kinase activity in hypothalamus and skeletal muscle. *Journal of Biological Chemistry*, **2006**, 281, 18933-41	5.4	216

56	In vivo administration of leptin activates signal transduction directly in insulin-sensitive tissues: overlapping but distinct pathways from insulin. *Endocrinology*, **2000**, 141, 2328-39	4.8	203
55	Reduction of elevated serum retinol binding protein in obese children by lifestyle intervention: association with subclinical inflammation. *Journal of Clinical Endocrinology and Metabolism*, **2007**, 92, 1971-4	5.6	192
54	p70S6 kinase phosphorylates AMPK on serine 491 to mediate leptinR effect on food intake. *Cell Metabolism*, **2012**, 16, 104-12	24.6	182
53	Retinol-binding protein 4 inhibits insulin signaling in adipocytes by inducing proinflammatory cytokines in macrophages through a c-Jun N-terminal kinase- and toll-like receptor 4-dependent and retinol-independent mechanism. *Molecular and Cellular Biology*, **2012**, 32, 2010-9	4.8	170
52	RBP4 activates antigen-presenting cells, leading to adipose tissue inflammation and systemic insulin resistance. *Cell Metabolism*, **2014**, 19, 512-26	24.6	169
51	Metabolites as regulators of insulin sensitivity and metabolism. *Nature Reviews Molecular Cell Biology*, **2018**, 19, 654-672	48.7	167
50	Adipose-specific overexpression of GLUT4 reverses insulin resistance and diabetes in mice lacking GLUT4 selectively in muscle. *American Journal of Physiology - Endocrinology and Metabolism*, **2005**, 289, E551-61	6	167
49	Palmitic Acid Hydroxystearic Acids Activate GPR40, Which Is Involved in Their Beneficial Effects on Glucose Homeostasis. *Cell Metabolism*, **2018**, 27, 419-427.e4	24.6	88
48	Brown Adipose Tissue Controls Skeletal Muscle Function via the Secretion of Myostatin. *Cell Metabolism*, **2018**, 28, 631-643.e3	24.6	87
47	GLUT4 Expression in Adipocytes Regulates De Novo Lipogenesis and Levels of a Novel Class of Lipids With Antidiabetic and Anti-inflammatory Effects. *Diabetes*, **2016**, 65, 1808-15	0.9	82
46	Long-term Fenretinide treatment prevents high-fat diet-induced obesity, insulin resistance, and hepatic steatosis. *American Journal of Physiology - Endocrinology and Metabolism*, **2009**, 297, E1420-9	6	80
45	Plasma retinol-binding protein 4 (RBP4) levels and risk of coronary heart disease: a prospective analysis among women in the nursesR health study. *Circulation*, **2013**, 127, 1938-47	16.7	79
44	Branched Fatty Acid Esters of Hydroxy Fatty Acids (FAHFAs) Protect against Colitis by Regulating Gut Innate and Adaptive Immune Responses. *Journal of Biological Chemistry*, **2016**, 291, 22207-22217	5.4	75
43	Absence of Carbohydrate Response Element Binding Protein in Adipocytes Causes Systemic Insulin Resistance and Impairs Glucose Transport. *Cell Reports*, **2017**, 21, 1021-1035	10.6	74
42	Role of hypothalamic adenosine 5R monophosphate-activated protein kinase in the impaired counterregulatory response induced by repetitive neuroglucopenia. *Endocrinology*, **2007**, 148, 1367-75	4.8	73
41	Decreased clearance of serum retinol-binding protein and elevated levels of transthyretin in insulin-resistant ob/ob mice. *American Journal of Physiology - Endocrinology and Metabolism*, **2008**, 294, E785-93	6	69
40	Neuronal protein tyrosine phosphatase 1B deficiency results in inhibition of hypothalamic AMPK and isoform-specific activation of AMPK in peripheral tissues. *Molecular and Cellular Biology*, **2009**, 29, 4563-73	4.8	66
39	Brain GLUT4 Knockout Mice Have Impaired Glucose Tolerance, Decreased Insulin Sensitivity, and Impaired Hypoglycemic Counterregulation. *Diabetes*, **2017**, 66, 587-597	0.9	54

38	Adipocyte-specific overexpression of retinol-binding protein 4 causes hepatic steatosis in mice. *Hepatology*, **2016**, 64, 1534-1546	11.2	50
37	A LC-MS-based workflow for measurement of branched fatty acid esters of hydroxy fatty acids. *Nature Protocols*, **2016**, 11, 747-63	18.8	49
36	Rosiglitazone, PPAR□and type 2 diabetes. *New England Journal of Medicine*, **2010**, 363, 2667-9	59.2	45
35	Stereochemistry of Endogenous Palmitic Acid Ester of 9-Hydroxystearic Acid and Relevance of Absolute Configuration to Regulation. *Journal of the American Chemical Society*, **2017**, 139, 4943-4947	16.4	43
34	AIG1 and ADTRP are atypical integral membrane hydrolases that degrade bioactive FAHFAs. *Nature Chemical Biology*, **2016**, 12, 367-372	11.7	43
33	Branched Fatty Acid Esters of Hydroxy Fatty Acids Are Preferred Substrates of the MODY8 Protein Carboxyl Ester Lipase. *Biochemistry*, **2016**, 55, 4636-41	3.2	43
32	A Postsynaptic AMPK-p21-Activated Kinase Pathway Drives Fasting-Induced Synaptic Plasticity in AgRP Neurons. *Neuron*, **2016**, 91, 25-33	13.9	41
31	PKD1 Inhibits AMPK2 through Phosphorylation of Serine 491 and Impairs Insulin Signaling in Skeletal Muscle Cells. *Journal of Biological Chemistry*, **2016**, 291, 5664-5675	5.4	36
30	PAHSAs enhance hepatic and systemic insulin sensitivity through direct and indirect mechanisms. *Journal of Clinical Investigation*, **2019**, 129, 4138-4150	15.9	36
29	Disruption of Adipose Rab10-Dependent Insulin Signaling Causes Hepatic Insulin Resistance. *Diabetes*, **2016**, 65, 1577-89	0.9	33
28	Alterations in glucose transporter expression and function in diabetes: mechanisms for insulin resistance. *Journal of Cellular Biochemistry*, **1992**, 48, 122-8	4.7	33
27	Antigen Presentation and T-Cell Activation Are Critical for RBP4-Induced Insulin Resistance. *Diabetes*, **2016**, 65, 1317-27	0.9	32
26	Transthyretin Antisense Oligonucleotides Lower Circulating RBP4 Levels and Improve Insulin Sensitivity in Obese Mice. *Diabetes*, **2015**, 64, 1603-14	0.9	32
25	Discovery of FAHFA-Containing Triacylglycerols and Their Metabolic Regulation. *Journal of the American Chemical Society*, **2019**, 141, 8798-8806	16.4	31
24	Activation of AMPK-Regulated CRH Neurons in the PVH is Sufficient and Necessary to Induce Dietary Preference for Carbohydrate over Fat. *Cell Reports*, **2018**, 22, 706-721	10.6	30
23	Faster Protocol for Endogenous Fatty Acid Esters of Hydroxy Fatty Acid (FAHFA) Measurements. *Analytical Chemistry*, **2018**, 90, 5358-5365	7.8	29
22	The relationship of retinol binding protein 4 to changes in insulin resistance and cardiometabolic risk in overweight black adolescents. *Journal of Pediatrics*, **2009**, 154, 67-73.e1	3.6	28
21	PAHSAs attenuate immune responses and promote □cell survival in autoimmune diabetic mice. *Journal of Clinical Investigation*, **2019**, 129, 3717-3731	15.9	28

20	Downregulation of STRA6 in adipocytes and adipose stromovascular fraction in obesity and effects of adipocyte-specific STRA6 knockdown in vivo. *Molecular and Cellular Biology*, **2014**, 34, 1170-86	4.8	26
19	Quantitative measurement of full-length and C-terminal proteolyzed RBP4 in serum of normal and insulin-resistant humans using a novel mass spectrometry immunoassay. *Endocrinology*, **2012**, 153, 1519-27	4.8	25
18	Methodological Issues in Studying PAHSA Biology: Masking PAHSA Effects. *Cell Metabolism*, **2018**, 28, 543-546	24.6	25
17	Novel role for retinol-binding protein 4 in the regulation of blood pressure. *FASEB Journal*, **2015**, 29, 3133-40	0.9	23
16	Adipose Tissue, Inter-Organ Communication, and the Path to Type 2 Diabetes: The 2016 Banting Medal for Scientific Achievement Lecture. *Diabetes*, **2019**, 68, 3-14	0.9	21
15	Obesity-Linked PPARγ S273 Phosphorylation Promotes Insulin Resistance through Growth Differentiation Factor 3. *Cell Metabolism*, **2020**, 32, 665-675.e6	24.6	20
14	Adipose tissue dysfunction is associated with low levels of the novel Palmitic Acid Hydroxystearic Acids. *Scientific Reports*, **2018**, 8, 15757	4.9	19
13	Overexpressing the novel autocrine/endocrine adipokine WISP2 induces hyperplasia of the heart, white and brown adipose tissues and prevents insulin resistance. *Scientific Reports*, **2017**, 7, 43515	4.9	17
12	RBP4 increases lipolysis in human adipocytes and is associated with increased lipolysis and hepatic insulin resistance in obese women. *FASEB Journal*, **2020**, 34, 6099-6110	0.9	17
11	Retinol binding protein 4 primes the NLRP3 inflammasome by signaling through Toll-like receptors 2 and 4. *Proceedings of the National Academy of Sciences of the United States of America*, **2020**, 117, 31309-31318	11.5	12
10	Retinol-binding protein 4 (RBP4): a biomarker for subclinical atherosclerosis?. *American Journal of Hypertension*, **2009**, 22, 948-9	2.3	11
9	Insulin action in adipocytes, adipose remodeling, and systemic effects. *Cell Metabolism*, **2021**, 33, 748-757	24.6	11
8	BCAA Supplementation in Mice with Diet-induced Obesity Alters the Metabolome Without Impairing Glucose Homeostasis. *Endocrinology*, **2021**, 162,	4.8	7
7	Leptin, GABA, and glucose control. *Cell Metabolism*, **2013**, 18, 304-6	24.6	5
6	Ca2+/calmodulin-dependent protein kinase kinase is not involved in hypothalamic AMP-activated protein kinase activation by neuroglucopenia. *PLoS ONE*, **2012**, 7, e36335	3.7	5
5	Distinct biological activities of isomers from several families of branched fatty acid esters of hydroxy fatty acids (FAHFAs). *Journal of Lipid Research*, **2021**, 62, 100108	6.3	5
4	High-throughput mediation analysis of human proteome and metabolome identifies mediators of post-bariatric surgical diabetes control. *Nature Communications*, **2021**, 12, 6951	17.4	2
3	Palmitic Acid Esters of Hydroxy Stearic Acids Are Hepatic Insulin Sensitizers in Chow and High-Fat Diet (HFD)-Fed Mice. *Diabetes*, **2018**, 67, 1838-P	0.9	1

2	Acute exercise increases serum retinol binding protein 4 concentrations. *FASEB Journal*, **2007**, 21, A928	0.9
1	De novo Lipogenesis in Adipocytes Results in the Production of Structurally Novel Signaling Lipids with Beneficial Metabolic and Anti-inflammatory Effects. *FASEB Journal*, **2019**, 33, 214.1	0.9