## Richard N Bergman

List of Publications by Year in descending order

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123 papers

15,633 citations

52 h-index 120 g-index

129 all docs 129 docs citations

times ranked

129

20528 citing authors

#	Article	IF	CITATIONS
1	Large-scale association analysis provides insights into the genetic architecture and pathophysiology of type 2 diabetes. Nature Genetics, 2012, 44, 981-990.	21.4	1,748
2	Assessment of Insulin Sensitivity <i>in Vivo </i> *. Endocrine Reviews, 1985, 6, 45-86.	20.1	1,045
3	Genome-wide trans-ancestry meta-analysis provides insight into the genetic architecture of type 2 diabetes susceptibility. Nature Genetics, 2014, 46, 234-244.	21.4	959
4	A genome-wide approach accounting for body mass index identifies genetic variants influencing fasting glycemic traits and insulin resistance. Nature Genetics, 2012, 44, 659-669.	21.4	762
5	Large-scale association analyses identify new loci influencing glycemic traits and provide insight into the underlying biological pathways. Nature Genetics, 2012, 44, 991-1005.	21.4	746
6	A Better Index of Body Adiposity. Obesity, 2011, 19, 1083-1089.	3.0	743
7	MINMOD: a computer program to calculate insulin sensitivity and pancreatic responsivity from the frequently sampled intravenous glucose tolerance test. Computer Methods and Programs in Biomedicine, 1986, 23, 113-122.	4.7	622
8	An Expanded Genome-Wide Association Study of Type 2 Diabetes in Europeans. Diabetes, 2017, 66, 2888-2902.	0.6	615
9	Accurate Assessment of β-Cell Function. Diabetes, 2002, 51, S212-S220.	0.6	452
10	Insulin sensitivity and B-cell responsiveness to glucose during late pregnancy in lean and moderately obese women with normal glucose tolerance or mild gestational diabetes. American Journal of Obstetrics and Gynecology, 1990, 162, 1008-1014.	1.3	399
11	MINMOD Millennium: A Computer Program to Calculate Glucose Effectiveness and Insulin Sensitivity from the Frequently Sampled Intravenous Glucose Tolerance Test. Diabetes Technology and Therapeutics, 2003, 5, 1003-1015.	4.4	372
12	Genetic fine mapping and genomic annotation defines causal mechanisms at type 2 diabetes susceptibility loci. Nature Genetics, 2015, 47, 1415-1425.	21.4	365
13	The trans-ancestral genomic architecture of glycemic traits. Nature Genetics, 2021, 53, 840-860.	21.4	341
14	The Influence of Age and Sex on Genetic Associations with Adult Body Size and Shape: A Large-Scale Genome-Wide Interaction Study. PLoS Genetics, 2015, 11, e1005378.	3.5	331
15	Why Visceral Fat is Bad: Mechanisms of the Metabolic Syndrome. Obesity, 2006, 14, 16S-19S.	3.0	300
16	Impact of Type 2 Diabetes Susceptibility Variants on Quantitative Glycemic Traits Reveals Mechanistic Heterogeneity. Diabetes, 2014, 63, 2158-2171.	0.6	297
17	Insulin Resistance and Associated Compensatory Responses in African-American and Hispanic Children. Diabetes Care, 2002, 25, 2184-2190.	8.6	224
18	Abdominal Obesity: Role in the Pathophysiology of Metabolic Disease and Cardiovascular Risk. American Journal of Medicine, 2007, 120, S3-S8.	1.5	222

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19	Chronic mirabegron treatment increases human brown fat, HDL cholesterol, and insulin sensitivity. Journal of Clinical Investigation, 2020, 130, 2209-2219.	8.2	214
20	FGF19 action in the brain induces insulin-independent glucose lowering. Journal of Clinical Investigation, 2013, 123, 4799-4808.	8.2	183
21	Obesity, insulin resistance and comorbidities? Mechanisms of association. Arquivos Brasileiros De Endocrinologia E Metabologia, 2014, 58, 600-609.	1.3	169
22	Genome-wide meta-analysis of 241,258 adults accounting for smoking behaviour identifies novel loci for obesity traits. Nature Communications, 2017, 8, 14977.	12.8	169
23	The Modified Minimal Model: Application to Measurement of Insulin Sensitivity in Children*. Journal of Clinical Endocrinology and Metabolism, 1990, 70, 1644-1650.	3.6	165
24	Relative fat mass (RFM) as a new estimator of whole-body fat percentage â"€ A cross-sectional study in American adult individuals. Scientific Reports, 2018, 8, 10980.	3.3	162
25	Genome-wide physical activity interactions in adiposity ― A meta-analysis of 200,452 adults. PLoS Genetics, 2017, 13, e1006528.	3.5	158
26	Metabolic Dysregulation With Atypical Antipsychotics Occurs in the Absence of Underlying Disease A Placebo-Controlled Study of Olanzapine and Risperidone in Dogs. Diabetes, 2005, 54, 862-871.	0.6	150
27	Minimal Model: Perspective from 2005. Hormone Research in Paediatrics, 2005, 64, 8-15.	1.8	148
28	Genetic Epidemiology of Insulin Resistance and Visceral Adiposity The IRAS Family Study Design and Methods. Annals of Epidemiology, 2003, 13, 211-217.	1.9	138
29	Acute enhancement of insulin secretion by FFA in humans is lost with prolonged FFA elevation. American Journal of Physiology - Endocrinology and Metabolism, 1999, 276, E1055-E1066.	3.5	131
30	Disposition Index, Glucose Effectiveness, and Conversion to Type 2 Diabetes. Diabetes Care, 2010, 33, 2098-2103.	8.6	124
31	Central injection of fibroblast growth factor 1 induces sustained remission of diabetic hyperglycemia in rodents. Nature Medicine, 2016, 22, 800-806.	30.7	119
32	Minimal Model-Based Insulin Sensitivity Has Greater Heritability and a Different Genetic Basis Than Homeostasis Model Assessment or Fasting Insulin. Diabetes, 2003, 52, 2168-2174.	0.6	118
33	Atypical Antipsychotics and Glucose Homeostasis. Journal of Clinical Psychiatry, 2005, 66, 504-514.	2.2	114
34	A Genome-Wide Association Study of IVGTT-Based Measures of First-Phase Insulin Secretion Refines the Underlying Physiology of Type 2 Diabetes Variants. Diabetes, 2017, 66, 2296-2309.	0.6	102
35	Treatment with a Somatostatin Analog Decreases Pancreatic B-Cell and Whole Body Sensitivity to Glucose*. Journal of Clinical Endocrinology and Metabolism, 1990, 71, 994-1002.	3.6	99
36	Influence of Total vs. Visceral Fat on Insulin Action and Secretion in African American and White Children. Obesity, 2001, 9, 423-431.	4.0	99

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37	Sex-dimorphic genetic effects and novel loci for fasting glucose and insulin variability. Nature Communications, 2021, 12, 24.	12.8	87
38	Dietary restriction and glucose regulation in aging rhesus monkeys: a follow-up report at 8.5 yr. American Journal of Physiology - Endocrinology and Metabolism, 2001, 281, E757-E765.	3.5	85
39	Insulin Clearance and the Incidence of Type 2 Diabetes in Hispanics and African Americans. Diabetes Care, 2013, 36, 901-907.	8.6	85
40	Nocturnal free fatty acids are uniquely elevated in the longitudinal development of diet-induced insulin resistance and hyperinsulinemia. American Journal of Physiology - Endocrinology and Metabolism, 2007, 292, E1590-E1598.	3.5	82
41	Hepatic and Extrahepatic Insulin Clearance Are Differentially Regulated: Results From a Novel Model-Based Analysis of Intravenous Glucose Tolerance Data. Diabetes, 2016, 65, 1556-1564.	0.6	80
42	Genetic Variants Associated With Quantitative Glucose Homeostasis Traits Translate to Type 2 Diabetes in Mexican Americans: The GUARDIAN (Genetics Underlying Diabetes in Hispanics) Consortium. Diabetes, 2015, 64, 1853-1866.	0.6	77
43	A principal component meta-analysis on multiple anthropometric traits identifies novel loci for body shape. Nature Communications, 2016, 7, 13357.	12.8	74
44	Inhibition of lipolysis causes suppression of endogenous glucose production independent of changes in insulin. American Journal of Physiology - Endocrinology and Metabolism, 2000, 279, E630-E637.	3.5	70
45	β-Cell "rest―accompanies reduced first-pass hepatic insulin extraction in the insulin-resistant, fat-fed canine model. American Journal of Physiology - Endocrinology and Metabolism, 2007, 292, E1581-E1589.	3.5	70
46	Genome-Wide Association Study of the Modified Stumvoll Insulin Sensitivity Index Identifies <i>BCL2</i> and <i>FAM19A2</i> as Novel Insulin Sensitivity Loci. Diabetes, 2016, 65, 3200-3211.	0.6	67
47	The Role of Liver Glucosensors in the Integrated Sympathetic Response Induced by Deep Hypoglycemia in Dogs. Diabetes, 1994, 43, 1052-1060.	0.6	61
48	Inverse association between altitude and obesity: A prevalence study among andean and lowâ€altitude adult individuals of Peru. Obesity, 2016, 24, 929-937.	3.0	61
49	Hepatic but Not Extrahepatic Insulin Clearance Is Lower in African American Than in European American Women. Diabetes, 2017, 66, 2564-2570.	0.6	60
50	Hypothesis: Role of Reduced Hepatic Insulin Clearance in the Pathogenesis of Type 2 Diabetes. Diabetes, 2019, 68, 1709-1716.	0.6	56
51	Identification of Quantitative Trait Loci for Glucose Homeostasis: The Insulin Resistance Atherosclerosis Study (IRAS) Family Study. Diabetes, 2004, 53, 1866-1875.	0.6	55
52	Hepatic insulin clearance is the primary determinant of insulin sensitivity in the normal dog. Obesity, 2014, 22, 1238-1245.	3.0	51
53	Mortality Attributed to COVID-19 in High-Altitude Populations. High Altitude Medicine and Biology, 2020, 21, 409-416.	0.9	48
54	A Low-Frequency Inactivating <i>AKT2</i> Variant Enriched in the Finnish Population Is Associated With Fasting Insulin Levels and Type 2 Diabetes Risk. Diabetes, 2017, 66, 2019-2032.	0.6	47

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55	Greater Omentectomy Improves Insulin Sensitivity in Nonobese Dogs. Obesity, 2009, 17, 674-680.	3.0	43
56	Novel canine models of obese prediabetes and mild type 2 diabetes. American Journal of Physiology - Endocrinology and Metabolism, 2010, 298, E38-E48.	3.5	43
57	Exenatide Sensitizes Insulin-Mediated Whole-Body Glucose Disposal and Promotes Uptake of Exogenous Glucose by the Liver. Diabetes, 2009, 58, 352-359.	0.6	42
58	Simultaneous Measurement of Insulin Sensitivity, Insulin Secretion, and the Disposition Index in Conscious Unhandled Mice. Obesity, 2012, 20, 1403-1412.	3.0	41
59	The Measurement of Insulin Clearance. Diabetes Care, 2020, 43, 2296-2302.	8.6	40
60	Peripheral Mechanisms Mediating the Sustained Antidiabetic Action of FGF1 in the Brain. Diabetes, 2019, 68, 654-664.	0.6	38
61	Defining cutoffs to diagnose obesity using the relative fat mass (RFM): Association with mortality in NHANES 1999–2014. International Journal of Obesity, 2020, 44, 1301-1310.	3.4	35
62	Evidence That the Sympathetic Nervous System Elicits Rapid, Coordinated, and Reciprocal Adjustments of Insulin Secretion and Insulin Sensitivity During Cold Exposure. Diabetes, 2017, 66, 823-834.	0.6	34
63	Indirect Regulation of Endogenous Glucose Production by Insulin: The Single Gateway Hypothesis Revisited. Diabetes, 2017, 66, 1742-1747.	0.6	34
64	Insulin Sensitivity and Insulin Clearance Are Heritable and Have Strong Genetic Correlation in Mexican Americans. Obesity, 2014, 22, 1157-1164.	3.0	33
65	Insulin secretion, obesity, and potential behavioral influences: results from the Insulin Resistance Atherosclerosis Study (IRAS). Diabetes/Metabolism Research and Reviews, 2001, 17, 137-145.	4.0	30
66	Large Size Cells in the Visceral Adipose Depot Predict Insulin Resistance in the Canine Model. Obesity, 2011, 19, 2121-2129.	3.0	30
67	Relative Fat Mass as an estimator of whole-body fat percentage among children and adolescents: A cross-sectional study using NHANES. Scientific Reports, 2019, 9, 15279.	3.3	30
68	Consistency of the Disposition Index in the Face of Diet Induced Insulin Resistance: Potential Role of FFA. PLoS ONE, 2011, 6, e18134.	2.5	29
69	Failure of Homeostatic Model Assessment of Insulin Resistance to Detect Marked Diet-Induced Insulin Resistance in Dogs. Diabetes, 2014, 63, 1914-1919.	0.6	29
70	Diets High in Protein or Saturated Fat Do Not Affect Insulin Sensitivity or Plasma Concentrations of Lipids and Lipoproteins in Overweight and Obese Adults. Journal of Nutrition, 2014, 144, 1753-1759.	2.9	29
71	Origins and History of the Minimal Model of Glucose Regulation. Frontiers in Endocrinology, 2020, 11, 583016.	3.5	28
72	OOPSEG: a data smoothing program for quantitation and isolation of random measurement error. Computer Methods and Programs in Biomedicine, 1995, 46, 67-77.	4.7	27

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73	Rimonabant prevents additional accumulation of visceral and subcutaneous fat during high-fat feeding in dogs. American Journal of Physiology - Endocrinology and Metabolism, 2009, 296, E1311-E1318.	3.5	26
74	Metabolic effects of eradicating breath methane using antibiotics in prediabetic subjects with obesity. Obesity, 2016, 24, 576-582.	3.0	26
75	Glucose intolerance induced by blockade of central FGF receptors is linked to an acute stress response. Molecular Metabolism, 2015, 4, 561-568.	6.5	25
76	Pathogenesis and prediction of diabetes mellitus: lessons from integrative physiology. Mount Sinai Journal of Medicine, 2002, 69, 280-90.	1.9	25
77	Diet-Induced Obesity Prevents Interstitial Dispersion of Insulin in Skeletal Muscle. Diabetes, 2010, 59, 619-626.	0.6	24
78	Variability of Directly Measured First-Pass Hepatic Insulin Extraction and Its Association With Insulin Sensitivity and Plasma Insulin. Diabetes, 2018, 67, 1495-1503.	0.6	23
79	CB1R antagonist increases hepatic insulin clearance in fat-fed dogs likely via upregulation of liver adiponectin receptors. American Journal of Physiology - Endocrinology and Metabolism, 2015, 309, E747-E758.	3.5	22
80	Insulin access to skeletal muscle is impaired during the early stages of dietâ€induced obesity. Obesity, 2016, 24, 1922-1928.	3.0	21
81	CB <sub>1</sub> antagonism restores hepatic insulin sensitivity without normalization of adiposity in diet-induced obese dogs. American Journal of Physiology - Endocrinology and Metabolism, 2012, 302, E1261-E1268.	3.5	20
82	CDKN2B expression and subcutaneous adipose tissue expandability: Possible influence of the 9p21 atherosclerosis locus. Biochemical and Biophysical Research Communications, 2014, 446, 1126-1131.	2.1	20
83	Dissection of hepatic versus extraâ€hepatic insulin clearance: Ethnic differences in childhood. Diabetes, Obesity and Metabolism, 2018, 20, 2869-2875.	4.4	20
84	Estimating Hepatic Glucokinase Activity Using a Simple Model of Lactate Kinetics. Diabetes Care, 2012, 35, 1015-1020.	8.6	19
85	The Minimal Model of Glucose Regulation: A Biography. Advances in Experimental Medicine and Biology, 2003, 537, 1-19.	1.6	18
86	Systems analysis and the prediction and prevention of Type 2 diabetes mellitus. Current Opinion in Biotechnology, 2014, 28, 165-170.	6.6	18
87	On Insulin Action in Vivo: The Single Gateway Hypothesis. Advances in Experimental Medicine and Biology, 1993, 334, 181-198.	1.6	18
88	Renal Denervation Reverses Hepatic Insulin Resistance Induced by High-Fat Diet. Diabetes, 2016, 65, 3453-3463.	0.6	17
89	Elevated nocturnal NEFA are an early signal for hyperinsulinaemic compensation during diet-induced insulin resistance in dogs. Diabetologia, 2015, 58, 2663-2670.	6.3	16
90	Transwomen and the Metabolic Syndrome: Is Orchiectomy Protective?. Transgender Health, 2016, 1, 165-171.	2.5	16

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91	Simplified Method to Isolate Highly Pure Canine Pancreatic Islets. Pancreas, 2012, 41, 31-38.	1.1	15
92	Rapid development of cardiac dysfunction in a canine model of insulin resistance and moderate obesity. Diabetologia, 2016, 59, 197-207.	6.3	15
93	Novel aspects of the role of the liver in carbohydrate metabolism. Metabolism: Clinical and Experimental, 2019, 99, 119-125.	3.4	15
94	Hepatic portal vein denervation impairs oral glucose tolerance but not exenatide's effect on glycemia. American Journal of Physiology - Endocrinology and Metabolism, 2014, 307, E644-E652.	3.5	12
95	Dietary Fat Intake Modulates Effects of a Frequent ACE Gene Variant on Glucose Tolerance with association to Type 2 Diabetes. Scientific Reports, 2017, 7, 9234.	3.3	12
96	The Physiology of Insulin Clearance. International Journal of Molecular Sciences, 2022, 23, 1826.	4.1	12
97	Dynamic control of hepatic glucose metabolism: Studies by experiment and computer simulation. Annals of Biomedical Engineering, 1975, 3, 411-432.	2.5	11
98	Lipid-induced insulin resistance does not impair insulin access to skeletal muscle. American Journal of Physiology - Endocrinology and Metabolism, 2015, 308, E1001-E1009.	3.5	11
99	A Peripheral CB1R Antagonist Increases Lipolysis, Oxygen Consumption Rate, and Markers of Beiging in 3T3-L1 Adipocytes Similar to RIM, Suggesting that Central Effects Can Be Avoided. International Journal of Molecular Sciences, 2020, 21, 6639.	4.1	11
100	Improved estimation of anaplerosis in heart using 13C NMR. American Journal of Physiology - Endocrinology and Metabolism, 1997, 273, E1228-E1242.	3.5	10
101	Exaggerated glucagon responses to hypoglycemia in women with polycystic ovary syndrome. Metabolism: Clinical and Experimental, 2017, 71, 125-131.	3.4	9
102	Assessment of hepatic insulin extraction from in vivo surrogate methods of insulin clearance measurement. American Journal of Physiology - Endocrinology and Metabolism, 2018, 315, E605-E612.	3.5	9
103	Impact of sleep deprivation and high-fat feeding on insulin sensitivity and beta cell function in dogs. Diabetologia, 2020, 63, 875-884.	6.3	9
104	AKA-Glucose: A Program for Kinetic and Epidemiological Analysis of Frequently Sampled Intravenous Glucose Tolerance Test Data Using Database Technology. Diabetes Technology and Therapeutics, 2005, 7, 298-307.	4.4	7
105	Increase in visceral fat <i>per se</i> does not induce insulin resistance in the canine model. Obesity, 2015, 23, 105-111.	3.0	7
106	Insulin Access to Skeletal Muscle is Preserved in Obesity Induced by Polyunsaturated Diet. Obesity, 2018, 26, 119-125.	3.0	7
107	Activation of NPRs and UCP1-independent pathway following CB1R antagonist treatment is associated with adipose tissue beiging in fat-fed male dogs. American Journal of Physiology - Endocrinology and Metabolism, 2019, 317, E535-E547.	3.5	7
108	Modest hyperglycemia prevents interstitial dispersion of insulin in skeletal muscle. Metabolism: Clinical and Experimental, 2015, 64, 330-337.	3.4	6

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109	Failure of acute hyperinsulinemia to alter blood pressure is not due to baroreceptor feedback. American Journal of Hypertension, 1999, 12, 405-413.	2.0	5
110	High-Fat Diet-Induced Insulin Resistance Does Not Increase Plasma Anandamide Levels or Potentiate Anandamide Insulinotropic Effect in Isolated Canine Islets. PLoS ONE, 2015, 10, e0123558.	2.5	5
111	The Genetic Basis of Glucose Homeostasis. Current Diabetes Reviews, 2005, 1, 221-226.	1.3	4
112	Improved Performance of Dynamic Measures of Insulin Response Over Surrogate Indices to Identify Genetic Contributors of Type 2 Diabetes: The GUARDIAN Consortium. Diabetes, 2016, 65, 2072-2080.	0.6	4
113	Exenatide Treatment Alone Improves $\hat{I}^2$ -Cell Function in a Canine Model of Pre-Diabetes. PLoS ONE, 2016, 11, e0158703.	2.5	3
114	Mechanisms of improved glucose handling after metabolic surgery: the big 6. Surgery for Obesity and Related Diseases, 2016, 12, 1192-1198.	1.2	3
115	Quantitative path to deep phenotyping: Possible importance of reduced hepatic insulin degradation to type 2 diabetes mellitus pathogenesis. Journal of Diabetes, 2018, 10, 778-783.	1.8	3
116	Glucoregulatory responses to hypothalamic preoptic area cooling. Brain Research, 2019, 1710, 136-145.	2.2	3
117	Hyperinsulinemic Compensation for Insulin Resistance Occurs Independent of Elevated Glycemia in Male Dogs. Endocrinology, 2021, 162, .	2.8	2
118	Abdominal obesity, fatty acids and insulin resistance. FASEB Journal, 2011, 25, 196.3.	0.5	2
119	Measures of glucose homeostasis during and after duodenal exclusion using a duodenal-jejunal bypass liner in a normoglycemic, nonobese canine model. Surgery for Obesity and Related Diseases, 2022, , .	1.2	1
120	Response to Zubieta-Calleja et al., Re: "Mortality Attributed to COVID-19 in High-Altitude Populations― High Altitude Medicine and Biology, 2021, 22, 109-109.	0.9	0
121	Response to Comment on Piccinini and Bergman The Measurement of Insulin Clearance. Diabetes Care 2020;43:2296–2302. Diabetes Care, 2021, 44, e100-e101.	8.6	0
122	Intermittent hypoxia (IH) causes greater insulin resistance than chronic hypoxia (CH) in lean mice. FASEB Journal, 2009, 23, 993.5.	0.5	0
123	Severe left ventricular dysfunction following shortâ€term high fat feeding in a canine model. FASEB Journal, 2013, 27, 1153.10.	0.5	0