Michael W Schwartz

List of Publications by Year in Descending Order

141 papers	25,914 citations	73 h-index	160 g-index
184 ext. papers	28,124 ext. citations	12.1 avg, IF	6.87 L-index

#	Paper	IF	Citations
141	Central Nervous System Control of Glucose Homeostasis: A Therapeutic Target for Type 2 Diabetes?. *Annual Review of Pharmacology and Toxicology*, **2022**, 62, 55-84	17.9	3
140	Combined micro-osmotic pump infusion and intracerebroventricular injection to study FGF1 signaling pathways in the mouse brain.. *STAR Protocols*, **2022**, 3, 101329	1.4	
139	Central nervous system regulation of organismal energy and glucose homeostasis. *Nature Metabolism*, **2021**, 3, 737-750	14.6	7
138	Nutritional regulation of oligodendrocyte differentiation regulates perineuronal net remodeling in the median eminence. *Cell Reports*, **2021**, 36, 109362	10.6	9
137	Brain control of blood glucose levels: implications for the pathogenesis of type 2 diabetes. *Diabetologia*, **2021**, 64, 5-14	10.3	7
136	Leptin receptor neurons in the dorsomedial hypothalamus regulate diurnal patterns of feeding, locomotion, and metabolism. *ELife*, **2021**, 10,	8.9	3
135	Role of hypothalamic MAPK/ERK signaling and central action of FGF1 in diabetes remission. *IScience*, **2021**, 24, 102944	6.1	2
134	Decoding perineuronal net glycan sulfation patterns in the Alzheimer's disease brain. *Alzheimeris and Dementia*, **2021**,	1.2	2
133	Daniel Porte Jr.: A Leader in Our Understanding of the Role of Defective Insulin Secretion and Action in Obesity and Type 2 Diabetes. *Diabetes Care*, **2020**, 43, 704-709	14.6	2
132	Cold-induced hyperphagia requires AgRP neuron activation in mice. *ELife*, **2020**, 9,	8.9	10
131	Transcriptomic analysis links diverse hypothalamic cell types to fibroblast growth factor 1-induced sustained diabetes remission. *Nature Communications*, **2020**, 11, 4458	17.4	16
130	Hypothalamic perineuronal net assembly is required for sustained diabetes remission induced by fibroblast growth factor 1 in rats. *Nature Metabolism*, **2020**, 2, 1025-1033	14.6	11
129	Perineuronal Net Formation during the Critical Period for Neuronal Maturation in the Hypothalamic Arcuate Nucleus. *Nature Metabolism*, **2019**, 1, 212-221	14.6	19
128	The role of vasodilator-stimulated phosphoprotein (VASP) in the control of hepatic gluconeogenic gene expression. *PLoS ONE*, **2019**, 14, e0215601	3.7	1
127	The Hypothalamic Arcuate Nucleus-Median Eminence Is a Target for Sustained Diabetes Remission Induced by Fibroblast Growth Factor 1. *Diabetes*, **2019**, 68, 1054-1061	0.9	18
126	The central fibroblast growth factor receptor/beta klotho system: Comprehensive mapping in Mus musculus and comparisons to nonhuman primate and human samples using an automated in situ hybridization platform. *Journal of Comparative Neurology*, **2019**, 527, 2069-2085	3.4	17
125	Quantitative analysis of chondroitin sulfate disaccharides from human and rodent fixed brain tissue by electrospray ionization-tandem mass spectrometry. *Glycobiology*, **2019**, 29, 847-860	5.8	9

124	Rethinking the role of the brain in glucose homeostasis and diabetes pathogenesis. *Journal of Clinical Investigation*, **2019**, 129, 3035-3037	15.9	15
123	Glucoregulatory responses to hypothalamic preoptic area cooling. *Brain Research*, **2019**, 1710, 136-145	3.7	3
122	Peripheral Mechanisms Mediating the Sustained Antidiabetic Action of FGF1 in the Brain. *Diabetes*, **2019**, 68, 654-664	0.9	26
121	Revisiting How the Brain Senses Glucose-And Why. *Cell Metabolism*, **2019**, 29, 11-17	24.6	27
120	Distinct Neuronal Projections From the Hypothalamic Ventromedial Nucleus Mediate Glycemic and Behavioral Effects. *Diabetes*, **2018**, 67, 2518-2529	0.9	24
119	Deletion of Protein Kinase C In POMC Neurons Predisposes to Diet-Induced Obesity. *Diabetes*, **2017**, 66, 920-934	0.9	11
118	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	0.9	28
117	How Should We Think About the Role of the Brain in Glucose Homeostasis and Diabetes?. *Diabetes*, **2017**, 66, 1758-1765	0.9	27
116	Chronic hindbrain administration of oxytocin is sufficient to elicit weight loss in diet-induced obese rats. *American Journal of Physiology - Regulatory Integrative and Comparative Physiology*, **2017**, 313, R357-R371	3.2	34
115	Obesity Pathogenesis: An Endocrine Society Scientific Statement. *Endocrine Reviews*, **2017**, 38, 267-296	27.2	264
114	Cancer-induced anorexia and malaise are mediated by CGRP neurons in the parabrachial nucleus. *Nature Neuroscience*, **2017**, 20, 934-942	25.5	59
113	Functional identification of a neurocircuit regulating blood glucose. *Proceedings of the National Academy of Sciences of the United States of America*, **2016**, 113, E2073-82	11.5	97
112	A method for high-throughput functional imaging of single cells within heterogeneous cell preparations. *Scientific Reports*, **2016**, 6, 39319	4.9	4
111	Central injection of fibroblast growth factor 1 induces sustained remission of diabetic hyperglycemia in rodents. *Nature Medicine*, **2016**, 22, 800-6	50.5	89
110	Chronic CNS oxytocin signaling preferentially induces fat loss in high-fat diet-fed rats by enhancing satiety responses and increasing lipid utilization. *American Journal of Physiology - Regulatory Integrative and Comparative Physiology*, **2016**, 310, R640-58	3.2	62
109	Parabrachial CGRP Neurons Control Meal Termination. *Cell Metabolism*, **2016**, 23, 811-20	24.6	132
108	Chronic oxytocin administration inhibits food intake, increases energy expenditure, and produces weight loss in fructose-fed obese rhesus monkeys. *American Journal of Physiology - Regulatory Integrative and Comparative Physiology*, **2015**, 308, R431-8	3.2	110
107	FoxO1 integrates direct and indirect effects of insulin on hepatic glucose production and glucose utilization. *Nature Communications*, **2015**, 6, 7079	17.4	127

106	M2 Macrophage Polarization Mediates Anti-inflammatory Effects of Endothelial Nitric Oxide Signaling. *Diabetes*, **2015**, 64, 2836-46	0.9	61
105	Glucose intolerance induced by blockade of central FGF receptors is linked to an acute stress response. *Molecular Metabolism*, **2015**, 4, 561-8	8.8	22
104	In vivo structure-function studies of human hepatic lipase: the catalytic function rescues the lean phenotype of HL-deficient (hl-/-) mice. *Physiological Reports*, **2015**, 3, e12365	2.6	5
103	Radiologic evidence that hypothalamic gliosis is associated with obesity and insulin resistance in humans. *Obesity*, **2015**, 23, 2142-8	8	71
102	Leptin signaling is required for adaptive changes in food intake, but not energy expenditure, in response to different thermal conditions. *PLoS ONE*, **2015**, 10, e0119391	3.7	41
101	Evidence against hypothalamic-pituitary-adrenal axis suppression in the antidiabetic action of leptin. *Journal of Clinical Investigation*, **2015**, 125, 4587-91	15.9	33
100	Neurobiology of food intake in health and disease. *Nature Reviews Neuroscience*, **2014**, 15, 367-78	13.5	401
99	Exercise, energy intake, glucose homeostasis, and the brain. *Journal of Neuroscience*, **2014**, 34, 15139-49	6.6	99
98	Hormones and diet, but not body weight, control hypothalamic microglial activity. *Glia*, **2014**, 62, 17-25	9	161
97	Genetic determinants of atherosclerosis, obesity, and energy balance in consomic mice. *Mammalian Genome*, **2014**, 25, 549-63	3.2	10
96	Vasodilator-stimulated phosphoprotein protects against vascular inflammation and insulin resistance. *American Journal of Physiology - Endocrinology and Metabolism*, **2014**, 307, E571-9	6	13
95	Cooperation between brain and islet in glucose homeostasis and diabetes. *Nature*, **2013**, 503, 59-66	50.4	220
94	Rapid glutamate release in the mediobasal hypothalamus accompanies feeding and is exaggerated by an obesogenic food. *Molecular Metabolism*, **2013**, 2, 116-22	8.8	14
93	A role for natriuretic peptides in the central control of energy balance?. *Diabetes*, **2013**, 62, 1379-81	0.9	2
92	BDNF action in the brain attenuates diabetic hyperglycemia via insulin-independent inhibition of hepatic glucose production. *Diabetes*, **2013**, 62, 1512-8	0.9	58
91	Leptin and the brain: then and now. *Journal of Clinical Investigation*, **2013**, 123, 2344-5	15.9	20
90	FGF19 action in the brain induces insulin-independent glucose lowering. *Journal of Clinical Investigation*, **2013**, 123, 4799-808	15.9	147
89	An inconvenient truth about obesity. *Molecular Metabolism*, **2012**, 1, 2-4	8.8	9

88	Clinical review: Regulation of food intake, energy balance, and body fat mass: implications for the pathogenesis and treatment of obesity. *Journal of Clinical Endocrinology and Metabolism*, **2012**, 97, 745-55	5.6	176
87	Obesity is associated with hypothalamic injury in rodents and humans. *Journal of Clinical Investigation*, **2012**, 122, 153-62	15.9	1125
86	Peripheral oxytocin suppresses food intake and causes weight loss in diet-induced obese rats. *American Journal of Physiology - Endocrinology and Metabolism*, **2012**, 302, E134-44	6	149
85	Leptin activates a novel CNS mechanism for insulin-independent normalization of severe diabetic hyperglycemia. *Endocrinology*, **2011**, 152, 394-404	4.8	130
84	Leptin and the central nervous system control of glucose metabolism. *Physiological Reviews*, **2011**, 91, 389-411	47.9	245
83	Response to Comment on: Kaiyala et al. (2010) Identification of Body Fat Mass as a Major Determinant of Metabolic Rate in Mice. Diabetes;59:1657–1666. *Diabetes*, **2011**, 60, e4-e4	0.9	
82	Leptin deficiency causes insulin resistance induced by uncontrolled diabetes. *Diabetes*, **2010**, 59, 1626-34	0.9	109
81	Fibroblast growth factor 21 action in the brain increases energy expenditure and insulin sensitivity in obese rats. *Diabetes*, **2010**, 59, 1817-24	0.9	216
80	The hypothalamus and β-cell connection in the gene-targeting era. *Diabetes*, **2010**, 59, 2991-3	0.9	19
79	Central administration of interleukin-4 exacerbates hypothalamic inflammation and weight gain during high-fat feeding. *American Journal of Physiology - Endocrinology and Metabolism*, **2010**, 299, E47-53	6	50
78	Assessment of feeding behavior in laboratory mice. *Cell Metabolism*, **2010**, 12, 10-7	24.6	147
77	Obesity and leptin resistance: distinguishing cause from effect. *Trends in Endocrinology and Metabolism*, **2010**, 21, 643-51	8.8	523
76	Minireview: Inflammation and obesity pathogenesis: the hypothalamus heats up. *Endocrinology*, **2010**, 151, 4109-15	4.8	227
75	Hypothalamic proinflammatory lipid accumulation, inflammation, and insulin resistance in rats fed a high-fat diet. *American Journal of Physiology - Endocrinology and Metabolism*, **2009**, 296, E1003-12	6	415
74	Receptors for tumor necrosis factor-alpha play a protective role against obesity and alter adipose tissue macrophage status. *Endocrinology*, **2009**, 150, 4124-34	4.8	65
73	Hypothalamic leptin signaling regulates hepatic insulin sensitivity via a neurocircuit involving the vagus nerve. *Endocrinology*, **2009**, 150, 4502-11	4.8	127
72	Evidence that intestinal glucagon-like peptide-1 plays a physiological role in satiety. *Endocrinology*, **2009**, 150, 1680-7	4.8	235
71	Forebrain melanocortin signaling enhances the hindbrain satiety response to CCK-8. *American Journal of Physiology - Regulatory Integrative and Comparative Physiology*, **2009**, 296, R476-84	3.2	54

70	Expression of peroxisome proliferator-activated receptor-gamma in key neuronal subsets regulating glucose metabolism and energy homeostasis. *Endocrinology*, **2009**, 150, 707-12	4.8	117
69	Does hypothalamic inflammation cause obesity?. *Cell Metabolism*, **2009**, 10, 241-2	24.6	51
68	Central interleukin-1 (IL1) signaling is required for pharmacological, but not physiological, effects of leptin on energy balance. *Brain Research*, **2007**, 1144, 101-6	3.7	11
67	Physiology. An integrative view of obesity. *Science*, **2007**, 318, 928-9	33.3	99
66	Distribution of insulin receptor substrate-2 in brain areas involved in energy homeostasis. *Brain Research*, **2006**, 1112, 169-78	3.7	71
65	Signal transducer and activator of transcription (stat) binding sites but not stat3 are required for fasting-induced transcription of agouti-related protein messenger ribonucleic acid. *Molecular Endocrinology*, **2006**, 20, 2591-602		31
64	Insulin action in the brain contributes to glucose lowering during insulin treatment of diabetes. *Cell Metabolism*, **2006**, 3, 67-73	24.6	141
63	Central nervous system regulation of food intake. *Obesity*, **2006**, 14 Suppl 1, 1S-8S	8	102
62	Diabetes, obesity, and the brain. *Science*, **2005**, 307, 375-9	33.3	657
61	Insulin signaling in the central nervous system: a critical role in metabolic homeostasis and disease from C. elegans to humans. *Diabetes*, **2005**, 54, 1264-76	0.9	265
60	Out of synch: Clock mutation causes obesity in mice. *Cell Metabolism*, **2005**, 1, 355-6	24.6	16
59	Attenuated feeding responses to circadian and palatability cues in mice lacking neuropeptide Y. *Peptides*, **2005**, 26, 2597-602	3.8	43
58	Leptin inhibits hypothalamic Npy and Agrp gene expression via a mechanism that requires phosphatidylinositol 3-OH-kinase signaling. *American Journal of Physiology - Endocrinology and Metabolism*, **2005**, 289, E1051-7	6	166
57	Leptin action in the forebrain regulates the hindbrain response to satiety signals. *Journal of Clinical Investigation*, **2005**, 115, 703-10	15.9	190
56	PI3K integrates the action of insulin and leptin on hypothalamic neurons. *Journal of Clinical Investigation*, **2005**, 115, 951-8	15.9	225
55	Neuropeptide Y is required for hyperphagic feeding in response to neuroglucopenia. *Endocrinology*, **2004**, 145, 3363-8	4.8	70
54	Adiposity signaling and biological defense against weight gain: absence of protection or central hormone resistance?. *Journal of Clinical Endocrinology and Metabolism*, **2004**, 89, 5889-97	5.6	75
53	Evidence that paraventricular nucleus oxytocin neurons link hypothalamic leptin action to caudal brain stem nuclei controlling meal size. *American Journal of Physiology - Regulatory Integrative and Comparative Physiology*, **2004**, 287, R87-96	3.2	248

52	Insulin and its evolving partnership with leptin in the hypothalamic control of energy homeostasis. *Trends in Endocrinology and Metabolism*, **2004**, 15, 362-9	8.8	167
51	Increased hypothalamic melanin concentrating hormone gene expression during energy restriction involves a melanocortin-independent, estrogen-sensitive mechanism. *Peptides*, **2004**, 25, 667-74	3.8	35
50	Arcuate nucleus-specific leptin receptor gene therapy attenuates the obesity phenotype of Koletsky (fa(k)/fa(k)) rats. *Endocrinology*, **2003**, 144, 2016-24	4.8	140
49	Insulin activation of phosphatidylinositol 3-kinase in the hypothalamic arcuate nucleus: a key mediator of insulin-induced anorexia. *Diabetes*, **2003**, 52, 227-31	0.9	394
48	Oxytocin innervation of caudal brainstem nuclei activated by cholecystokinin. *Brain Research*, **2003**, 993, 30-41	3.7	134
47	Insulin and leptin revisited: adiposity signals with overlapping physiological and intracellular signaling capabilities. *Frontiers in Neuroendocrinology*, **2003**, 24, 1-10	8.9	292
46	STAT3 signalling is required for leptin regulation of energy balance but not reproduction. *Nature*, **2003**, 421, 856-9	50.4	813
45	Melanocortin signaling and anorexia in chronic disease states. *Annals of the New York Academy of Sciences*, **2003**, 994, 275-81	6.5	36
44	Is the energy homeostasis system inherently biased toward weight gain?. *Diabetes*, **2003**, 52, 232-8	0.9	292
43	Genetics and pathophysiology of human obesity. *Annual Review of Medicine*, **2003**, 54, 453-71	17.4	268
42	Genetic approaches to studying energy balance: perception and integration. *Nature Reviews Genetics*, **2002**, 3, 589-600	30.1	319
41	Leptin and insulin action in the central nervous system. *Nutrition Reviews*, **2002**, 60, S20-9; discussion S68-84, 85-7	6.4	147
40	Attenuation of diabetic hyperphagia in neuropeptide Y--deficient mice. *Diabetes*, **2002**, 51, 778-83	0.9	68
39	Evidence that the caudal brainstem is a target for the inhibitory effect of leptin on food intake. *Endocrinology*, **2002**, 143, 239-46	4.8	319
38	Peptide signals regulating food intake and energy homeostasis. *Canadian Journal of Physiology and Pharmacology*, **2002**, 80, 396-406	2.4	38
37	Brain pathways controlling food intake and body weight. *Experimental Biology and Medicine*, **2001**, 226, 978-81	3.7	99
36	Intracellular signalling. Key enzyme in leptin-induced anorexia. *Nature*, **2001**, 413, 794-5	50.4	541
35	Reversal of cancer anorexia by blockade of central melanocortin receptors in rats. *Endocrinology*, **2001**, 142, 3292-301	4.8	180

34	Hypothalamic, metabolic, and behavioral responses to pharmacological inhibition of CNS melanocortin signaling in rats. *Journal of Neuroscience*, **2001**, 21, 3639-45	6.6	94
33	Central nervous system control of food intake. *Nature*, **2000**, 404, 661-71	50.4	4703
32	Long-term orexigenic effects of AgRP-(83---132) involve mechanisms other than melanocortin receptor blockade. *American Journal of Physiology - Regulatory Integrative and Comparative Physiology*, **2000**, 279, R47-52	3.2	210
31	Effect of intracerebroventricular alpha-MSH on food intake, adiposity, c-Fos induction, and neuropeptide expression. *American Journal of Physiology - Regulatory Integrative and Comparative Physiology*, **2000**, 279, R695-703	3.2	108
30	Hypothalamic melanin-concentrating hormone and estrogen-induced weight loss. *Journal of Neuroscience*, **2000**, 20, 8637-42	6.6	153
29	Leptin deficiency induced by fasting impairs the satiety response to cholecystokinin. *Endocrinology*, **2000**, 141, 4442-8	4.8	104
28	CNS melanocortin system involvement in the regulation of food intake. *Hormones and Behavior*, **2000**, 37, 299-305	3.7	73
27	Food intake and the regulation of body weight. *Annual Review of Psychology*, **2000**, 51, 255-77	26.1	270
26	SOCS-3 expression in leptin-sensitive neurons of the hypothalamus of fed and fasted rats. *Regulatory Peptides*, **2000**, 92, 9-15		36
25	Metabolic, gastrointestinal, and CNS neuropeptide effects of brain leptin administration in the rat. *American Journal of Physiology - Regulatory Integrative and Comparative Physiology*, **1999**, 276, R1425-33	3.2	12
24	Role of the CNS melanocortin system in the response to overfeeding. *Journal of Neuroscience*, **1999**, 19, 2362-7	6.6	172
23	Leptin receptor long-form splice-variant protein expression in neuron cell bodies of the brain and co-localization with neuropeptide Y mRNA in the arcuate nucleus. *Journal of Histochemistry and Cytochemistry*, **1999**, 47, 353-62	3.4	170
22	Insulin and leptin: dual adiposity signals to the brain for the regulation of food intake and body weight. *Brain Research*, **1999**, 848, 114-23	3.7	311
21	Model for the regulation of energy balance and adiposity by the central nervous system. *American Journal of Clinical Nutrition*, **1999**, 69, 584-96	7	205
20	Coexpression of Agrp and NPY in fasting-activated hypothalamic neurons. *Nature Neuroscience*, **1998**, 1, 271-2	25.5	884
19	Signals that regulate food intake and energy homeostasis. *Science*, **1998**, 280, 1378-83	33.3	962
18	Effect of fasting and leptin deficiency on hypothalamic neuropeptide Y gene transcription in vivo revealed by expression of a lacZ reporter gene. *Endocrinology*, **1998**, 139, 2629-35	4.8	72
17	Seminars in medicine of the Beth Israel Deaconess Medical Center. Neuroendocrine responses to starvation and weight loss. *New England Journal of Medicine*, **1997**, 336, 1802-11	59.2	226

16	Leptin increases hypothalamic pro-opiomelanocortin mRNA expression in the rostral arcuate nucleus. *Diabetes*, **1997**, 46, 2119-23	0.9	728
15	Regulation of body adiposity and the problem of obesity. *Arteriosclerosis, Thrombosis, and Vascular Biology*, **1997**, 17, 233-8	9.4	14
14	Regulation of appetite and body weight. *Hospital Practice (1995)*, **1997**, 32, 109-12, 117-9	2.2	7
13	Wasting illness as a disorder of body weight regulation. *Proceedings of the Nutrition Society*, **1997**, 56, 785-91	2.9	7
12	Evidence that elevated plasma corticosterone levels are the cause of reduced hypothalamic corticotrophin-releasing hormone gene expression in diabetes. *Regulatory Peptides*, **1997**, 72, 105-12		52
11	Melanocortin receptors in leptin effects. *Nature*, **1997**, 390, 349	50.4	400
10	Cerebrospinal fluid leptin levels: relationship to plasma levels and to adiposity in humans. *Nature Medicine*, **1996**, 2, 589-93	50.5	833
9	Differential effect of fasting on hypothalamic expression of genes encoding neuropeptide Y, galanin, and glutamic acid decarboxylase. *Brain Research Bulletin*, **1993**, 31, 361-7	3.9	103
8	Immunocytochemical detection of insulin receptor substrate-1 (IRS-1) in rat brain: colocalization with phosphotyrosine. *Regulatory Peptides*, **1993**, 48, 257-66		44
7	Insulin in the brain: a hormonal regulator of energy balance. *Endocrine Reviews*, **1992**, 13, 387-414	27.2	480
6	Effect of fasting on regional levels of neuropeptide Y mRNA and insulin receptors in the rat hypothalamus: An autoradiographic study. *Molecular and Cellular Neurosciences*, **1992**, 3, 199-205	4.8	65
5	Central insulin administration reduces neuropeptide Y mRNA expression in the arcuate nucleus of food-deprived lean (Fa/Fa) but not obese (fa/fa) Zucker rats. *Endocrinology*, **1991**, 128, 2645-7	4.8	232
4	Disproportionately elevated proinsulin in Pima Indians with noninsulin-dependent diabetes mellitus. *Journal of Clinical Endocrinology and Metabolism*, **1990**, 70, 1247-53	5.6	184
3	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	5.6	89
2	Leptin Deficiency Induced by Fasting Impairs the Satiety Response to Cholecystokinin*This work was supported by grants from the NIH (DK-12829, DK-52989, and NS-32272) and by the Royalty Research Fund, the Diabetes Endocrinology Research Center, and the Clinical Nutrition Research Unit of the University of Washington.		26
1	Reversal of Cancer Anorexia by Blockade of Central Melanocortin Receptors in Rats		55