Hans-Rudolf Berthoud

List of Publications by Year
in descending order

126 papers	12,946 citations	28736 57 h-index	27587 110 g-index
126 all docs	126 docs citations	126 times ranked	12504 citing authors

#	Article	IF	Citations
1	Regulation of body weight: Lessons learned from bariatric surgery. Molecular Metabolism, 2023, 68, 101517.	3.0	17
2	Sympathetic innervation of inguinal white adipose tissue in the mouse. Journal of Comparative Neurology, 2021, 529, 1465-1485.	0.9	30
3	Physiology of Energy Intake in the Weightâ€Reduced State. Obesity, 2021, 29, S25-S30.	1.5	5
4	IGFBP-2 partly mediates the early metabolic improvements caused by bariatric surgery. Cell Reports Medicine, 2021, 2, 100248.	3.3	18
5	Gut-brain communication and obesity: understanding functions of the vagus nerve. Journal of Clinical Investigation, 2021, 131, .	3.9	43
6	Learning of food preferences: mechanisms and implications for obesity & metabolic diseases. International Journal of Obesity, 2021, 45, 2156-2168.	1.6	36
7	Functional anatomy of the vagus system â€" Emphasis on the somato-visceral interface. Autonomic Neuroscience: Basic and Clinical, 2021, 236, 102887.	1.4	29
8	Sympathetic innervation of the mouse kidney and liver arising from prevertebral ganglia. American Journal of Physiology - Regulatory Integrative and Comparative Physiology, 2021, 321, R328-R337.	0.9	12
9	Protein Appetite at the Interface between Nutrient Sensing and Physiological Homeostasis. Nutrients, 2021, 13, 4103.	1.7	11
10	The obesity epidemic in the face of homeostatic body weight regulation: What went wrong and how can it be fixed?. Physiology and Behavior, 2020, 222, 112959.	1.0	31
11	Minimum reporting guidelines and the role of causal inference in functional neuroimaging for obesity research. International Journal of Obesity, 2020, 44, 1633-1635.	1.6	0
12	What Should I Eat and Why? The Environmental, Genetic, and Behavioral Determinants of Food Choice: Summary from a Pennington Scientific Symposium. Obesity, 2020, 28, 1386-1396.	1.5	12
13	FGF21 and the Physiological Regulation of Macronutrient Preference. Endocrinology, 2020, 161, .	1.4	57
14	Vagal mechanisms as neuromodulatory targets for the treatment of metabolic disease. Annals of the New York Academy of Sciences, 2019, 1454, 42-55.	1.8	42
15	Gastric bypass surgery in lean adolescent mice prevents diet-induced obesity later in life. Scientific Reports, 2019, 9, 7881.	1.6	4
16	FGF21 Signals Protein Status to the Brain and Adaptively Regulates Food Choice and Metabolism. Cell Reports, 2019, 27, 2934-2947.e3.	2.9	143
17	Combined loss of GLP-1R and Y2R does not alter progression of high-fat diet-induced obesity or response to RYGB surgery in mice. Molecular Metabolism, 2019, 25, 64-72.	3.0	31
18	The PYY/Y2R-Deficient Mouse Responds Normally to High-Fat Diet and Gastric Bypass Surgery. Nutrients, 2019, 11, 585.	1.7	35

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19	Unlike calorie restriction, Roux-en-Y gastric bypass surgery does not increase hypothalamic AgRP and NPY in mice on a high-fat diet. International Journal of Obesity, 2019, 43, 2143-2150.	1.6	18
20	Obesity. Journal of the American College of Cardiology, 2018, 71, 69-84.	1.2	375
21	Pharmacotherapy for Patients with Obesity. Clinical Chemistry, 2018, 64, 118-129.	1.5	41
22	Genetics-based manipulation of adipose tissue sympathetic innervation. Physiology and Behavior, 2018, 190, 21-27.	1.0	14
23	Effects of Obesity and Gastric Bypass Surgery on Nutrient Sensors, Endocrine Cells, and Mucosal Innervation of the Mouse Colon. Nutrients, 2018, 10, 1529.	1.7	30
24	Roux-en-Y Gastric Bypass Surgery-Induced Weight Loss and Metabolic Improvements Are Similar in TGR5-Deficient and Wildtype Mice. Obesity Surgery, 2018, 28, 3227-3236.	1.1	30
25	Mechanisms Responsible for Metabolic Improvements of Bariatric Surgeries. Diabetes, 2018, 67, 1043-1044.	0.3	7
26	Homeostatic sensing of dietary protein restriction: A case for FGF21. Frontiers in Neuroendocrinology, 2018, 51, 125-131.	2.5	51
27	Preoptic leptin signaling modulates energy balance independent of body temperature regulation. ELife, 2018, 7, .	2.8	28
28	Gut-Brain Cross-Talk in Metabolic Control. Cell, 2017, 168, 758-774.	13.5	218
29	Blaming the Brain for Obesity: Integration of Hedonic and Homeostatic Mechanisms. Gastroenterology, 2017, 152, 1728-1738.	0.6	263
30	RYGB Produces more Sustained Body Weight Loss and Improvement of Glycemic Control Compared with VSG in the Diet-Induced Obese Mouse Model. Obesity Surgery, 2017, 27, 2424-2433.	1.1	39
31	Advances in Obesity: Causes, Consequences, and Therapy. Gastroenterology, 2017, 152, 1635-1637.	0.6	22
32	Hedonics Act in Unison with the Homeostatic System to Unconsciously Control Body Weight. Frontiers in Nutrition, 2016, 3, 6.	1.6	25
33	Body Composition, Food Intake, and Energy Expenditure in a Murine Model of Roux-en-Y Gastric Bypass Surgery. Obesity Surgery, 2016, 26, 2173-2182.	1.1	44
34	Roux-en-Y gastric bypass surgery is effective in fibroblast growth factor-21 deficient mice. Molecular Metabolism, 2016, 5, 1006-1014.	3.0	20
35	Metabolic Responses to Dietary Protein Restriction Require an Increase in FGF21 that Is Delayed by the Absence of GCN2. Cell Reports, 2016, 16, 707-716.	2.9	146
36	Reprogramming of defended body weight after <scp>R</scp>ouxâ€Ênâ€‹<scp>Y</scp> gastric bypass surgery in dietâ€induced obese mice. Obesity, 2016, 24, 654-660.	1.5	34

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37	Sleeve Gastrectomy Does Not Cause Hypertrophy and Reprogramming of Intestinal Glucose Metabolism in Rats. Obesity Surgery, 2015, 25, 1468-1473.	1.1	40
38	Leptin modulates nutrient reward via inhibitory galanin action on orexin neurons. Molecular Metabolism, 2015, 4, 706-717.	3.0	63
39	Neural Control of Energy Expenditure. Handbook of Experimental Pharmacology, 2015, 233, 173-194.	0.9	36
40	Gastric Inhibitory Polypeptide (GIP) Is Selectively Decreased in the Roux-Limb of Dietary Obese Mice after RYGB Surgery. PLoS ONE, 2015, 10, e0134728.	1.1	8
41	Monoclonal Antibody Targeting of Fibroblast Growth Factor Receptor 1c Ameliorates Obesity and Glucose Intolerance via Central Mechanisms. PLoS ONE, 2014, 9, e112109.	1.1	22
42	Vagal Innervation of Intestine Contributes to Weight Loss After Roux-en-Y Gastric Bypass Surgery in Rats. Obesity Surgery, 2014, 24, 2145-2151.	1.1	58
43	Reversible hyperphagia and obesity in rats with gastric bypass by central MC3/4R blockade. Obesity, 2014, 22, 1847-1853.	1.5	17
44	GLP-1 receptor signaling is not required for reduced body weight after RYGB in rodents. American Journal of Physiology - Regulatory Integrative and Comparative Physiology, 2014, 306, R352-R362.	0.9	157
45	Longitudinal Assessment of Food Intake, Fecal Energy Loss, and Energy Expenditure After Roux-en-Y Gastric Bypass Surgery in High-Fat-Fed Obese Rats. Obesity Surgery, 2013, 23, 531-540.	1.1	37
46	Obesity surgery: happy with less or eternally hungry?. Trends in Endocrinology and Metabolism, 2013, 24, 101-108.	3.1	18
47	Synergy: A Concept in Search of a Definition. Endocrinology, 2013, 154, 3974-3977.	1.4	23
48	Why Does Gastric Bypass Surgery Work?. Science, 2013, 341, 351-352.	6.0	8
49	Development and Verification of a Mouse Model for Roux-en-Y Gastric Bypass Surgery with a Small Gastric Pouch. PLoS ONE, 2013, 8, e52922.	1.1	47
50	Vagal Innervation of the Hepatic Portal Vein and Liver Is Not Necessary for Roux-En-Y Gastric Bypass Surgery-Induced Hypophagia, Weight Loss, and Hypermetabolism. Annals of Surgery, 2012, 255, 294-301.	2.1	56
51	The neurobiology of food intake in an obesogenic environment. Proceedings of the Nutrition Society, 2012, 71, 478-487.	0.4	232
52	Neural and metabolic regulation of macronutrient intake and selection. Proceedings of the Nutrition Society, 2012, 71, 390-400.	0.4	71
53	Modulation of taste responsiveness and food preference by obesity and weight loss. Physiology and Behavior, 2012, 107, 527-532.	1.0	97
54	Food reward in the obese and after weight loss induced by calorie restriction and bariatric surgery. Annals of the New York Academy of Sciences, 2012, 1264, 36-48.	1.8	52

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55	Obesity surgery and gutâ€"brain communication. Physiology and Behavior, 2011, 105, 106-119.	1.0	74
56	Metabolic and hedonic drives in the neural control of appetite: who is the boss?. Current Opinion in Neurobiology, 2011, 21, 888-896.	2.0	388
57	Food reward, hyperphagia, and obesity. American Journal of Physiology - Regulatory Integrative and Comparative Physiology, 2011, 300, R1266-R1277.	0.9	192
58	â€œLikingâ€• and â€œwantingâ€• of sweet and oily food stimuli as affected by high-fat diet-induced obesity, weight loss, leptin, and genetic predisposition. American Journal of Physiology - Regulatory Integrative and Comparative Physiology, 2011, 301, R1267-R1280.	0.9	95
59	High-fat intake induced by mu-opioid activation of the nucleus accumbens is inhibited by Y1R-blockade and MC3/4R- stimulation. Brain Research, 2010, 1350, 131-138.	1.1	32
60	Innervation of skeletal muscle by leptin receptor-containing neurons. Brain Research, 2010, 1345, 146-155.	1.1	15
61	A potential role for hypothalamomedullary POMC projections in leptin-induced suppression of food intake. American Journal of Physiology - Regulatory Integrative and Comparative Physiology, 2010, 298, R720-R728.	0.9	64
62	Meal-Induced Hormone Responses in a Rat Model of Roux-en-Y Gastric Bypass Surgery. Endocrinology, 2010, 151, 1588-1597.	1.4	134
63	Meal patterns, satiety, and food choice in a rat model of Roux-en-Y gastric bypass surgery. American Journal of Physiology - Regulatory Integrative and Comparative Physiology, 2009, 297, R1273-R1282.	0.9	155
64	Phenotype of neurons in the nucleus of the solitary tract that express CCK-induced activation of the ERK signaling pathway. American Journal of Physiology - Regulatory Integrative and Comparative Physiology, 2009, 296, R845-R854.	0.9	36
65	An expanded view of energy homeostasis: Neural integration of metabolic, cognitive, and emotional drives to eat. Physiology and Behavior, 2009, 97, 572-580.	1.0	129
66	Central and Peripheral Regulation of Food Intake and Physical Activity: Pathways and Genes. Obesity, 2008, 16, S11-22.	1.5	257
67	The vagus nerve, food intake and obesity. Regulatory Peptides, 2008, 149, 15-25.	1.9	249
68	The Brain, Appetite, and Obesity. Annual Review of Psychology, 2008, 59, 55-92.	9.9	546
69	Presynaptic Melanocortin-4 Receptors on Vagal Afferent Fibers Modulate the Excitability of Rat Nucleus Tractus Solitarius Neurons. Journal of Neuroscience, 2008, 28, 4957-4966.	1.7	88
70	Paying the Price for Eating Ice Cream: Is Excessive GLP-1 Signaling in the Brain the Culprit?. Endocrinology, 2008, 149, 4765-4767.	1.4	5
71	Orexin Signaling in the Ventral Tegmental Area Is Required for High-Fat Appetite Induced by Opioid Stimulation of the Nucleus Accumbens. Journal of Neuroscience, 2007, 27, 11075-11082.	1.7	223
72	Monoclonal antibody antagonists of hypothalamic FGFR1 cause potent but reversible hypophagia and weight loss in rodents and monkeys. American Journal of Physiology - Endocrinology and Metabolism, 2007, 292, E964-E976.	1.8	87

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73	Interactions between the â€œcognitiveâ€•and â€œmetabolicâ€•brain in the control of food intake. Physiology and Behavior, 2007, 91, 486-498.	1.0	225
74	Eating for pleasure or calories. Current Opinion in Pharmacology, 2007, 7, 607-612.	1.7	94
75	Brainstem mechanisms integrating gut-derived satiety signals and descending forebrain information in the control of meal size. Physiology and Behavior, 2006, 89, 517-524.	1.0	118
76	Homeostatic and Nonâ€homeostatic Pathways Involved in the Control of Food Intake and Energy Balance. Obesity, 2006, 14, 197S-200S.	1.5	232
77	Stimulation of the vagus nerve attenuates macrophage activation by activating the Jak2-STAT3 signaling pathway. Nature Immunology, 2005, 6, 844-851.	7.0	1,009
78	Orexin-A projections to the caudal medulla and orexin-induced c-Fos expression, food intake, and autonomic function. Journal of Comparative Neurology, 2005, 485, 127-142.	0.9	126
79	Orexin inputs to caudal raphÃ© neurons involved in thermal, cardiovascular, and gastrointestinal regulation. Histochemistry and Cell Biology, 2005, 123, 147-156.	0.8	108
80	Brain stem melanocortinergic modulation of meal size and identification of hypothalamic POMC projections. American Journal of Physiology - Regulatory Integrative and Comparative Physiology, 2005, 289, R247-R258.	0.9	156
81	Melanocortinergic Modulation of Cholecystokinin-Induced Suppression of Feeding through Extracellular Signal-Regulated Kinase Signaling in Rat Solitary Nucleus. Endocrinology, 2005, 146, 3739-3747.	1.4	124
82	The Caudal Brainstem and the Control of Food Intake and Energy Balance. , 2004, , 195-240.		20
83	Extracellular Signal-Regulated Kinase 1/2 Signaling Pathway in Solitary Nucleus Mediates Cholecystokinin-Induced Suppression of Food Intake in Rats. Journal of Neuroscience, 2004, 24, 10240-10247.	1.7	72
84	Anatomy and function of sensory hepatic nerves. The Anatomical Record, 2004, 280A, 827-835.	2.3	160
85	Mind versus metabolism in the control of food intake and energy balance. Physiology and Behavior, 2004, 81, 781-793.	1.0	213
86	Neural control of appetite: cross-talk between homeostatic and non-homeostatic systems. Appetite, 2004, 43, 315-317.	1.8	153
87	Vanilloid receptor (VR1) expression in vagal afferent neurons innervating the gastrointestinal tract. Cell and Tissue Research, 2003, 311, 277-287.	1.5	140
88	Appetite-inducing accumbens manipulation activates hypothalamic orexin neurons and inhibits POMC neurons. American Journal of Physiology - Regulatory Integrative and Comparative Physiology, 2003, 284, R1436-R1444.	0.9	120
89	Neural systems controlling food intake and energy balance in the modern world. Current Opinion in Clinical Nutrition and Metabolic Care, 2003, 6, 615-620.	1.3	32
90	Gastric distension induces c-Fos in medullary GLP-1/2-containing neurons. American Journal of Physiology - Regulatory Integrative and Comparative Physiology, 2003, 285, R470-R478.	0.9	175

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91	Neurochemical control and reconfiguration of the medullary network controlling different oromotor behaviors. American Journal of Physiology - Regulatory Integrative and Comparative Physiology, 2003, 285, R19-R20.	0.9	3
92	Orexins in rat dorsal motor nucleus of the vagus potently stimulate gastric motor function. American Journal of Physiology - Renal Physiology, 2002, 283, G465-G472.	1.6	68
93	Behavioral analysis of anorexia produced by hindbrain injections of AMPA receptor antagonist NBQX in rats. American Journal of Physiology - Regulatory Integrative and Comparative Physiology, 2002, 282, R147-R155.	0.9	16
94	CART in the dorsal vagal complex: sources of immunoreactivity and effects on Fos expression and food intake. Brain Research, 2002, 957, 298-310.	1.1	58
95	Vagal afferents innervating the gastrointestinal tract and CCKA-receptor immunoreactivity. The Anatomical Record, 2002, 266, 10-20.	2.3	58
96	Multiple neural systems controlling food intake and body weight. Neuroscience and Biobehavioral Reviews, 2002, 26, 393-428.	2.9	614
97	Vagal and spinal mechanosensors in the rat stomach and colon have multiple receptive fields. American Journal of Physiology - Regulatory Integrative and Comparative Physiology, 2001, 280, R1371-R1381.	0.9	83
98	Immunohistochemical identification of cholecystokinin A receptors on interstitial cells of Cajal, smooth muscle, and enteric neurons in rat pylorus. Cell and Tissue Research, 2001, 305, 11-23.	1.5	56
99	Vagal-enteric interface: Vagal activation-induced expression of c-Fos and p-CREB in neurons of the upper gastrointestinal tract and pancreas. The Anatomical Record, 2001, 262, 29-40.	2.3	39
100	Fourth ventricular injection of CART peptide inhibits short-term sucrose intake in rats. Brain Research, 2001, 896, 153-156.	1.1	49
101	Food-related gastrointestinal signals activate caudal brainstem neurons expressing both NMDA and AMPA receptors. Brain Research, 2001, 915, 143-154.	1.1	56
102	Additive satiety-delaying effects of capsaicin-induced visceral deafferentation and NMDA receptor blockade suggest separate pathways. Pharmacology Biochemistry and Behavior, 2000, 67, 371-375.	1.3	9
103	Capsaicin-treated rats permanently overingest low- but not high-concentration sucrose solutions. American Journal of Physiology - Regulatory Integrative and Comparative Physiology, 2000, 279, R1805-R1812.	0.9	25
104	Functional vagal input to gastric myenteric plexus as assessed by vagal stimulation-induced Fos expression. American Journal of Physiology - Renal Physiology, 2000, 279, G73-G81.	1.6	31
105	Functional and chemical anatomy of the afferent vagal system. Autonomic Neuroscience: Basic and Clinical, 2000, 85, 1-17.	1.4	953
106	Functional vagal input to chemically identified neurons in pancreatic ganglia as revealed by Fos expression. American Journal of Physiology - Endocrinology and Metabolism, 1999, 277, E958-E964.	1.8	21
107	An Overview of Neural Pathways and Networks Involved in the Control of Food Intake and Selection. , 1999, , .		11
108	Neural and Metabolic Control of Macronutrient Selection. , 1999, , .		4

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109	Vagal and spinal afferent innervation of the rat esophagus: A combined retrograde tracing and immunocytochemical study with special emphasis on calcium-binding proteins. Journal of Comparative Neurology, 1998, 398, 289-307.	0.9	95
110	Vagal efferent and afferent innervation of the rat esophagus as demonstrated by anterograde DiI and DiA tracing: Focus on myenteric ganglia. Journal of the Autonomic Nervous System, 1998, 70, 92-102.	1.9	88
111	Vagal Afferent Nerve Fibres Contact Mast Cells in Rat Small Intestinal Mucosa. NeuroImmunoModulation, 1997, 4, 266-270.	0.9	113
112	Capsaicin-resistant vagal afferent fibers in the rat gastrointestinal tract: anatomical identification and functional integrity. Brain Research, 1997, 746, 195-206.	1.1	98
113	Innervation of rat abdominal paraganglia by calretinin-like immunoreactive nerve fibers. Neuroscience Letters, 1996, 210, 115-118.	1.0	13
114	Morphological analysis of vagal input to gastrin releasing peptide and vasoactive intestinal peptide containing neurons in the rat glandular stomach. , 1996, 370, 61-70.		36
115	Interaction between parasympathetic and sympathetic nerves in prevertebral ganglia: Morphological evidence for vagal efferent innervation of ganglion cells in the rat. , 1996, 35, 80-86.		83
116	Anatomical demonstration of vagal input to nicotinamide acetamide dinucleotide phosphate diaphorase-positive (nitrergic) neurons in rat fundic stomach. Journal of Comparative Neurology, 1995, 358, 428-439.	0.9	51
117	Vagal sensors in the rat duodenal mucosa: distribution and structure as revealed by in vivo DiI-tracing. Anatomy and Embryology, 1995, 191, 203-12.	1.5	174
118	Vagal innervation of the rat pylorus: an anterograde tracing study using carbocyanine dyes and laser scanning confocal microscopy. Cell and Tissue Research, 1994, 275, 109-123.	1.5	84
119	NADPH-diaphorase-positive nerve fibers associated with motor endplates in the rat esophagus: new evidence for co-innervation of striated muscle by enteric neurons. Cell and Tissue Research, 1994, 276, 23-30.	1.5	111
120	Characterization of vagal innervation to the rat celiac, suprarenal and mesenteric ganglia. Journal of the Autonomic Nervous System, 1993, 42, 153-169.	1.9	151
121	Vagal afferent innervation of the rat fundic stomach: Morphological characterization of the gastric tension receptor. Journal of Comparative Neurology, 1992, 319, 261-276.	0.9	269
122	Morphology and distribution of efferent vagal innervation of rat pancreas as revealed with anterograde transport of DiI. Brain Research, 1991, 553, 336-341.	1.1	59
123	Abdominal pathways and central origin of rat vagal fibers that stimulate gastric acid. Gastroenterology, 1991, 100, 627-637.	0.6	30
124	Simultaneous labeling of vagal innervation of the gut and afferent projections from the visceral forebrain with DiI injected into the dorsal vagal complex in the rat. Journal of Comparative Neurology, 1990, 301, 65-79.	0.9	184
125	Anatomical considerations for surgery of the rat abdominal vagus: distribution, paraganglia and regeneration. Journal of the Autonomic Nervous System, 1983, 9, 79-97.	1.9	58
126	Neurobiology of Nutrition and Obesity. Nutrition Reviews, 0, 65, 517-534.	2.6	46