Robert O Heuckeroth

List of Publications by Year
in descending order

84	7,324	66343	64796
papers	citations	42 h-index	79 g-index

91	91	91	5637
all docs	docs citations	times ranked	citing authors

#	Article	IF	Citations
1	Sympathetic Input to Multiple Cell Types in Mouse and Human Colon Produces Region-Specific Responses. Gastroenterology, 2021, 160, 1208-1223.e4.	1.3	23
2	Newly Identified Enteric Nervous System Precursors in the Mesentery Make One Skip, But Not For Joy!. Cellular and Molecular Gastroenterology and Hepatology, 2021, 12, 378-379.	4.5	0
3	Nerves Make the Bowel Happy, Even When the Enteric Nervous System Is Missing!. Cellular and Molecular Gastroenterology and Hepatology, 2021, 12, 785-786.	4.5	2
4	Cell-autonomous retinoic acid receptor signaling has stage-specific effects on mouse enteric nervous system. JCI Insight, 2021, 6, .	5.0	6
5	Visceral myopathy: clinical syndromes, genetics, pathophysiology, and fall of the cytoskeleton. American Journal of Physiology - Renal Physiology, 2021, 320, G919-G935.	3.4	24
6	scRNA-Seq Reveals New Enteric Nervous System Roles for GDNF, NRTN, and TBX3. Cellular and Molecular Gastroenterology and Hepatology, 2021, 11, 1548-1592.e1.	4.5	55
7	Glial Cell-Derived Neurotrophic Factor Induces Enteric Neurogenesis and Improves Colon Structure and Function in Mouse Models of Hirschsprung Disease. Gastroenterology, 2020, 159, 1824-1838.e17.	1.3	63
8	The EXTrauterine Environment for Neonatal Development Supports Normal Intestinal Maturation and Development. Cellular and Molecular Gastroenterology and Hepatology, 2020, 10, 623-637.	4.5	8
9	Robust, 3-Dimensional Visualization of Human Colon Enteric Nervous System Without Tissue Sectioning. Gastroenterology, 2020, 158, 2221-2235.e5.	1.3	43
10	Dlx1/2 mice have abnormal enteric nervous system function. JCI Insight, 2020, 5, .	5.0	11
11	Pseudo-obstructionâ€“inducing ACTG2R257C alters actin organization and function. JCI Insight, 2020, 5, .	5.0	10
12	The Pediatric Cell Atlas: Defining the Growth Phase of Human Development at Single-Cell Resolution. Developmental Cell, 2019, 49, 10-29.	7.0	57
13	Unexpected Roles for the Second Brain: Enteric Nervous System as Master Regulator of Bowel Function. Annual Review of Physiology, 2019, 81, 235-259.	13.1	132
14	Down syndrome mouse models have an abnormal enteric nervous system. JCI Insight, 2019, 4, .	5.0	9
15	Muscularis macrophage development in the absence of an enteric nervous system. Proceedings of the National Academy of Sciences of the United States of America, 2018, 115, 4696-4701.	7.1	61
16	Hirschsprung disease â€" integrating basic science and clinical medicine to improve outcomes. Nature Reviews Gastroenterology and Hepatology, 2018, 15, 152-167.	17.8	197
17	Even When You Know Everything, There Is Still More toÂLearnÂAbout Hirschsprung Disease. Gastroenterology, 2018, 155, 1681-1684.	1.3	7
18	Loss of Tbx3 in murine neural crest reduces enteric glia and causes cleft palate, but does not influence heart development or bowel transit. Developmental Biology, 2018, 444, S337-S351.	2.0	15

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19	Intestinal Dysmotility Syndromes following Systemic Infection by Flaviviruses. Cell, 2018, 175, 1198-1212.e12.	28.9	53
20	MicroRNAs Induce a Permissive Chromatin Environment that Enables Neuronal Subtype-Specific Reprogramming of Adult Human Fibroblasts. Cell Stem Cell, 2017, 21, 332-348.e9.	11.1	112
21	Hirschsprung Disease. , 2017, , 291-302.		2
22	White paper on guidelines concerning enteric nervous system stem cell therapy for enteric neuropathies. Developmental Biology, 2016, 417, 229-251.	2.0	112
23	Neural crest requires Impdh 2 for development of the enteric nervous system, great vessels, and craniofacial skeleton. Developmental Biology, 2016, 409, 152-165.	2.0	19
24	Gene-environment interactions and the enteric nervous system: Neural plasticity and Hirschsprung disease prevention. Developmental Biology, 2016, 417, 188-197.	2.0	44
25	Stem cells make the bowel nervous. Nature, 2016, 531, 44-45.	27.8	8
26	Ibuprofen slows migration and inhibits bowel colonization by enteric nervous system precursors in zebrafish, chick and mouse. Developmental Biology, 2016, 409, 473-488.	2.0	41
27	Vascular and neural stem cells in the gut: do they need each other?. Histochemistry and Cell Biology, 2015, 143, 397-410.	1.7	12
28	Building a second brain in the bowel. Journal of Clinical Investigation, 2015, 125, 899-907.	8.2	104
29	Hepatocyte Growth Factor and MET Support Mouse Enteric Nervous System Development, the Peristaltic Response, and Intestinal Epithelial Proliferation in Response to Injury. Journal of Neuroscience, 2015, 35, 11543-11558.	3.6	34
30	Hirschsprungâ€™s disease, Down syndrome, and missing heritability: too much collagen slows migration. Journal of Clinical Investigation, 2015, 125, 4323-4326.	8.2	14
31	Enteric nervous system development: migration, differentiation, and disease. American Journal of Physiology - Renal Physiology, 2013, 305, G1-G24.	3.4	277
32	Retinaldehyde dehydrogenase enzymes regulate colon enteric nervous system structure and function. Developmental Biology, 2013, 381, 28-37.	2.0	21
33	Hirschsprung Disease. , 2013, , 271-283.		3
34	Retinoblastoma protein prevents enteric nervous system defects and intestinal pseudo-obstruction. Journal of Clinical Investigation, 2013, 123, 5152-5164.	8.2	10
35	Hirschsprung-like disease is exacerbated by reduced de novo GMP synthesis. Journal of Clinical Investigation, 2013, 123, 4875-4887.	8.2	55
36	Ret heterozygous mice have enhanced intestinal adaptation after massive small bowel resection. American Journal of Physiology - Renal Physiology, 2012, 302, G1143-G1150.	3.4	15

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37	Hypothyroidism Is a Rare Cause of Isolated Constipation. Journal of Pediatric Gastroenterology and Nutrition, 2012, 54, 285-287.	1.8	19
38	Differential Regional and Subtype-Specific Vulnerability of Enteric Neurons to Mitochondrial Dysfunction. PLoS ONE, 2011, 6, e27727.	2.5	25
39	Augmentation of the ascending component of the peristaltic reflex and substance P release by glial cell line-derived neurotrophic factor. Neurogastroenterology and Motility, 2010, 22, 779-786.	3.0	14
40	Vitamin A facilitates enteric nervous system precursor migration by reducing Pten accumulation. Development (Cambridge), 2010, 137, 631-640.	2.5	98
41	The Timing and Location of Glial Cell Line-Derived Neurotrophic Factor Expression Determine Enteric Nervous System Structure and Function. Journal of Neuroscience, 2010, 30, 1523-1538.	3.6	79
42	T1735 The Role of RALDH1, RALDH2, and RALDH3 in Enteric Nervous System Development. Gastroenterology, 2010, 138, S-567.	1.3	0
43	Serum Markers May Distinguish Biliary Atresia From Other Forms of Neonatal Cholestasis. Journal of Pediatric Gastroenterology and Nutrition, 2010, 50, 411-416.	1.8	15
44	Organotypic specificity of key RET adaptor-docking sites in the pathogenesis of neurocristopathies and renal malformations in mice. Journal of Clinical Investigation, 2010, 120, 778-790.	8.2	50
45	Vitamin A facilitates enteric nervous system precursor migration by reducing Pten accumulation. Journal of Cell Science, 2010, 123, e1-e1.	2.0	0
46	Dosage Effects of Cohesin Regulatory Factor PDS5 on Mammalian Development: Implications for Cohesinopathies. PLoS ONE, 2009, 4, e5232.	2.5	74
47	Retinoic acid regulates murine enteric nervous system precursor proliferation, enhances neuronal precursor differentiation, and reduces neurite growth in vitro. Developmental Biology, 2008, 320, 185-198.	2.0	62
48	Mice lacking sister chromatid cohesion protein PDS5B exhibit developmental abnormalities reminiscent of Cornelia de Lange syndrome. Development (Cambridge), 2007, 134, 3191-3201.	2.5	94
49	Protein Kinase CÂ and Glycogen Synthase Kinase-3Â Control Neuronal Polarity in Developing Rodent Enteric Neurons, whereas SMAD Specific E3 Ubiquitin Protein Ligase 1 Promotes Neurite Growth But Does Not Influence Polarity. Journal of Neuroscience, 2007, 27, 9458-9468.	3.6	36
50	PAI-1 deficiency reduces liver fibrosis after bile duct ligation in mice through activation of tPA. FEBS Letters, 2007, 581, 3098-3104.	2.8	76
51	Reduced endothelin converting enzyme-1 and endothelin-3 mRNA in the developing bowel of male mice may increase expressivity and penetrance of Hirschsprung diseaseâ€“like distal intestinal aganglionosis. Developmental Dynamics, 2007, 236, 106-117.	1.8	20
52	Tissue-type plasminogen activator deficiency exacerbates cholestatic liver injury in mice. Hepatology, 2007, 45, 1527-1537.	7.3	30
53	Differential gene expression and functional analysis implicate novel mechanisms in enteric nervous system precursor migration and neuritogenesis. Developmental Biology, 2006, 298, 259-271.	2.0	62
54	BMP signaling regulates murine enteric nervous system precursor migration, neurite fasciculation, and patterning via altered Ncam1 polysialic acid addition. Developmental Biology, 2006, 299, 137-150.	2.0	85

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55	Getting to the guts of enteric nervous system development. Development (Cambridge), 2006, 133, 2287-2290.	2.5	14
56	Transcriptional profiling after bile duct ligation identifies PAI-1 as a contributor to cholestatic injury in mice. Hepatology, 2005, 42, 1099-1108.	7.3	56
57	Enteric neuroblasts require the phosphatidylinositol 3-kinase/Akt/Forkhead pathway for GDNF-stimulated survival. Molecular and Cellular Neurosciences, 2005, 29, 107-119.	2.2	62
58	A Human Yeast Artificial Chromosome Containing the Multiple Endocrine Neoplasia Type 2B Ret Mutation Does Not Induce Medullary Thyroid Carcinoma but Does Support the Growth of Kidneys and Partially Rescues Enteric Nervous System Development in Ret-Deficient Mice. American Journal of Pathology, 2005, 166, 265-274.	3.8	8
59	Mice expressing a dominant-negative Ret mutation phenocopy human Hirschsprung disease and delineate a direct role of Ret in spermatogenesis. Development (Cambridge), 2004, 131, 5503-5513.	2.5	112
60	GFRÎ±1 Expression in Cells Lacking RET Is Dispensable for Organogenesis and Nerve Regeneration. Neuron, 2004, 44, 623-636.	8.1	67
61	Neurturin signalling via GFRÎ±2 is essential for innervation of glandular but not muscle targets of sacral parasympathetic ganglion neurons. Molecular and Cellular Neurosciences, 2004, 25, 288-300.	2.2	43
62	Finding Your Way to the End. Neuron, 2003, 40, 871-873.	8.1	10
63	GDNF availability determines enteric neuron number by controlling precursor proliferation. Development (Cambridge), 2003, 130, 2187-2198.	2.5	248
64	Neurturin-Deficient Mice Develop Dry Eye and Keratoconjunctivitis Sicca. , 2003, 44, 4223.		105
65	Artemin Is a Vascular-Derived Neurotropic Factor for Developing Sympathetic Neurons. Neuron, 2002, 35, 267-282.	8.1	294
66	RET signaling is essential for migration, axonal growth and axon guidance of developing sympathetic neurons. Development (Cambridge), 2001, 128, 3963-3974.	2.5	254
67	Anomalous development of the hepatobiliary system in theinv mouse. Hepatology, 1999, 30, 372-378.	7.3	128
68	Gene Targeting Reveals a Critical Role for Neurturin in the Development and Maintenance of Enteric, Sensory, and Parasympathetic Neurons. Neuron, 1999, 22, 253-263.	8.1	303
69	Persephin, a Novel Neurotrophic Factor Related to GDNF and Neurturin. Neuron, 1998, 20, 245-253.	8.1	460
70	GFRÎ±1-Deficient Mice Have Deficits in the Enteric Nervous System and Kidneys. Neuron, 1998, 21, 317-324.	8.1	443
71	Neurturin and GDNF Promote Proliferation and Survival of Enteric Neuron and Glial Progenitorsin Vitro. Developmental Biology, 1998, 200, 116-129.	2.0	211
72	Neurturin shares receptors and signal transduction pathways with glial cell line-derived neurotrophic factor in sympathetic neurons. Proceedings of the National Academy of Sciences of the United States of America, 1997, 94, 7018-7023.	7.1	201

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73	Neurturin, a Novel Neurotrophic Factor, Is Localized to Mouse Chromosome 17 and Human Chromosome 19p13.3. Genomics, 1997, 44, 137-140.	2.9	20
74	TrnR2, a Novel Receptor That Mediates Neurturin and GDNF Signaling through Ret. Neuron, 1997, 18, 793-802.	8.1	333
75	Neurturin, a relative of glial-cell-line-derived neurotrophic factor. Nature, 1996, 384, 467-470.	27.8	688
76	Functional analysis of protein N-myristoylation: metabolic labeling studies using three oxygen-substituted analogs of myristic acid and cultured mammalian cells provide evidence for protein-sequence-specific incorporation and analog-specific redistribution.. Proceedings of the National Academy of Sciences of the United States of America, 1990, 87, 8511-8515.	7.1	38
77	Protein N-myristoylation in Escherichia coli: reconstitution of a eukaryotic protein modification in bacteria.. Proceedings of the National Academy of Sciences of the United States of America, 1990, 87, 1506-1510.	7.1	249
78	Disruption of the yeast N-myristoyl transferase gene causes recessive lethality. Science, 1989, 243, 796-800.	12.6	196
79	Replication of human immunodeficiency virus 1 and Moloney murine leukemia virus is inhibited by different heteroatom-containing analogs of myristic acid.. Proceedings of the National Academy of Sciences of the United States of America, 1989, 86, 8655-8659.	7.1	93
80	Altered membrane association of p60v-src and a murine 63-kDa N-myristoyl protein after incorporation of an oxygen-substituted analog of myristic acid.. Proceedings of the National Academy of Sciences of the United States of America, 1989, 86, 5262-5266.	7.1	48
81	Electron-transfer-induced photocyclization reactions of arene-iminium salt systems. Effects of cation-diradical deprotonation and desilylation on the nature and efficiencies of reaction pathways followed. Journal of the American Chemical Society, 1987, 109, 2738-2745.	13.7	46
82	Arene-iminium salt electron-transfer photochemistry. Mechanistically interesting photoaddition processes. Journal of the American Chemical Society, 1987, 109, 2728-2737.	13.7	43
83	IDIOTYPES AND ANTI-IDIOTYPES11This work was supported by NIH grants AI-15926, CA-09118, GM-02016 and GM-07157.. , 1985, , 253-265.		0
84	Arene-iminium salt photochemistry. Dramatic effects of sequential electron-transfer-desilylation pathways on the nature and efficiency of photoaddition and photocyclization processes. Journal of the American Chemical Society, 1984, 106, 6439-6440.	13.7	25