Muriel Thoby-Brisson

List of Publications by Year
in descending order

56	3,042	201674	189892
papers	citations	27 h-index	50 g-index

64	64	64	1812
all docs	docs citations	times ranked	citing authors

#	Article	IF	Citations
1	Reconfiguration of the neural network controlling multiple breathing patterns: eupnea, sighs and gasps. Nature Neuroscience, 2000, 3, 600-607.	14.8	499
2	Hindbrain interneurons and axon guidance signaling critical for breathing. Nature Neuroscience, 2010, 13, 1066-1074.	14.8	206
3	Genetic identification of an embryonic parafacial oscillator coupling to the preBÃ¶tzinger complex. Nature Neuroscience, 2009, 12, 1028-1035.	14.8	186
4	Vesicular Glutamate Transporter 2 Is Required for Central Respiratory Rhythm Generation But Not for Locomotor Central Pattern Generation. Journal of Neuroscience, 2006, 26, 12294-12307.	3.6	183
5	Identification of Two Types of Inspiratory Pacemaker Neurons in the Isolated Respiratory Neural Network of Mice. Journal of Neurophysiology, 2001, 86, 104-112.	1.8	173
6	Breathing without CO₂Chemosensitivity in ConditionalPhox2bMutants. Journal of Neuroscience, 2011, 31, 12880-12888.	3.6	149
7	Emergence of the Pre-Botzinger Respiratory Rhythm Generator in the Mouse Embryo. Journal of Neuroscience, 2005, 25, 4307-4318.	3.6	124
8	Differential Modulation of Neural Network and Pacemaker Activity Underlying Eupnea and Sigh-Breathing Activities. Journal of Neurophysiology, 2008, 99, 2114-2125.	1.8	124
9	Mice Lacking Brain/Kidney Phosphate-Activated Glutaminase Have Impaired Glutamatergic Synaptic Transmission, Altered Breathing, Disorganized Goal-Directed Behavior and Die Shortly after Birth. Journal of Neuroscience, 2006, 26, 4660-4671.	3.6	117
10	Defective Respiratory Rhythmogenesis and Loss of Central Chemosensitivity in Phox2b Mutants Targeting Retrotrapezoid Nucleus Neurons. Journal of Neuroscience, 2009, 29, 14836-14846.	3.6	115
11	The Role of the Hyperpolarization-Activated Current in Modulating Rhythmic Activity in the Isolated Respiratory Network of Mice. Journal of Neuroscience, 2000, 20, 2994-3005.	3.6	114
12	Neuromodulatory Inputs Maintain Expression of a Lobster Motor Pattern-Generating Network in a Modulation-Dependent State: Evidence from Long-Term DecentralizationIn Vitro. Journal of Neuroscience, 1998, 18, 2212-2225.	3.6	99
13	Role of Inspiratory Pacemaker Neurons in Mediating the Hypoxic Response of the Respiratory NetworkIn Vitro. Journal of Neuroscience, 2000, 20, 5858-5866.	3.6	92
14	Expression of Functional Tyrosine Kinase B Receptors by Rhythmically Active Respiratory Neurons in the Pre-BÃ¶tzinger Complex of Neonatal Mice. Journal of Neuroscience, 2003, 23, 7685-7689.	3.6	87
15	Long-Term Neuromodulatory Regulation of a Motor Patternâ€“Generating Network: Maintenance of Synaptic Efficacy and Oscillatory Properties. Journal of Neurophysiology, 2002, 88, 2942-2953.	1.8	53
16	Early development of respiratory rhythm generation in mouse and chick. Respiratory Physiology and Neurobiology, 2002, 131, 5-13.	1.6	45
17	Teashirt 3 Regulates Development of Neurons Involved in Both Respiratory Rhythm and Airflow Control. Journal of Neuroscience, 2010, 30, 9465-9476.	3.6	43
18	Developmental gene control of brainstem function: views from the embryo. Progress in Biophysics and Molecular Biology, 2004, 84, 89-106.	2.9	39

#	Article	IF	Citations
19	Phox2b, congenital central hypoventilation syndrome and the control of respiration. Seminars in Cell and Developmental Biology, 2010, 21, 814-822.	5.0	37
20	Transition to Endogenous Bursting After Long-Term Decentralization Requires De Novo Transcription in a Critical Time Window. Journal of Neurophysiology, 2000, 84, 596-599.	1.8	36
21	From Hindbrain Segmentation to Breathing After Birth: Developmental Patterning in Rhombomeres 3 and 4. Molecular Neurobiology, 2003, 28, 277-294.	4.0	35
22	Remote Control of Respiratory Neural Network by Spinal Locomotor Generators. PLoS ONE, 2014, 9, e89670.	2.5	35
23	Development of pacemaker properties and rhythmogenic mechanisms in the mouse embryonic respiratory network. ELife, 2016, 5, .	6.0	35
24	Embryonic emergence of the respiratory rhythm generator. Respiratory Physiology and Neurobiology, 2009, 168, 86-91.	1.6	32
25	Brainâ€derived neurotrophic factor enhances fetal respiratory rhythm frequency in the mouse preBÃ¶tzinger complex in vitro. European Journal of Neuroscience, 2008, 28, 510-520.	2.6	31
26	Prenatal development of central rhythm generation. Respiratory Physiology and Neurobiology, 2011, 178, 146-155.	1.6	31
27	Respiratory circuits: development, function and models. Current Opinion in Neurobiology, 2012, 22, 676-685.	4.2	30
28	Sigh and Eupnea Rhythmogenesis Involve Distinct Interconnected Subpopulations: A Combined Computational and Experimental Study. ENeuro, 2015, 2, ENEURO.0074-14.2015.	1.9	28
29	Neural tube patterning by Krox20 and emergence of a respiratory control. Respiratory Physiology and Neurobiology, 2005, 149, 63-72.	1.6	27
30	Anatomical and functional development of the pre-BÃ¶tzinger complex in prenatal rodents. Journal of Applied Physiology, 2008, 104, 1213-1219.	2.5	27
31	Developmental basis of the rostro-caudal organization of the brainstem respiratory rhythm generator. Philosophical Transactions of the Royal Society B: Biological Sciences, 2009, 364, 2469-2476.	4.0	27
32	Emergence of sigh rhythmogenesis in the embryonic mouse. Journal of Physiology, 2014, 592, 2169-2181.	2.9	25
33	Ontogeny of central rhythm generation in chicks and rodents. Respiratory Physiology and Neurobiology, 2006, 154, 37-46.	1.6	23
34	Role of the K+-Clâ€“ Cotransporter KCC2a Isoform in Mammalian Respiration at Birth. ENeuro, 2018, 5, ENEURO.0264-18.2018.	1.9	19
35	Developmental molecular switches regulating breathing patterns in CNS. Respiratory Physiology and Neurobiology, 2003, 135, 121-132.	1.6	17
36	Acute exposure to zinc oxide nanoparticles critically disrupts operation of the respiratory neural network in neonatal rat. NeuroToxicology, 2018, 67, 150-160.	3.0	13

#	Article	IF	Citations
37	Obstructive Apneas in a Mouse Model of Congenital Central Hypoventilation Syndrome. American Journal of Respiratory and Critical Care Medicine, 2021, 204, 1200-1210.	5.6	11
38	Generation of BAC Transgenic Tadpoles Enabling Live Imaging of Motoneurons by Using the Urotensin II-Related Peptide (ust2b) Gene as a Driver. PLoS ONE, 2015, 10, e0117370.	2.5	10
39	Modulation of respiratory network activity by forelimb and hindlimb locomotor generators. European Journal of Neuroscience, 2020, 52, 3181-3195.	2.6	10
40	Functional limb muscle innervation prior to cholinergic transmitter specification during early metamorphosis in Xenopus. ELife, 2018, 7, .	6.0	9
41	Reconfiguration of the Central Respiratory Network Under Normoxic and Hypdxic Conditions. Advances in Experimental Medicine and Biology, 2001, 499, 171-178.	1.6	7
42	Abnormal inspiratory depth in Phox2a haploinsufficient mice. Neuroscience, 2007, 145, 384-392.	2.3	7
43	Brainstem Respiratory Oscillators Develop Independently of Neuronal Migration Defects in the Wnt/PCP Mouse Mutant looptail. PLoS ONE, 2012, 7, e31140.	2.5	6
44	Mechanisms Underlying Adaptation of Respiratory Network Activity to Modulatory Stimuli in the Mouse Embryo. Neural Plasticity, 2016, 2016, 1-10.	2.2	6
45	BDNF Preferentially Targets Membrane Properties of Rhythmically Active Neurons in the pre-BÃ¶tzinger Complex in Neonatal Mice. Advances in Experimental Medicine and Biology, 2004, 551, 115-120.	1.6	4
46	Genetic factors determining the functional organization of neural circuits controlling rhythmic movements. Progress in Brain Research, 2010, 187, 39-46.	1.4	4
47	The pre-BÃ¶tzinger oscillator in the mouse embryo. Journal of Physiology (Paris), 2006, 100, 284-289.	2.1	3
48	Acute role of the brain-derived neurotrophic factor (BDNF) on the respiratory neural network activity in mice in vitro. Journal of Physiology (Paris), 2006, 100, 290-296.	2.1	3
49	Neural mechanisms for sigh generation during prenatal development. Journal of Neurophysiology, 2018, 120, 1162-1172.	1.8	3
50	A Rodent Model of Mild Neonatal Hypoxic Ischemic Encephalopathy. Frontiers in Neurology, 2021, 12, 637947.	2.4	3
51	Emergence of neural net function during brain development. Journal of Physiology (Paris), 2003, 97, 1-3.	2.1	0
52	Title is missing!. Journal of Physiology (Paris), 2006, 100, 237-242.	2.1	0
53	Role of Na+ and Ca2+ currents in computational model of in-vitro sigh generation. BMC Neuroscience, 2015, 16, .	1.9	0
54	The embryonic development of hindbrain respiratory networks is unaffected by mutation of the planar polarity protein Scribble. Neuroscience, 2017, 357, 160-171.	2.3	0

#	Article	IF	Citations
55	Synergistic interaction between sensory inputs and propriospinal signalling underlying quadrupedal locomotion. Journal of Physiology, 2021, 599, 4477-4496.	2.9	0
56	Genes and development of respiratory rhythm generation. , 2008, , 169-189.		0