Patrick M Nolan

List of Publications by Year
in descending order

98 papers	8,290 citations	61945 43 h-index	48277 88 g-index
103 all docs	103 docs citations	103 times ranked	11857 citing authors

#	Article	IF	Citations
1	Zfhx3 modulates retinal sensitivity and circadian responses to light. FASEB Journal, 2021, 35, e21802.	0.2	5
2	Comprehensive phenotypic analysis of the Dp1Tyb mouse strain reveals a broad range of Down syndrome-related phenotypes. DMM Disease Models and Mechanisms, 2021, 14, .	1.2	17
3	Zfhx3-mediated genetic ablation of the SCN abolishes light entrainable circadian activity while sparing food anticipatory activity. IScience, 2021, 24, 103142.	1.9	7
4	Forward genetics identifies a novel sleep mutant with sleep state inertia and REM sleep deficits. Science Advances, 2020, 6, eabb3567.	4.7	15
5	Phenotyping in Mice Using Continuous Home Cage Monitoring and Ultrasonic Vocalization Recordings. Current Protocols in Mouse Biology, 2020, 10, e80.	1.2	11
6	Simultaneous Assessment of Circadian Rhythms and Sleep in Mice Using Passive Infrared Sensors: A User's Guide. Current Protocols in Mouse Biology, 2020, 10, e81.	1.2	5
7	The guanine nucleotide exchange factor, Spata13, influences social behaviour and nocturnal activity. Mammalian Genome, 2019, 30, 54-62.	1.0	8
8	Loss of Frrs1l disrupts synaptic AMPA receptor function, and results in neurodevelopmental, motor, cognitive and electrographical abnormalities. DMM Disease Models and Mechanisms, 2019, 12, .	1.2	22
9	Assessing mouse behaviour throughout the light/dark cycle using automated in-cage analysis tools. Journal of Neuroscience Methods, 2018, 300, 37-47.	1.3	128
10	A missense mutation in Katnal1 underlies behavioural, neurological and ciliary anomalies. Molecular Psychiatry, 2018, 23, 713-722.	4.1	28
11	Differential roles for cryptochromes in the mammalian retinal clock. FASEB Journal, 2018, 32, 4302-4314.	0.2	20
12	Meta-analysis of transcriptomic datasets identifies genes enriched in the mammalian circadian pacemaker. Nucleic Acids Research, 2017, 45, 9860-9873.	6.5	29
13	Phenotyping first-generation genome editing mutants: a new standard?. Mammalian Genome, 2017, 28, 377-382.	1.0	23
14	Inducible Knockout of Mouse Zfhx3 Emphasizes Its Key Role in Setting the Pace and Amplitude of the Adult Circadian Clock. Journal of Biological Rhythms, 2017, 32, 433-443.	1.4	34
15	Disruption of the homeodomain transcription factor orthopedia homeobox (Otp) is associated with obesity and anxiety. Molecular Metabolism, 2017, 6, 1419-1428.	3.0	15
16	The after-hours circadian mutant has reduced phenotypic plasticity in behaviors at multiple timescales and in sleep homeostasis. Scientific Reports, 2017, 7, 17765.	1.6	7
17	Analysis of Individual Mouse Activity in Group Housed Animals of Different Inbred Strains using a Novel Automated Home Cage Analysis System. Frontiers in Behavioral Neuroscience, 2016, 10, 106.	1.0	87
18	Melanopsin Regulates Both Sleep-Promoting and Arousal-Promoting Responses to Light. PLoS Biology, 2016, 14, e1002482.	2.6	129

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19	The Zfhx3-Mediated Axis Regulates Sleep and Interval Timing in Mice. Cell Reports, 2016, 16, 615-621.	2.9	33
20	Novel gene function revealed by mouse mutagenesis screens for models of age-related disease. Nature Communications, 2016, 7, 12444.	5.8	79
21	Loss-of-Function Mutations in FRRS1L Lead to an Epileptic-Dyskinetic Encephalopathy. American Journal of Human Genetics, 2016, 98, 1249-1255.	2.6	40
22	Reciprocal interactions between circadian clocks and aging. Mammalian Genome, 2016, 27, 332-340.	1.0	64
23	Early doors (Edo) mutant mouse reveals the importance of period 2 (PER2) PAS domain structure for circadian pacemaking. Proceedings of the National Academy of Sciences of the United States of America, 2016, 113, 2756-2761.	3.3	19
24	A twin and molecular genetics study of sleep paralysis and associated factors. Journal of Sleep Research, 2015, 24, 438-446.	1.7	42
25	A novel SOD1-ALS mutation separates central and peripheral effects of mutant SOD1 toxicity. Human Molecular Genetics, 2015, 24, 1883-1897.	1.4	52
26	Social jetlag, obesity and metabolic disorder: investigation in a cohort study. International Journal of Obesity, 2015, 39, 842-848.	1.6	332
27	Analysis of mammalian gene function through broad-based phenotypic screens across a consortium of mouse clinics. Nature Genetics, 2015, 47, 969-978.	9.4	137
28	Sleepâ€like behavior and 24â€h rhythm disruption in the Tc1 mouse model of Down syndrome. Genes, Brain and Behavior, 2015, 14, 209-216.	1.1	15
29	Genetic background influences age-related decline in visual and nonvisual retinal responses, circadian rhythms, and sleep. Neurobiology of Aging, 2015, 36, 380-393.	1.5	61
30	The Regulatory Factor ZFHX3 Modifies Circadian Function in SCN via an AT Motif-Driven Axis. Cell, 2015, 162, 607-621.	13.5	74
31	Dominant Î²-catenin mutations cause intellectual disability with recognizable syndromic features. Journal of Clinical Investigation, 2014, 124, 1468-1482.	3.9	110
32	Early motor deficits in mouse disease models are reliably uncovered using an automated home cage wheel-running system: a cross-laboratory validation. DMM Disease Models and Mechanisms, 2014, 7, 397-407.	1.2	33
33	Clusterin regulates Î²-amyloid toxicity via Dickkopf-1-driven induction of the wntâ€“PCPâ€“JNK pathway. Molecular Psychiatry, 2014, 19, 88-98.	4.1	197
34	Cognitive assessment of mice strains heterozygous for cell-adhesion genes reveals strain-specific alterations in timing. Philosophical Transactions of the Royal Society B: Biological Sciences, 2014, 369, 20120464.	1.8	7
35	Polymorphisms in the circadian expressed genes PER3 and ARNTL2 are associated with diurnal preference and GNÎ²3 with sleep measures. Journal of Sleep Research, 2014, 23, 595-604.	1.7	45
36	A Cross-Laboratory Investigation of Timing Endophenotypes in Mouse Behavior. Timing and Time Perception, 2014, 2, 35-50.	0.4	22

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37	Replication of Genomeâ€Wide association studies (<scp>GWAS</scp>) loci for sleep in the British G1219 cohort. American Journal of Medical Genetics Part B: Neuropsychiatric Genetics, 2013, 162, 431-438.	1.1	57
38	Distinct and Separable Roles for Endogenous CRY1 and CRY2 within the Circadian Molecular Clockwork of the Suprachiasmatic Nucleus, as Revealed by the Fbxl3^{Afh}Mutation. Journal of Neuroscience, 2013, 33, 7145-7153.	1.7	56
39	KATNAL1 Regulation of Sertoli Cell Microtubule Dynamics Is Essential for Spermiogenesis and Male Fertility. PLoS Genetics, 2012, 8, e1002697.	1.5	62
40	Generation of mouse mutants as tools in dissecting the molecular clock. Progress in Brain Research, 2012, 199, 247-265.	0.9	1
41	Reduced Anxiety and Depression-Like Behaviours in the Circadian Period Mutant Mouse Afterhours. PLoS ONE, 2012, 7, e38263.	1.1	54
42	Stringent requirement of a proper level of canonical WNT signalling activity for head formation in mouse embryo. Development (Cambridge), 2011, 138, 667-676.	1.2	50
43	Tuning the Period of the Mammalian Circadian Clock: Additive and Independent Effects of CK1Îµ^{Tau}and Fbxl3^{Afh}Mutations on Mouse Circadian Behavior and Molecular Pacemaking. Journal of Neuroscience, 2011, 31, 1539-1544.	1.7	42
44	Assessment of Circadian and Lightâ€Entrainable Parameters in Mice Using Wheelâ€Running Activity. Current Protocols in Mouse Biology, 2011, 1, 369-381.	1.2	19
45	Overexpression of Fto leads to increased food intake and results in obesity. Nature Genetics, 2010, 42, 1086-1092.	9.4	612
46	An ENU-induced mutation in mouse glycyl-tRNA synthetase (GARS) causes peripheral sensory and motor phenotypes creating a model of Charcot-Marie-Tooth type 2D peripheral neuropathy. DMM Disease Models and Mechanisms, 2009, 2, 359-373.	1.2	91
47	A point mutation in TRPC3 causes abnormal Purkinje cell development and cerebellar ataxia in moonwalker mice. Proceedings of the National Academy of Sciences of the United States of America, 2009, 106, 6706-6711.	3.3	187
48	Clocks go forward: progress in the molecular genetic analysis of rhythmic behaviour. Mammalian Genome, 2009, 20, 67-70.	1.0	7
49	Impaired Synaptic Plasticity and Motor Learning in Mice with a Point Mutation Implicated in Human Speech Deficits. Current Biology, 2008, 18, 354-362.	1.8	304
50	Reliability, robustness, and reproducibility in mouse behavioral phenotyping: a cross-laboratory study. Physiological Genomics, 2008, 34, 243-255.	1.0	229
51	When Clocks Go Bad: Neurobehavioural Consequences of Disrupted Circadian Timing. PLoS Genetics, 2008, 4, e1000040.	1.5	155
52	The After-Hours Mutant Reveals a Role for Fbxl3 in Determining Mammalian Circadian Period. Science, 2007, 316, 897-900.	6.0	434
53	SCFFbxl3 Controls the Oscillation of the Circadian Clock by Directing the Degradation of Cryptochrome Proteins. Science, 2007, 316, 900-904.	6.0	445
54	Genetic and Molecular Analysis of the Central and Peripheral Circadian Clockwork of Mice. Cold Spring Harbor Symposia on Quantitative Biology, 2007, 72, 85-94.	2.0	52

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55	Reaching and grasping phenotypes in the mouse (Mus musculus): A characterization of inbred strains and mutant lines. Neuroscience, 2007, 147, 573-582.	1.1	19
56	Mutations in Î±-Tubulin Cause Abnormal Neuronal Migration in Mice and Lissencephaly in Humans. Cell, 2007, 128, 45-57.	13.5	397
57	Defining the Cause of Skewed X-Chromosome Inactivation in X-Linked Mental Retardation by Use of a Mouse Model. American Journal of Human Genetics, 2007, 80, 1138-1149.	2.6	32
58	Novel Mouse Model of Autosomal Semidominant Adult Hypophosphatasia Has a Splice Site Mutation in the Tissue Nonspecific Alkaline Phosphatase Gene Akp2. Journal of Bone and Mineral Research, 2007, 22, 1397-1407.	3.1	34
59	A comparison of physiological and behavioural parameters in C57BL/6J mice undergoing food or water restriction regimes. Behavioural Brain Research, 2006, 173, 22-29.	1.2	56
60	The role of mutagenesis in defining genes in behaviour. European Journal of Human Genetics, 2006, 14, 651-659.	1.4	25
61	Gene-environment interactions differentially affect mouse strain behavioral parameters. Mammalian Genome, 2006, 17, 1113-1120.	1.0	42
62	Mutations in Gasdermin 3 Cause Aberrant Differentiation of the Hair Follicle and Sebaceous Gland. Journal of Investigative Dermatology, 2005, 124, 615-621.	0.3	68
63	Dissecting the genetic complexity of human 6p deletion syndromes by using a region-specific, phenotype-driven mouse screen. Proceedings of the National Academy of Sciences of the United States of America, 2005, 102, 12477-12482.	3.3	28
64	Screening for novel ENU-induced rhythm, entrainment and activity mutants. Genes, Brain and Behavior, 2004, 3, 196-205.	1.1	37
65	Towards a mutant map of the mouse ? new models of neurological, behavioural, deafness, bone, renal and blood disorders. Genetica, 2004, 122, 47-49.	0.5	17
66	New semidominant mutations that affect mouse development. Genesis, 2004, 40, 109-117.	0.8	26
67	Three Novel Pigmentation Mutants Generated by Genome-Wide Random ENU Mutagenesis in the Mouse. Comparative and Functional Genomics, 2004, 5, 123-127.	2.0	2
68	Mutation of Celsr1 Disrupts Planar Polarity of Inner Ear Hair Cells and Causes Severe Neural Tube Defects in the Mouse. Current Biology, 2003, 13, 1129-1133.	1.8	552
69	N-ethyl-N-nitrosourea mouse mutants in the dissection of behavioural and psychiatric disorders. European Journal of Pharmacology, 2003, 480, 205-217.	1.7	19
70	A Mutation inAf4Is Predicted to Cause Cerebellar Ataxia and Cataracts in the Robotic Mouse. Journal of Neuroscience, 2003, 23, 1631-1637.	1.7	66
71	Novel ENU-induced eye mutations in the mouse: models for human eye disease. Human Molecular Genetics, 2002, 11, 755-767.	1.4	126
72	ENU mutagenesis in the mouse: Application to human genetic disease. Briefings in Functional Genomics & Proteomics, 2002, 1, 278-289.	3.8	32

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73	Running endurance abnormality in mdx mice. Muscle and Nerve, 2002, 25, 207-211.	1.0	35
74	Novel phenotypes identified by plasma biochemical screening in the mouse. Mammalian Genome, 2002, 13, 595-602.	1.0	62
75	ENU mutagenesis reveals a highly mutable locus on mouse Chromosome 4 that affects ear morphogenesis. Mammalian Genome, 2002, 13, 142-148.	1.0	45
76	Mutations in Rab3a alter circadian period and homeostatic response to sleep loss in the mouse. Nature Genetics, 2002, 32, 290-295.	9.4	91
77	The Wheels Mutation in the Mouse Causes Vascular, Hindbrain, and Inner Ear Defects. Developmental Biology, 2001, 234, 244-260.	0.9	33
78	Toward an understanding of the function of sleep: New insights from mouse genetics. , 2001, , 218-237.		1
79	A systematic, genome-wide, phenotype-driven mutagenesis programme for gene function studies in the mouse. Nature Genetics, 2000, 25, 440-443.	9.4	657
80	Implementation of a large-scale ENU mutagenesis program: towards increasing the mouse mutant resource. Mammalian Genome, 2000, 11, 500-506.	1.0	109
81	Informatics for mutagenesis: the design of Mutabaseâ€”a distributed data recording system for animal husbandry, mutagenesis, and phenotypic analysis. Mammalian Genome, 2000, 11, 577-583.	1.0	20
82	Towards new models of disease and physiology in the neurosciences: the role of induced and naturally occurring mutations. Human Molecular Genetics, 2000, 9, 893-900.	1.4	38
83	Identification of two new Pmp22 mouse mutants using large-scale mutagenesis and a novel rapid mapping strategy. Human Molecular Genetics, 2000, 9, 1865-1871.	1.4	56
84	Generation of mouse mutants as a tool for functional genomics. Pharmacogenomics, 2000, 1, 243-255.	0.6	17
85	A retroviral Gene Trap Insertion into the Histone 3.3A Gene Causes Partial Neonatal Lethality, Stunted Growth, Neuromuscular Deficits and Male Sub-fertility in Transgenic Mice. Human Molecular Genetics, 1999, 8, 2489-2495.	1.4	103
86	Mouse mutagenesis-systematic studies of mammalian gene function. Human Molecular Genetics, 1998, 7, 1627-1633.	1.4	114
87	Random Mutagenesis Screen for Dominant Behavioral Mutations in Mice. Methods, 1997, 13, 379-395.	1.9	64
88	Mutagenesis and behavioral screening for altered circadian activity identifies the mouse mutant, Wheels. Brain Research, 1995, 705, 255-266.	1.1	36
89	Comparative mapping of 9 human chromosome 22q loci in the laboratory mouse. Human Molecular Genetics, 1993, 2, 1245-1252.	1.4	31
90	Neurodevelopmental events underlying information acquisition and storage. Network: Computation in Neural Systems, 1992, 3, 89-94.	2.2	19

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91	Intraventricular Infusions of Anti-Neural Cell Adhesion Molecules in a Discrete Posttraining Period Impair Consolidation of a Passive Avoidance Response in the Rat. Journal of Neurochemistry, 1992, 59, 1570-1573.	2.1	173
92	Hippocampal NCAM180 transiently increases sialylation during the acquisition and consolidation of a passive avoidance response in the adult rat. Journal of Neuroscience Research, 1992, 31, 513-523.	1.3	141
93	Dibutyryl cyclic AMP stimulates expression of ependymin mRNA and the synthesis and release of the protein into the culture medium by neuroblastoma cells (NB2a/d1). Journal of Neuroscience Research, 1992, 32, 239-244.	1.3	6
94	Learning-induced change in neural activity during acquisition and consolidation of a passive avoidance response in the rat. Neurochemical Research, 1990, 15, 551-558.	1.6	16
95	Soluble rat brain sialidase does not influence intracellular glycosylation of Golgi sialyltransferase or its constitutive glycoproteins. Neuroscience Letters, 1988, 88, 308-312.	1.0	3
96	Acquisition of a brief behavioural experience in the rat is inhibited by the brain-specific monoclonal antibody, F3-87-8. Neuroscience Letters, 1987, 79, 346-350.	1.0	11
97	Acquisition of a brief behavioral experience in the presence of neuron-specific and D2-CAM/N-CAM-specific antisera. Neurochemical Research, 1987, 12, 619-624.	1.6	15
98	Behavioral and Neurological Phenotyping in the Mouse. , 0, , 135-175.		3