J David Sweatt

List of Publications by Citations

209 papers	30,481 citations	93 h-index	174 g-index
216 ext. papers	32,953 ext. citations	9.1 avg, IF	7.5 L-index

#	Paper	IF	Citations
209	Lasting epigenetic influence of early-life adversity on the BDNF gene. *Biological Psychiatry*, **2009**, 65, 760-9	7.9	988
208	Covalent modification of DNA regulates memory formation. *Neuron*, **2007**, 53, 857-69	13.9	952
207	The MAPK cascade is required for mammalian associative learning. *Nature Neuroscience*, **1998**, 1, 602-9	25.5	933
206	The neuronal MAP kinase cascade: a biochemical signal integration system subserving synaptic plasticity and memory. *Journal of Neurochemistry*, **2001**, 76, 1-10	6	893
205	Regulation of histone acetylation during memory formation in the hippocampus. *Journal of Biological Chemistry*, **2004**, 279, 40545-59	5.4	867
204	Mitogen-activated protein kinases in synaptic plasticity and memory. *Current Opinion in Neurobiology*, **2004**, 14, 311-7	7.6	816
203	Dnmt1 and Dnmt3a maintain DNA methylation and regulate synaptic function in adult forebrain neurons. *Nature Neuroscience*, **2010**, 13, 423-30	25.5	759
202	A requirement for the mitogen-activated protein kinase cascade in hippocampal long term potentiation. *Journal of Biological Chemistry*, **1997**, 272, 19103-6	5.4	695
201	Epigenetic regulation of BDNF gene transcription in the consolidation of fear memory. *Journal of Neuroscience*, **2008**, 28, 10576-86	6.6	635
200	Epigenetic mechanisms in memory formation. *Nature Reviews Neuroscience*, **2005**, 6, 108-18	13.5	603
199	Activation of ERK/MAP kinase in the amygdala is required for memory consolidation of pavlovian fear conditioning. *Journal of Neuroscience*, **2000**, 20, 8177-87	6.6	543
198	Inhibitors of class 1 histone deacetylases reverse contextual memory deficits in a mouse model of Alzheimer's disease. *Neuropsychopharmacology*, **2010**, 35, 870-80	8.7	531
197	Molecular psychology: roles for the ERK MAP kinase cascade in memory. *Annual Review of Pharmacology and Toxicology*, **2002**, 42, 135-63	17.9	506
196	Beta-amyloid activates the mitogen-activated protein kinase cascade via hippocampal alpha7 nicotinic acetylcholine receptors: In vitro and in vivo mechanisms related to Alzheimer's disease. *Journal of Neuroscience*, **2001**, 21, 4125-33	6.6	479
195	Evidence that DNA (cytosine-5) methyltransferase regulates synaptic plasticity in the hippocampus. *Journal of Biological Chemistry*, **2006**, 281, 15763-73	5.4	478
194	Mild overexpression of MeCP2 causes a progressive neurological disorder in mice. *Human Molecular Genetics*, **2004**, 13, 2679-89	5.6	478
193	The mitogen-activated protein kinase cascade couples PKA and PKC to cAMP response element binding protein phosphorylation in area CA1 of hippocampus. *Journal of Neuroscience*, **1999**, 19, 4337-48	6.6	473

192	Activation of p42 mitogen-activated protein kinase in hippocampal long term potentiation. *Journal of Biological Chemistry*, **1996**, 271, 24329-32	5.4	466
191	Reelin and ApoE receptors cooperate to enhance hippocampal synaptic plasticity and learning. *Journal of Biological Chemistry*, **2002**, 277, 39944-52	5.4	464
190	Cortical DNA methylation maintains remote memory. *Nature Neuroscience*, **2010**, 13, 664-6	25.5	431
189	Histone methylation regulates memory formation. *Journal of Neuroscience*, **2010**, 30, 3589-99	6.6	427
188	Learning and memory and synaptic plasticity are impaired in a mouse model of Rett syndrome. *Journal of Neuroscience*, **2006**, 26, 319-27	6.6	417
187	Epigenetic mechanisms in cognition. *Neuron*, **2011**, 70, 813-29	13.9	378
186	Pet-1 ETS gene plays a critical role in 5-HT neuron development and is required for normal anxiety-like and aggressive behavior. *Neuron*, **2003**, 37, 233-47	13.9	371
185	Modulation of synaptic plasticity and memory by Reelin involves differential splicing of the lipoprotein receptor Apoer2. *Neuron*, **2005**, 47, 567-79	13.9	359
184	DNA methylation and memory formation. *Nature Neuroscience*, **2010**, 13, 1319-23	25.5	358
183	DNA methylation and histone acetylation work in concert to regulate memory formation and synaptic plasticity. *Neurobiology of Learning and Memory*, **2008**, 89, 599-603	3.1	342
182	Neural plasticity and behavior - sixty years of conceptual advances. *Journal of Neurochemistry*, **2016**, 139 Suppl 2, 179-199	6	332
181	TET1 controls CNS 5-methylcytosine hydroxylation, active DNA demethylation, gene transcription, and memory formation. *Neuron*, **2013**, 79, 1086-93	13.9	320
180	Structure and function of Kv4-family transient potassium channels. *Physiological Reviews*, **2004**, 84, 803-33	27.9	282
179	Protein kinase modulation of dendritic K+ channels in hippocampus involves a mitogen-activated protein kinase pathway. *Journal of Neuroscience*, **2002**, 22, 4860-8	6.6	279
178	Roles of serine/threonine phosphatases in hippocampal synaptic plasticity. *Nature Reviews Neuroscience*, **2001**, 2, 461-74	13.5	276
177	A necessity for MAP kinase activation in mammalian spatial learning. *Learning and Memory*, **1999**, 6, 478-90	2.8	275
176	ERK/MAPK regulates hippocampal histone phosphorylation following contextual fear conditioning. *Learning and Memory*, **2006**, 13, 322-8	2.8	273
175	Epigenetic modification of hippocampal Bdnf DNA in adult rats in an animal model of post-traumatic stress disorder. *Journal of Psychiatric Research*, **2011**, 45, 919-26	5.2	253

174	Experience-dependent epigenetic modifications in the central nervous system. *Biological Psychiatry*, **2009**, 65, 191-7	7.9	252
173	Deletion of Kv4.2 gene eliminates dendritic A-type K+ current and enhances induction of long-term potentiation in hippocampal CA1 pyramidal neurons. *Journal of Neuroscience*, **2006**, 26, 12143-51	6.6	252
172	A long CAG repeat in the mouse Sca1 locus replicates SCA1 features and reveals the impact of protein solubility on selective neurodegeneration. *Neuron*, **2002**, 34, 905-19	13.9	250
171	Epigenetic regulation of memory formation and maintenance. *Learning and Memory*, **2013**, 20, 61-74	2.8	249
170	The emerging field of neuroepigenetics. *Neuron*, **2013**, 80, 624-32	13.9	227
169	Derangements of hippocampal calcium/calmodulin-dependent protein kinase II in a mouse model for Angelman mental retardation syndrome. *Journal of Neuroscience*, **2003**, 23, 2634-44	6.6	214
168	Deletion of ERK2 mitogen-activated protein kinase identifies its key roles in cortical neurogenesis and cognitive function. *Journal of Neuroscience*, **2008**, 28, 6983-95	6.6	205
167	A fundamental role for KChIPs in determining the molecular properties and trafficking of Kv4.2 potassium channels. *Journal of Biological Chemistry*, **2003**, 278, 36445-54	5.4	205
166	The IkappaB kinase regulates chromatin structure during reconsolidation of conditioned fear memories. *Neuron*, **2007**, 55, 942-57	13.9	201
165	Rap1 couples cAMP signaling to a distinct pool of p42/44MAPK regulating excitability, synaptic plasticity, learning, and memory. *Neuron*, **2003**, 39, 309-25	13.9	199
164	The nuclear kinase mitogen- and stress-activated protein kinase 1 regulates hippocampal chromatin remodeling in memory formation. *Journal of Neuroscience*, **2007**, 27, 12732-42	6.6	195
163	The A-type potassium channel Kv4.2 is a substrate for the mitogen-activated protein kinase ERK. *Journal of Neurochemistry*, **2000**, 75, 2277-87	6	193
162	Deficiency in the inhibitory serine-phosphorylation of glycogen synthase kinase-3 increases sensitivity to mood disturbances. *Neuropsychopharmacology*, **2010**, 35, 1761-74	8.7	184
161	nMDA receptor activation increases cyclic AMP in area CA1 of the hippocampus via calcium/calmodulin stimulation of adenylyl cyclase. *Journal of Neurochemistry*, **1993**, 61, 1933-42	6	184
160	Annual Research Review: Epigenetic mechanisms and environmental shaping of the brain during sensitive periods of development. *Journal of Child Psychology and Psychiatry and Allied Disciplines*, **2011**, 52, 398-408	7.9	181
159	beta -Amyloid peptide activates alpha 7 nicotinic acetylcholine receptors expressed in Xenopus oocytes. *Journal of Biological Chemistry*, **2002**, 277, 25056-61	5.4	175
158	SCA7 knockin mice model human SCA7 and reveal gradual accumulation of mutant ataxin-7 in neurons and abnormalities in short-term plasticity. *Neuron*, **2003**, 37, 383-401	13.9	173
157	Accelerated plaque accumulation, associative learning deficits, and up-regulation of alpha 7 nicotinic receptor protein in transgenic mice co-expressing mutant human presenilin 1 and amyloid precursor proteins. *Journal of Biological Chemistry*, **2002**, 277, 22768-80	5.4	171

156	DNA methylation regulates associative reward learning. *Nature Neuroscience*, **2013**, 16, 1445-52	25.5	170
155	Increased histone acetyltransferase and lysine acetyltransferase activity and biphasic activation of the ERK/RSK cascade in insular cortex during novel taste learning. *Journal of Neuroscience*, **2001**, 21, 3383-91	6.6	170
154	Neuronal LRP1 functionally associates with postsynaptic proteins and is required for normal motor function in mice. *Molecular and Cellular Biology*, **2004**, 24, 8872-83	4.8	159
153	A role for the beta isoform of protein kinase C in fear conditioning. *Journal of Neuroscience*, **2000**, 20, 5906-14	6.6	159
152	Integrin requirement for hippocampal synaptic plasticity and spatial memory. *Journal of Neuroscience*, **2003**, 23, 7107-16	6.6	158
151	Receptor clustering is involved in Reelin signaling. *Molecular and Cellular Biology*, **2004**, 24, 1378-86	4.8	157
150	Loss of alpha7 nicotinic receptors enhances beta-amyloid oligomer accumulation, exacerbating early-stage cognitive decline and septohippocampal pathology in a mouse model of Alzheimer's disease. *Journal of Neuroscience*, **2010**, 30, 2442-53	6.6	149
149	Epigenetic marking of the BDNF gene by early-life adverse experiences. *Hormones and Behavior*, **2011**, 59, 315-20	3.7	148
148	Lithium ameliorates altered glycogen synthase kinase-3 and behavior in a mouse model of fragile X syndrome. *Biochemical Pharmacology*, **2010**, 79, 632-46	6	148
147	A role for superoxide in protein kinase C activation and induction of long-term potentiation. *Journal of Biological Chemistry*, **1998**, 273, 4516-22	5.4	148
146	A bioinformatics analysis of memory consolidation reveals involvement of the transcription factor c-rel. *Journal of Neuroscience*, **2004**, 24, 3933-43	6.6	144
145	Epigenetic mechanisms in learned fear: implications for PTSD. *Neuropsychopharmacology*, **2013**, 38, 77-98	7.7	142
144	ERK/MAPK regulates the Kv4.2 potassium channel by direct phosphorylation of the pore-forming subunit. *American Journal of Physiology - Cell Physiology*, **2006**, 290, C852-61	5.4	140
143	The role of mitochondrial porins and the permeability transition pore in learning and synaptic plasticity. *Journal of Biological Chemistry*, **2002**, 277, 18891-7	5.4	138
142	Calcium-calmodulin-dependent kinase II modulates Kv4.2 channel expression and upregulates neuronal A-type potassium currents. *Journal of Neuroscience*, **2004**, 24, 3643-54	6.6	136
141	Mitochondrial regulation of synaptic plasticity in the hippocampus. *Journal of Biological Chemistry*, **2003**, 278, 17727-34	5.4	134
140	Hippocampal function in cognition. *Psychopharmacology*, **2004**, 174, 99-110	4.7	133
139	Transient activation of cyclic AMP-dependent protein kinase during hippocampal long-term potentiation. *Journal of Biological Chemistry*, **1996**, 271, 30436-41	5.4	132

138	Beta 1-integrins are required for hippocampal AMPA receptor-dependent synaptic transmission, synaptic plasticity, and working memory. *Journal of Neuroscience*, **2006**, 26, 223-32	6.6	131
137	A role for ERK MAP kinase in physiologic temporal integration in hippocampal area CA1. *Learning and Memory*, **2003**, 10, 26-39	2.8	128
136	Long-term potentiation and contextual fear conditioning increase neuronal glutamate uptake. *Nature Neuroscience*, **2002**, 5, 155-61	25.5	127
135	Adult mice maintained on a high-fat diet exhibit object location memory deficits and reduced hippocampal SIRT1 gene expression. *Neurobiology of Learning and Memory*, **2012**, 98, 25-32	3.1	125
134	Molecular neurobiology of human cognition. *Neuron*, **2002**, 33, 845-8	13.9	125
133	RGS14 is a natural suppressor of both synaptic plasticity in CA2 neurons and hippocampal-based learning and memory. *Proceedings of the National Academy of Sciences of the United States of America*, **2010**, 107, 16994-8	11.5	124
132	Kalirin regulates cortical spine morphogenesis and disease-related behavioral phenotypes. *Proceedings of the National Academy of Sciences of the United States of America*, **2009**, 106, 13058-63	11.5	123
131	Protein kinase inhibition by omega-3 fatty acids. *Journal of Biological Chemistry*, **2001**, 276, 10888-96	5.4	122
130	Regulation of chromatin structure in memory formation. *Current Opinion in Neurobiology*, **2009**, 19, 336-42	7.6	120
129	Histone H2A.Z subunit exchange controls consolidation of recent and remote memory. *Nature*, **2014**, 515, 582-6	50.4	119
128	Mouse genetic approaches to investigating calcium/calmodulin-dependent protein kinase II function in plasticity and cognition. *Journal of Neuroscience*, **2004**, 24, 8410-5	6.6	118
127	Persistent and transcriptionally-dependent increase in protein phosphorylation in long-term facilitation of Aplysia sensory neurons. *Nature*, **1989**, 339, 51-4	50.4	118
126	Nitric oxide synthase-independent long-term potentiation in area CA1 of hippocampus. *NeuroReport*, **1993**, 4, 919-22	1.7	117
125	c-Rel, an NF-kappaB family transcription factor, is required for hippocampal long-term synaptic plasticity and memory formation. *Learning and Memory*, **2008**, 15, 539-49	2.8	110
124	Cognitive neuroepigenetics: a role for epigenetic mechanisms in learning and memory. *Neurobiology of Learning and Memory*, **2011**, 96, 2-12	3.1	106
123	Genetic deletion of Gadd45b, a regulator of active DNA demethylation, enhances long-term memory and synaptic plasticity. *Journal of Neuroscience*, **2012**, 32, 17059-66	6.6	103
122	Increased phosphorylation of a 17-kDa protein kinase C substrate (P17) in long-term potentiation. *Journal of Neurochemistry*, **1992**, 58, 1576-9	6	103
121	Behavioral epigenetics. *Annals of the New York Academy of Sciences*, **2011**, 1226, 14-33	6.5	101

120	Reelin and cyclin-dependent kinase 5-dependent signals cooperate in regulating neuronal migration and synaptic transmission. *Journal of Neuroscience*, **2004**, 24, 1897-906	6.6	100
119	An epigenetic hypothesis of aging-related cognitive dysfunction. *Frontiers in Aging Neuroscience*, **2010**, 2, 9	5.3	98
118	Functional dissection of Reelin signaling by site-directed disruption of Disabled-1 adaptor binding to apolipoprotein E receptor 2: distinct roles in development and synaptic plasticity. *Journal of Neuroscience*, **2006**, 26, 2041-52	6.6	98
117	MAPK recruitment by beta-amyloid in organotypic hippocampal slice cultures depends on physical state and exposure time. *Journal of Neurochemistry*, **2004**, 91, 349-61	6	97
116	Impaired conditioned fear and enhanced long-term potentiation in Fmr2 knock-out mice. *Journal of Neuroscience*, **2002**, 22, 2753-63	6.6	93
115	Epigenetic treatments for cognitive impairments. *Neuropsychopharmacology*, **2012**, 37, 247-60	8.7	90
114	Regulation of nuclear factor kappaB in the hippocampus by group I metabotropic glutamate receptors. *Journal of Neuroscience*, **2006**, 26, 4870-9	6.6	83
113	Striatal histone modifications in models of levodopa-induced dyskinesia. *Journal of Neurochemistry*, **2008**, 106, 486-94	6	82
112	DNA methylation regulates neuronal glutamatergic synaptic scaling. *Science Signaling*, **2015**, 8, ra61	8.8	80
111	Cellular, molecular, and epigenetic mechanisms in non-associative conditioning: implications for pain and memory. *Neurobiology of Learning and Memory*, **2013**, 105, 133-50	3.1	78
110	Pitt-Hopkins Syndrome: intellectual disability due to loss of TCF4-regulated gene transcription. *Experimental and Molecular Medicine*, **2013**, 45, e21	12.8	78
109	Reduced expression of the NMDA receptor-interacting protein SynGAP causes behavioral abnormalities that model symptoms of Schizophrenia. *Neuropsychopharmacology*, **2009**, 34, 1659-72	8.7	78
108	Kinase suppressor of Ras1 compartmentalizes hippocampal signal transduction and subserves synaptic plasticity and memory formation. *Neuron*, **2006**, 50, 765-79	13.9	76
107	Tcf4 Regulates Synaptic Plasticity, DNA Methylation, and Memory Function. *Cell Reports*, **2016**, 16, 2666-2685	26.8	74
106	Altered protein synthesis is a trigger for long-term memory formation. *Neurobiology of Learning and Memory*, **2008**, 89, 247-59	3.1	71
105	Studies with synthetic peptide substrates derived from the neuronal protein neurogranin reveal structural determinants of potency and selectivity for protein kinase C. *Biochemistry*, **1993**, 32, 1032-9	3.2	71
104	Enhanced phosphorylation of the postsynaptic protein kinase C substrate RC3/neurogranin during long-term potentiation. *Brain Research*, **1997**, 749, 181-7	3.7	68
103	Mitochondria mediate tumor necrosis factor-alpha/NF-kappaB signaling in skeletal muscle myotubes. *Antioxidants and Redox Signaling*, **1999**, 1, 97-104	8.4	68

102	Oxidation-induced persistent activation of protein kinase C in hippocampal homogenates. *Biochemical and Biophysical Research Communications*, **1992**, 187, 1439-45	3.4	68
101	Protein kinase signal transduction cascades in mammalian associative conditioning. *Neuroscientist*, **2002**, 8, 122-31	7.6	67
100	Input-specific immunolocalization of differentially phosphorylated Kv4.2 in the mouse brain. *Learning and Memory*, **2000**, 7, 321-32	2.8	65
99	Reactive oxygen species mediate activity-dependent neuron-glia signaling in output fibers of the hippocampus. *Journal of Neuroscience*, **1999**, 19, 7241-8	6.6	63
98	DNA Methylation in Memory Formation: Emerging Insights. *Neuroscientist*, **2015**, 21, 475-89	7.6	61
97	Mice lacking Tropomodulin-2 show enhanced long-term potentiation, hyperactivity, and deficits in learning and memory. *Molecular and Cellular Neurosciences*, **2003**, 23, 1-12	4.8	58
96	Pharmacological Selectivity Within Class I Histone Deacetylases Predicts Effects on Synaptic Function and Memory Rescue. *Neuropsychopharmacology*, **2015**, 40, 2307-16	8.7	57
95	DNA methylation and its implications and accessibility for neuropsychiatric therapeutics. *Annual Review of Pharmacology and Toxicology*, **2015**, 55, 591-611	17.9	57
94	Developmental regulation of Eed complex composition governs a switch in global histone modification in brain. *Journal of Biological Chemistry*, **2007**, 282, 9962-9972	5.4	56
93	Obesity Weighs down Memory through a Mechanism Involving the Neuroepigenetic Dysregulation of Sirt1. *Journal of Neuroscience*, **2016**, 36, 1324-35	6.6	55
92	Transcriptional and epigenetic regulation of Hebbian and non-Hebbian plasticity. *Neuropharmacology*, **2014**, 80, 3-17	5.5	55
91	Serine proteases, serine protease inhibitors, and protease-activated receptors: roles in synaptic function and behavior. *Brain Research*, **2011**, 1407, 107-22	3.7	54
90	Normal development and fertility of knockout mice lacking the tumor suppressor gene LRP1b suggest functional compensation by LRP1. *Molecular and Cellular Biology*, **2004**, 24, 3782-93	4.8	53
89	Histone H3 lysine K4 methylation and its role in learning and memory. *Epigenetics and Chromatin*, **2019**, 12, 7	5.8	52
88	Mechanisms of age-related cognitive change and targets for intervention: epigenetics. *Journals of Gerontology - Series A Biological Sciences and Medical Sciences*, **2012**, 67, 741-6	6.4	51
87	FMRFamide reverses protein phosphorylation produced by 5-HT and cAMP in Aplysia sensory neurons. *Nature*, **1989**, 342, 275-8	50.4	51
86	The role of calsenilin/DREAM/KChIP3 in contextual fear conditioning. *Learning and Memory*, **2009**, 16, 167-77	2.8	50
85	Protected-site phosphorylation of protein kinase C in hippocampal long-term potentiation. *Journal of Neurochemistry*, **1998**, 71, 1075-85	6	48

84	Learning and memory deficits in mice lacking protease activated receptor-1. *Neurobiology of Learning and Memory*, **2007**, 88, 295-304	3.1	47
83	Amnesia or retrieval deficit? Implications of a molecular approach to the question of reconsolidation. *Learning and Memory*, **2006**, 13, 498-505	2.8	46
82	Secretin receptor-deficient mice exhibit impaired synaptic plasticity and social behavior. *Human Molecular Genetics*, **2006**, 15, 3241-50	5.6	46
81	Neuronal MEK is important for normal fear conditioning in mice. *Journal of Neuroscience Research*, **2004**, 75, 760-70	4.4	46
80	Astroglial nuclear factor-kappaB regulates learning and memory and synaptic plasticity in female mice. *Journal of Neurochemistry*, **2008**, 104, 611-23	6	45
79	Leitmotifs in the biochemistry of LTP induction: amplification, integration and coordination. *Journal of Neurochemistry*, **2001**, 77, 961-71	6	45
78	Protease-activated receptor-1 modulates hippocampal memory formation and synaptic plasticity. *Journal of Neurochemistry*, **2013**, 124, 109-22	6	44
77	Interindividual Variability in Stress Susceptibility: A Role for Epigenetic Mechanisms in PTSD. *Frontiers in Psychiatry*, **2013**, 4, 60	5	44
76	The role of the Gadd45 family in the nervous system: a focus on neurodevelopment, neuronal injury, and cognitive neuroepigenetics. *Advances in Experimental Medicine and Biology*, **2013**, 793, 81-119	3.6	42
75	Disruption of neocortical histone H3 homeostasis by soluble A□implications for Alzheimer's disease. *Neurobiology of Aging*, **2013**, 34, 2081-90	5.6	41
74	Alpha3-integrins are required for hippocampal long-term potentiation and working memory. *Learning and Memory*, **2007**, 14, 606-15	2.8	41
73	Extra-coding RNAs regulate neuronal DNA methylation dynamics. *Nature Communications*, **2016**, 7, 12091	17.4	41
72	Dynamic DNA methylation regulates neuronal intrinsic membrane excitability. *Science Signaling*, **2016**, 9, ra83	8.8	40
71	Dynamic DNA methylation controls glutamate receptor trafficking and synaptic scaling. *Journal of Neurochemistry*, **2016**, 137, 312-30	6	40
70	Experience-dependent epigenomic reorganization in the hippocampus. *Learning and Memory*, **2017**, 24, 278-288	2.8	39
69	Neuroscience. Epigenetics and cognitive aging. *Science*, **2010**, 328, 701-2	33.3	39
68	Molecular genetics of human cognition. *Molecular Interventions: Pharmacological Perspectives From Biology, Chemistry and Genomics*, **2002**, 2, 376-91, 339		36
67	Postsynaptic contributions to hippocampal network hyperexcitability induced by chronic activity blockade in vivo. *European Journal of Neuroscience*, **2003**, 18, 1861-72	3.5	35

66	Kv4.2 is a locus for PKC and ERK/MAPK cross-talk. *Biochemical Journal*, **2009**, 417, 705-15	3.8	34
65	A myelin-related transcriptomic profile is shared by Pitt-Hopkins syndrome models and human autism spectrum disorder. *Nature Neuroscience*, **2020**, 23, 375-385	25.5	34
64	Memory-Associated Dynamic Regulation of the "Stable" Core of the Chromatin Particle. *Neuron*, **2015**, 87, 1-4	13.9	32
63	Generation and characterization of LANP/pp32 null mice. *Molecular and Cellular Biology*, **2004**, 24, 3140-9	4.8	32
62	Enhanced hippocampal long-term potentiation and fear memory in Btbd9 mutant mice. *PLoS ONE*, **2012**, 7, e35518	3.7	31
61	DNA methylation regulates neurophysiological spatial representation in memory formation. *Neuroepigenetics*, **2015**, 2, 1-8		30
60	Tet1 Oxidase Regulates Neuronal Gene Transcription, Active DNA Hydroxy-methylation, Object Location Memory, and Threat Recognition Memory. *Neuroepigenetics*, **2015**, 4, 12-27		30
59	Epigenetic regulation of genes in learning and memory. *Essays in Biochemistry*, **2010**, 48, 263-74	7.6	30
58	Increased c-fos expression in the central nucleus of the amygdala and enhancement of cued fear memory in Dyt1 DeltaGAG knock-in mice. *Neuroscience Research*, **2009**, 65, 228-35	2.9	30
57	A Biochemical Blueprint for Long-Term Memory. *Learning and Memory*, **1999**, 6, 381-388	2.8	30
56	Regulation of myelin basic protein phosphorylation by mitogen-activated protein kinase during increased action potential firing in the hippocampus. *Journal of Neurochemistry*, **1999**, 73, 1090-7	6	28
55	Amygdala kindling alters protein kinase C activity in dentate gyrus. *Journal of Neurochemistry*, **1992**, 59, 1761-9	6	28
54	Hippocampal phenotypes in kalirin-deficient mice. *Molecular and Cellular Neurosciences*, **2011**, 46, 45-54	4.8	27
53	The other half of Hebb: K+ channels and the regulation of neuronal excitability in the hippocampus. *Molecular Neurobiology*, **2002**, 25, 51-66	6.2	27
52	Epigenetic modifications in neurons are essential for formation and storage of behavioral memory. *Neuropsychopharmacology*, **2011**, 36, 357-8	8.7	26
51	Pitt-Hopkins Mouse Model has Altered Particular Gastrointestinal Transits In Vivo. *Autism Research*, **2015**, 8, 629-33	5.1	23
50	NADPH oxidase mediates beta-amyloid peptide-induced activation of ERK in hippocampal organotypic cultures. *Molecular Brain*, **2009**, 2, 31	4.5	21
49	Rhythms of memory. *Nature Neuroscience*, **2008**, 11, 993-4	25.5	21

48	Increased phosphorylation of myelin basic protein during hippocampal long-term potentiation. *Journal of Neurochemistry*, **1997**, 68, 1960-7	6	20
47	Broad domains of histone 3 lysine 4 trimethylation are associated with transcriptional activation in CA1 neurons of the hippocampus during memory formation. *Neurobiology of Learning and Memory*, **2019**, 161, 149-157	3.1	16
46	Pre-synaptic release deficits in a DYT1 dystonia mouse model. *PLoS ONE*, **2013**, 8, e72491	3.7	15
45	Drugging the methylome: DNA methylation and memory. *Critical Reviews in Biochemistry and Molecular Biology*, **2016**, 51, 185-94	8.7	14
44	Aging and energetics' 'Top 40' future research opportunities 2010-2013. *F1000Research*, **2014**, 3, 219	3.6	14
43	Behavioral and electrophysiological characterization of Dyt1 heterozygous knockout mice. *PLoS ONE*, **2015**, 10, e0120916	3.7	14
42	Memory-forming chemical reactions. *Reviews in the Neurosciences*, **2001**, 12, 41-50	4.7	13
41	Glutamate uptake in synaptic plasticity: from mollusc to mammal. *Current Molecular Medicine*, **2002**, 2, 593-603	2.5	13
40	An Antisense Oligonucleotide Leads to Suppressed Transcription of Hdac2 and Long-Term Memory Enhancement. *Molecular Therapy - Nucleic Acids*, **2020**, 19, 1399-1412	10.7	12
39	APOE genotype modifies the association between central arterial stiffening and cognition in older adults. *Neurobiology of Aging*, **2018**, 67, 120-127	5.6	12
38	Genetics of childhood disorders: LII. Learning and memory, part 5: human cognitive disorders and the ras/ERK/CREB pathway. *Journal of the American Academy of Child and Adolescent Psychiatry*, **2003**, 42, 873-6	7.2	12
37	An epigenomics approach to individual differences and its translation to neuropsychiatric conditions. *Dialogues in Clinical Neuroscience*, **2016**, 18, 289-298	5.7	12
36	Cognition-Enhancing Vagus Nerve Stimulation Alters the Epigenetic Landscape. *Journal of Neuroscience*, **2019**, 39, 3454-3469	6.6	10
35	Development of a database of amino acid sequences for proteins identified and isolated on two-dimensional polyacrylamide gels. *Electrophoresis*, **1989**, 10, 152-7	3.6	10
34	Signal transduction mechanisms in memory disorders. *Progress in Brain Research*, **2006**, 157, 25-41	2.9	9
33	Genetics of childhood disorders: LI. Learning and memory, Part 4: Human cognitive disorders and the ras/ERK/CREB pathway. *Journal of the American Academy of Child and Adolescent Psychiatry*, **2003**, 42, 741-4	7.2	9
32	Noninvasive, in vivo approaches to evaluating behavior and exercise physiology in mouse models of mitochondrial disease. *Methods*, **2002**, 26, 364-70	4.6	9
31	The Epigenetic Basis of Individuality. *Current Opinion in Behavioral Sciences*, **2019**, 25, 51-56	4	8

30	Neuroscience. Creating stable memories. *Science*, **2011**, 331, 869-70	33.3	7
29	Isoforms Differentially Regulate Gene Expression, Synaptic Transmission, and Memory in the Mammalian Brain. *Journal of Neuroscience*, **2021**, 41, 578-593	6.6	6
28	An Overview of the Molecular Basis of Epigenetics **2013**, 3-33		4
27	Autosomal dominant retinitis pigmentosa rhodopsin mutant Q344X drives specific alterations in chromatin complex gene transcription. *Molecular Vision*, **2018**, 24, 153-164	2.3	4
26	GENE EXPRESSION. Chromatin controls behavior. *Science*, **2016**, 353, 218-9	33.3	3
25	Rodent Behavioral Learning and Memory Models **2010**, 76-103		2
24	Covalent Modification of DNA Regulates Memory Formation. *Neuron*, **2008**, 59, 1051	13.9	2
23	An atomic switch for memory. *Cell*, **2007**, 129, 23-4	56.2	2
22	Synthetic female gonadal hormones alter neurodevelopmental programming and behavior in F offspring. *Hormones and Behavior*, **2020**, 126, 104848	3.7	1
21	DNA Methylation in Memory Formation. *Research and Perspectives in Neurosciences*, **2012**, 81-96		1
20	Aging-Related Memory Disorders Alzheimer Disease **2010**, 292-319		1
19	NF- B in Neurons **2006**, 147-161		1
18	Regulation of adenylyl cyclase in LTP. *Behavioral and Brain Sciences*, **1995**, 18, 485	0.9	1
17	The Chemistry of Perpetual Memory **2003**, 367-390		1
16	Locus-Specific DNA Methylation Assays to Study Glutamate Receptor Regulation. *Methods in Molecular Biology*, **2019**, 1941, 167-188	1.4	1
15	LTP Does Not Equal Memory **2003**, 263-306		1
14	Aging-Related Memory Disorders **2003**, 337-366		1
13	Defects of myelination are common pathophysiology in syndromic and idiopathic autism spectrum disorder		1

List of Publications

12 The Biochemistry of LTP Induction **2003**, 147-188 0

11 Epigenetics of Memory Processes **2017**, 347-358

10 Epigenetic Mechanisms in Learning and Memory **2013**, 121-170

9 Epigenetics of Memory Processes **2011**, 381-390

8 Biochemical Mechanisms for Information Storage at the Cellular Level **2010**, 208-235

7 Molecular Genetic Mechanisms for Long-Term Information Storage at the Cellular Level **2010**, 236-267

6 Inherited Disorders of Human Memory: Mental Retardation Syndromes **2010**, 268-291

5 Inherited Disorders of Human Memory **2003**, 307-336

4 Rodent Behavioral Learning and Memory Models **2003**, 29-60

3 Biochemical Mechanisms for Short-Term Information Storage at the Cellular Level **2003**, 189-232

2 Biochemical Mechanisms for Long-Term Information Storage at the Cellular Level **2003**, 233-262

1 Complexities of Long-Term Potentiation **2003**, 117-146