Barbara L Finlay

List of Publications by Year
in descending order

73 papers	5,505 citations	87843 38 h-index	82499 72 g-index
75 all docs	75 docs citations	75 times ranked	4909 citing authors

#	Article	IF	Citations
1	Extrapolating brain development from experimental species to humans. NeuroToxicology, 2007, 28, 931-937.	1.4	735
2	Modeling Transformations of Neurodevelopmental Sequences across Mammalian Species. Journal of Neuroscience, 2013, 33, 7368-7383.	1.7	687
3	Developmental structure in brain evolution. Behavioral and Brain Sciences, 2001, 24, 263-278.	0.4	452
4	Web-based method for translating neurodevelopment from laboratory species to humans. Neuroinformatics, 2007, 5, 79-94.	1.5	288
5	Patterns of Vertebrate Neurogenesis and the Paths of Vertebrate Evolution. Brain, Behavior and Evolution, 1998, 52, 232-242.	0.9	175
6	A conserved pattern of brain scaling from sharks to primates. Proceedings of the National Academy of Sciences of the United States of America, 2010, 107, 12946-12951.	3.3	166
7	Topography of visual and somatosensory projections to the superior colliculus of the golden hamster. Brain Research, 1978, 142, 223-235.	1.1	163
8	The early development of thalamocortical and corticothalamic projections. Journal of Comparative Neurology, 1993, 335, 16-41.	0.9	156
9	Systematic, Cross-Cortex Variation in Neuron Numbers in Rodents and Primates. Cerebral Cortex, 2015, 25, 147-160.	1.6	131
10	Developmental mechanisms channeling cortical evolution. Trends in Neurosciences, 2015, 38, 69-76.	4.2	124
11	Anomalous ipsilateral retinotectal projections in syrian hamsters with early lesions: Topography and functional capacity. Journal of Comparative Neurology, 1979, 183, 721-740.	0.9	119
12	The course of human events: predicting the timing of primate neural development. Developmental Science, 2000, 3, 57-66.	1.3	110
13	The role of the superior colliculus in visually guided locomotion and visual orienting in the hamster. Physiological Psychology, 1980, 8, 20-28.	0.8	105
14	Systematic, balancing gradients in neuron density and number across the primate isocortex. Frontiers in Neuroanatomy, 2012, 6, 28.	0.9	101
15	Regressive Events in Brain Development and Scenarios for Vertebrate Brain Evolution. Brain, Behavior and Evolution, 1987, 30, 102-117.	0.9	96
16	Evo-Devo and Brain Scaling: Candidate Developmental Mechanisms for Variation and Constancy in Vertebrate Brain Evolution. Brain, Behavior and Evolution, 2011, 78, 248-257.	0.9	78
17	Peripheral variability and central constancy in mammalian visual system evolution. Proceedings of the Royal Society B: Biological Sciences, 2005, 272, 91-100.	1.2	73
18	Developmental sources of conservation and variation in the evolution of the primate eye. Proceedings of the National Academy of Sciences of the United States of America, 2009, 106, 8963-8968.	3.3	72

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19	Short-term response variability of monkey striate neurons. Brain Research, 1976, 105, 347-349.	1.1	71
20	Modeling local and cross-species neuron number variations in the cerebral cortex as arising from a common mechanism. Proceedings of the National Academy of Sciences of the United States of America, 2014, 111, 17642-17647.	3.3	66
21	Thinking outside the cortex: social motivation in the evolution and development of language. Developmental Science, 2011, 14, 417-430.	1.3	63
22	Number and topography of cones, rods and optic nerve axons in New and Old World primates. Visual Neuroscience, 2008, 25, 289-299.	0.5	62
23	Orderly compression of the retinotectal projection following partial tectal ablation in the newborn hamster. Nature, 1979, 280, 153-155.	13.7	56
24	Regulation of retinal ganglion cell axon arbor size by target availability: Mechanisms of compression and expansion of the retinotectal projection. Journal of Comparative Neurology, 1994, 344, 581-597.	0.9	56
25	Allocating structure to function: the strong links between neuroplasticity and natural selection. Frontiers in Human Neuroscience, 2014, 7, 918.	1.0	56
26	Comparing Adult Hippocampal Neurogenesis Across Species: Translating Time to Predict the Tempo in Humans. Frontiers in Neuroscience, 2018, 12, 706.	1.4	54
27	Cell death and the creation of regional differences in neuronal numbers. Journal of Neurobiology, 1992, 23, 1159-1171.	3.7	53
28	Evo-Devo and the Primate Isocortex: The Central Organizing Role of Intrinsic Gradients of Neurogenesis. Brain, Behavior and Evolution, 2014, 84, 81-92.	0.9	53
29	Endless minds most beautiful. Developmental Science, 2007, 10, 30-34.	1.3	52
30	Scaling of neuron number and volume of the pulvinar complex in new world primates: Comparisons with humans, other primates, and mammals. Journal of Comparative Neurology, 2007, 504, 265-274.	0.9	49
31	Cell degeneration in early development of the forebrain and cerebellum. Anatomy and Embryology, 1983, 167, 439-447.	1.5	48
32	Embracing covariation in brain evolution. Progress in Brain Research, 2012, 195, 71-87.	0.9	48
33	The developing and evolving retina: Using time to organize form. Brain Research, 2008, 1192, 5-16.	1.1	45
34	Factors controlling the dendritic arborization of retinal ganglion cells. Visual Neuroscience, 1996, 13, 721-733.	0.5	43
35	Mapping behavioural evolution onto brain evolution: the strategic roles of conserved organization in individuals and species. Philosophical Transactions of the Royal Society B: Biological Sciences, 2011, 366, 2111-2123.	1.8	42
36	The pain of altruism. Trends in Cognitive Sciences, 2014, 18, 615-617.	4.0	41

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37	The cortex in multidimensional space: where do cortical areas come from?. Developmental Science, 2001, 4, 125-142.	1.3	40
38	Concepts, goals and the control of survival-related behaviors. Current Opinion in Behavioral Sciences, 2018, 24, 172-179.	2.0	40
39	Developmental structure in brain evolution. Behavioral and Brain Sciences, 2001, 24, .	0.4	37
40	THE OUTCOME OF PERINATAL BRAIN DAMAGE: THE RÃ"LE OF NORMAL NEURON LOSS AND AXON RETRACTION. Developmental Medicine and Child Neurology, 1986, 28, 375-389.	1.1	37
41	Mammalian brain development and our grandmothering life history. Physiology and Behavior, 2018, 193, 55-68.	1.0	37
42	Human exceptionalism. Trends in Cognitive Sciences, 2013, 17, 199-201.	4.0	34
43	Variation in Human Brains May Facilitate Evolutionary Change toward a Limited Range of Phenotypes. Brain, Behavior and Evolution, 2013, 81, 74-85.	0.9	34
44	Differential elasticity of the immature retina: A contribution to the development of the area centralis?. Visual Neuroscience, 1989, 2, 117-120.	0.5	33
45	A neuroethological approach to hamster vision. Behavioural Brain Research, 1980, 1, 479-496.	1.2	32
46	Reduction of early thalamic input alters adult corticocortical connectivity. Developmental Brain Research, 2002, 138, 35-43.	2.1	32
47	Ganglion Cell and Displaced Amacrine Cell Density Distribution in the Retina of the Howler Monkey (Alouatta caraya). PLoS ONE, 2014, 9, e115291.	1.1	24
48	Network Structure Implied by Initial Axon Outgrowth in Rodent Cortex: Empirical Measurement and Models. PLoS ONE, 2011, 6, e16113.	1.1	24
49	Developmental changes in the distribution of retinal catecholaminergic neurones in hamsters and gerbils. Journal of Comparative Neurology, 1990, 292, 480-494.	0.9	23
50	Thalamic Ablations and Neocortical Development: Alterations in Thalamic and Callosal Connectivity. Cerebral Cortex, 1991, 1, 241-261.	1.6	22
51	Toward a neuroethology of mammalian vision. Behavioural Brain Research, 1981, 3, 133-149.	1.2	20
52	Acquisition of visuomotor behavior after neonatal tectal lesions in the hamster: The role of visual experience.. Journal of Comparative and Physiological Psychology, 1980, 94, 506-518.	1.8	19
53	Coevolution in the timing of GABAergic and pyramidal neuron maturation in primates. Proceedings of the Royal Society B: Biological Sciences, 2017, 284, 20171169.	1.2	18
54	The neuroecology of the water-to-land transition and the evolution of the vertebrate brain. Philosophical Transactions of the Royal Society B: Biological Sciences, 2022, 377, 20200523.	1.8	18

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55	Human exceptionalism, our ordinary cortex and our research futures. Developmental Psychobiology, 2019, 61, 317-322.	0.9	16
56	Late Still Equals Large. Brain, Behavior and Evolution, 2010, 75, 4-6.	0.9	15
57	Self-organization of cortical areas in the development and evolution of neocortex. Proceedings of the National Academy of Sciences of the United States of America, 2020, 117, 29212-29220.	3.3	13
58	Comparative Aspects of Visual System Development. , 2006, , 37-72.		12
59	The specialization of the owl monkey retina for night vision. Color Research and Application, 2001, 26, S118-S122.	0.8	11
60	Natural symmetry. Nature, 2005, 435, 149-149.	13.7	11
61	Evolution of cytoarchitectural landscapes in the mammalian isocortex: Sirenians (<i>Trichechus) Tj ETQq1 1 0.784314 rgBT /Overlock 1(	0.9	11
62	Principles of Network Architecture Emerging from Comparisons of the Cerebral Cortex in Large and Small Brains. PLoS Biology, 2016, 14, e1002556.	2.6	11
63	The neuroscience of vision and pain: evolution of two disciplines. Philosophical Transactions of the Royal Society B: Biological Sciences, 2019, 374, 20190292.	1.8	10
64	Scaling the primate lateral geniculate nucleus: Niche and neurodevelopment in the regulation of magnocellular and parvocellular cell number and nucleus volume. Journal of Comparative Neurology, 2014, 522, 1839-1857.	0.9	9
65	Changes in synaptic density after developmental compression or expansion of retinal input to the superior colliculus. Journal of Comparative Neurology, 1993, 330, 455-463.	0.9	8
66	Developmental duration as an organizer of the evolving mammalian brain: scaling, adaptations, and exceptions. Evolution & Development, 2020, 22, 181-195.	1.1	8
67	Altered development of visual subcortical projections following neonatal thalamic ablation in the hamster. Journal of Comparative Neurology, 2000, 424, 165-178.	0.9	7
68	Chapter 25 What do developmental mapping rules optimize?. Progress in Brain Research, 1996, 112, 351-361.	0.9	3
69	The Calvinist Cortex: Penetrating Evolutionary Predestination Commentary on â€œCortex, Countercurrent Context, and Dimensional Integration of Lifetime Memoryâ€•by Bjorn Merker. Cortex, 2004, 40, 577-579.	1.1	2
70	Generic Homo sapiens and Unique Mus musculus: Establishing the Typicality of the Modeled and the Model Species. Brain, Behavior and Evolution, 2019, 93, 122-136.	0.9	2
71	Master Mechanic, may I? Evolutionary permission versus evolutionary pressure. Behavioral and Brain Sciences, 1990, 13, 353-354.	0.4	1
72	The specialization of the owl monkey retina for night vision. Color Research and Application, 2001, 26, S118-S122.	0.8	1

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73	So many problems, so little time: Evolution and the dendrite. Behavioral and Brain Sciences, 1997, 20, 564-565.	0.4	0