Russell D Fernald

List of Publications by Year
in descending order

134	11,128	26630	31849
papers	citations	56 h-index	101 g-index

139	139	139	7786
all docs	docs citations	times ranked	citing authors

#	Article	IF	Citations
1	Comprehensive Algorithm for Quantitative Real-Time Polymerase Chain Reaction. Journal of Computational Biology, 2005, 12, 1047-1064.	1.6	1,143
2	The genomic substrate for adaptive radiation in African cichlid fish. Nature, 2014, 513, 375-381.	27.8	874
3	Genes and Social Behavior. Science, 2008, 322, 896-900.	12.6	546
4	Fish can infer social rank by observation alone. Nature, 2007, 445, 429-432.	27.8	466
5	Gonadotropin-Releasing Hormone Genes: Phylogeny, Structure, and Functions. Frontiers in Neuroendocrinology, 1999, 20, 224-240.	5.2	278
6	Genesis of rods in teleost fish retina. Nature, 1981, 293, 141-142.	27.8	260
7	Stress and Dominance in a Social Fish. Journal of Neuroscience, 1997, 17, 6463-6469.	3.6	257
8	Rapid Behavioral and Genomic Responses to Social Opportunity. PLoS Biology, 2005, 3, e363.	5.6	249
9	Multiple Corticosteroid Receptors in a Teleost Fish: Distinct Sequences, Expression Patterns, and Transcriptional Activities. Endocrinology, 2003, 144, 4226-4236.	2.8	237
10	Field study of Haplochromis burtoni: Quantitative behavioural observations. Animal Behaviour, 1977, 25, 964-975.	1.9	236
11	Circadian rhythm and light regulate opsin mRNA in rod photoreceptors. Nature, 1989, 337, 454-457.	27.8	206
12	Expression of arginine vasotocin in distinct preoptic regions is associated with dominant and subordinate behaviour in an African cichlid fish. Proceedings of the Royal Society B: Biological Sciences, 2008, 275, 2393-2402.	2.6	181
13	Social regulation of gonadotropin-releasing hormone. Journal of Experimental Biology, 2002, 205, 2567-2581.	1.7	167
14	Quantitative behavioural observations of Haplochromis burtoni under semi-natural conditions. Animal Behaviour, 1977, 25, 643-653.	1.9	154
15	Social control of neuronal soma size. Journal of Neurobiology, 1990, 21, 1180-1188.	3.6	154
16	Behavioral and physiological plasticity: Rapid changes during social ascent in an African cichlid fish. Hormones and Behavior, 2010, 58, 230-240.	2.1	147
17	Social regulation of gonadotropin-releasing hormone. Journal of Experimental Biology, 2002, 205, 2567-81.	1.7	135
18	Casting a Genetic Light on the Evolution of Eyes. Science, 2006, 313, 1914-1918.	12.6	132

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19	Social information changes the brain. Proceedings of the National Academy of Sciences of the United States of America, 2012, 109, 17194-17199.	7.1	127
20	Evolution of eyes. Current Opinion in Neurobiology, 2000, 10, 444-450.	4.2	125
21	What do fish make of mirror images?. Biology Letters, 2010, 6, 744-747.	2.3	125
22	Field study of Haplochromis burtoni: habitats and co-habitant. Environmental Biology of Fishes, 1977, 2, 299-308.	1.0	117
23	Social Regulation of Gene Expression in the Hypothalamic-Pituitary-Gonadal Axis. Physiology, 2011, 26, 412-423.	3.1	116
24	The organization of the diencephalon and the pretectum in the cichlid fish, Haplochromis burtoni. Journal of Comparative Neurology, 1985, 238, 202-217.	1.6	110
25	Androgen level and male social status in the African cichlid, Astatotilapia burtoni. Behavioural Brain Research, 2006, 166, 291-295.	2.2	110
26	Social dominance regulates androgen and estrogen receptor gene expression. Hormones and Behavior, 2007, 51, 164-170.	2.1	109
27	Regional Expression of mRNA Encoding a Second Form of Gonadotropin-Releasing Hormone in the Macaque Brain. Endocrinology, 1999, 140, 1945-1948.	2.8	105
28	Metamorphosis and fish vision. Journal of Neurobiology, 1990, 21, 1037-1052.	3.6	99
29	Contextual chemosensory urine signaling in an African cichlid fish. Journal of Experimental Biology, 2012, 215, 68-74.	1.7	97
30	The African Cichlid Fish Astatotilapia burtoni Uses Acoustic Communication for Reproduction: Sound Production, Hearing, and Behavioral Significance. PLoS ONE, 2012, 7, e37612.	2.5	95
31	Social Context Influences Aggressive and Courtship Behavior in a Cichlid Fish. PLoS ONE, 2012, 7, e32781.	2.5	94
32	Maintenance of optical quality during crystalline lens growth. Nature, 1983, 301, 618-620.	27.8	88
33	Social Status Controls Somatostatin Neuron Size and Growth. Journal of Neuroscience, 2000, 20, 4740-4744.	3.6	85
34	A Neural Basis for Control of Cichlid Female Reproductive Behavior by Prostaglandin F 2Î±. Current Biology, 2016, 26, 943-949.	3.9	84
35	Retinal growth and cell addition during embryogenesis in the teleost,Haplochromis burtoni. Journal of Comparative Neurology, 1992, 321, 193-208.	1.6	82
36	Androgen Regulation of Hypothalamic Neurons Containing Gonadotropin-Releasing Hormone in a Cichlid Fish: Integration with Social Cues. Hormones and Behavior, 1996, 30, 216-226.	2.1	81

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37	Social Control of Developmental Rate in the African Cichlid,Haplochromis burtoni. Zeitschrift FÃ¼r Tierpsychologie, 1982, 60, 66-82.	0.2	79
38	Genomic Structure and Expression Sites of Three Gonadotropin-Releasing Hormone Genes in One Species. General and Comparative Endocrinology, 1998, 112, 17-25.	1.8	79
39	Teleost vision: Seeing while growing. The Journal of Experimental Zoology, 1990, 256, 167-180.	1.4	78
40	Steroid receptor expression in the fish inner earvaries with sex, social status, and reproductive state. BMC Neuroscience, 2010, 11, 58.	1.9	77
41	Social Regulation of Male Reproductive Plasticity in an African Cichlid Fish. Integrative and Comparative Biology, 2013, 53, 938-950.	2.0	77
42	Androgen receptors in a cichlid fish, Astatotilapia burtoni: Structure, localization, and expression levels. Journal of Comparative Neurology, 2007, 504, 57-73.	1.6	74
43	Characterization of cell proliferation throughout the brain of the African cichlid fish Astatotilapia burtoni and its regulation by social status. Journal of Comparative Neurology, 2012, 520, 3471-3491.	1.6	71
44	Color change as a potential behavioral strategy. Hormones and Behavior, 2008, 54, 463-470.	2.1	70
45	Social Control of the Brain. Annual Review of Neuroscience, 2012, 35, 133-151.	10.7	69
46	Plasticity of the Reproductive Axis Caused by Social Status Change in an African Cichlid Fish: II. Testicular Gene Expression and Spermatogenesis. Endocrinology, 2011, 152, 291-302.	2.8	67
47	Social descent with territory loss causes rapid behavioral, endocrine, and transcriptional changes in the brain. Journal of Experimental Biology, 2013, 216, 3656-66.	1.7	67
48	Visual Information Alone Changes Behavior and Physiology during Social Interactions in a Cichlid Fish (Astatotilapia burtoni). PLoS ONE, 2011, 6, e20313.	2.5	66
49	Female genomic response to mate information. Proceedings of the National Academy of Sciences of the United States of America, 2010, 107, 21176-21180.	7.1	65
50	Evolutionary conservation of the egrâ€1 immediateâ€early gene response in a teleost. Journal of Comparative Neurology, 2005, 481, 220-232.	1.6	64
51	Plasticity of the Reproductive Axis Caused by Social Status Change in an African Cichlid Fish: I. Pituitary Gonadotropins. Endocrinology, 2011, 152, 281-290.	2.8	64
52	Regulation of cell division and rod differentiation in the teleost retina. Developmental Brain Research, 1993, 76, 183-187.	1.7	63
53	Behavioral coping strategies in a cichlid fish: the role of social status and acute stress response in direct and displaced aggression. Hormones and Behavior, 2005, 47, 336-342.	2.1	62
54	Polygenic sex determination in the cichlid fish Astatotilapia burtoni. BMC Genomics, 2016, 17, 835.	2.8	61

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55	Astatotilapia burtoni: A Model System for Analyzing the Neurobiology of Behavior. ACS Chemical Neuroscience, 2018, 9, 1951-1962.	3.5	61
56	Retinal transformation at metamorphosis in the winter flounder (Pseudopleuronectes) Tj ETQq0 0 0 rgBT /Overlock 10 Tf 50 702 Td (	1.0	60
57	Reproductive status regulates expression of sex steroid and GnRH receptors in the olfactory bulb. Behavioural Brain Research, 2010, 213, 208-217.	2.2	60
58	Expression, Structure, Function, and Evolution of Gonadotropin-Releasing Hormone (GnRH) Receptors GnRH-R1SHS and GnRH-R2PEY in the Teleost, Astatotilapia burtoni. Endocrinology, 2007, 148, 5060-5071.	2.8	59
59	Photoreceptor spectral absorbance in larval and adult winter flounder (Pseudopleuronectes) Tj ETQq1 1 0.784314 rgBT /Overlock	1.0	58
60	Distributions of two gonadotropinâ€releasing hormone receptor types in a cichlid fish suggest functional specialization. Journal of Comparative Neurology, 2006, 495, 314-323.	1.6	57
61	Cytoarchitecture of a Cichlid Fish Telencephalon. Brain, Behavior and Evolution, 2009, 74, 110-120.	1.7	55
62	Ontogeny of Gonadotropin-Releasing Hormone (GnRH) Gene Expression Reveals a Distinct Origin for GnRH-Containing Neurons in the Midbrain. General and Comparative Endocrinology, 1998, 112, 322-329.	1.8	54
63	The Dynamic Nature of DNA Methylation: A Role in Response to Social and Seasonal Variation. Integrative and Comparative Biology, 2014, 54, 68-76.	2.0	52
64	Social Regulation of the Electrical Properties of Gonadotropin-Releasing Hormone Neurons in a Cichlid Fish (Astatotilapia burtoni)1. Biology of Reproduction, 2004, 71, 909-918.	2.7	50
65	Two Visual Processing Pathways Are Targeted by Gonadotropin-Releasing Hormone in the Retina. Brain, Behavior and Evolution, 2005, 66, 1-9.	1.7	48
66	Modular genetic control of social status in a cichlid fish. Proceedings of the National Academy of Sciences of the United States of America, 2020, 117, 28167-28174.	7.1	48
67	Retinal projections in the African cichlid fish, Haplochromis burtoni. Journal of Comparative Neurology, 1982, 206, 379-389.	1.6	47
68	The organization of retinal projections to the diencephalon and pretectum in the cichlid fish, Haplochromis burtoni. Journal of Comparative Neurology, 1985, 235, 360-374.	1.6	45
69	Female affiliative preference depends on reproductive state in the African cichlid fish, Astatotilapia burtoni. Behavioral Ecology, 2005, 16, 83-88.	2.2	44
70	Effects of stress and motivation on performing a spatial task. Neurobiology of Learning and Memory, 2011, 95, 277-285.	1.9	44
71	Timing reproduction in teleost fish: cues and mechanisms. Current Opinion in Neurobiology, 2016, 38, 57-62.	4.2	43
72	Social status differences regulate the serotonergic system of a cichlid fish, Astatotilapia burtoni. Journal of Experimental Biology, 2014, 217, 2680-90.	1.7	42

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73	Behavior-dependent cis regulation reveals genes and pathways associated with bower building in cichlid fishes. Proceedings of the National Academy of Sciences of the United States of America, 2018, 115, E11081-E11090.	7.1	42
74	Subordinate male cichlids retain reproductive competence during social suppression. Proceedings of the Royal Society B: Biological Sciences, 2012, 279, 434-443.	2.6	41
75	New Rods Move before Differentiating in Adult Teleost Retina. Developmental Biology, 1995, 170, 136-141.	2.0	40
76	Evolving eyes. International Journal of Developmental Biology, 2004, 48, 701-705.	0.6	39
77	Tol2-Mediated Generation of a Transgenic Haplochromine Cichlid, Astatotilapia burtoni. PLoS ONE, 2013, 8, e77647.	2.5	39
78	Electrical synapses connect a network of gonadotropin releasing hormone neurons in a cichlid fish. Proceedings of the National Academy of Sciences of the United States of America, 2015, 112, 3805-3810.	7.1	39
79	Social Opportunity Rapidly Regulates Expression of CRF and CRF Receptors in the Brain during Social Ascent of a Teleost Fish, Astatotilapia burtoni. PLoS ONE, 2014, 9, e96632.	2.5	39
80	Differential social regulation of two pituitary gonadotropin-releasing hormone receptors. Behavioural Brain Research, 2006, 170, 342-346.	2.2	38
81	Physiological consequences of social descent: studies in Astatotilapia burtoni. Journal of Endocrinology, 2006, 190, 183-190.	2.6	38
82	Castration Lowers Aggression but not Social Dominance in Male Haplochromis burtoni (Cichlidae). Ethology, 1992, 90, 247-255.	1.1	37
83	Epigenetic DNA Methylation Linked to Social Dominance. PLoS ONE, 2015, 10, e0144750.	2.5	37
84	Eyes: Variety, Development and Evolution. Brain, Behavior and Evolution, 2004, 64, 141-147.	1.7	36
85	Communication about social status. Current Opinion in Neurobiology, 2014, 28, 1-4.	4.2	36
86	Cognitive skills and the evolution of social systems. Journal of Experimental Biology, 2017, 220, 103-113.	1.7	36
87	Fast body turns in a cichlid fish. Nature, 1975, 258, 228-229.	27.8	35
88	Second form of gonadotropinâ€releasing hormone in mouse: immunocytochemistry reveals hippocampal and periventricular distribution. FEBS Letters, 1999, 448, 289-291.	2.8	35
89	Differential activation of vasotocin neurons in contexts that elicit aggression and courtship. Behavioural Brain Research, 2017, 317, 188-203.	2.2	34
90	Hypertrophy of gonadotropin releasing hormoneâ€containing neurons after castration in the teleost, Haplochromis burtoni. Journal of Neurobiology, 1992, 23, 1084-1093.	3.6	33

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91	IGF-1 produced by cone photoreceptors regulates rod progenitor proliferation in the teleost retina. Developmental Brain Research, 2005, 154, 91-100.	1.7	31
92	Hormonal regulation of social ascent and temporal patterns of behavior in an African cichlid. Hormones and Behavior, 2019, 107, 83-95.	2.1	31
93	Brains over Brawn: Experience overcomes a size disadvantage in fish social hierarchies. Journal of Experimental Biology, 2014, 217, 1462-8.	1.7	30
94	The embryogenesis of rod photoreceptors in the teleost fish retina, Haplochromis burtoni. Developmental Brain Research, 1998, 108, 217-227.	1.7	27
95	Spectral sensitivity of the African cichlid fish,Haplochromis burtoni. Journal of Comparative Physiology A: Neuroethology, Sensory, Neural, and Behavioral Physiology, 1985, 157, 247-253.	1.6	26
96	Cell death precedes rod neurogenesis in embryonic teleost retinal development. Developmental Brain Research, 1998, 111, 143-146.	1.7	25
97	Dopaminergic inhibition of gonadotropin-releasing hormone neurons in the cichlid fish, Astatotilapia burtoni. Journal of Experimental Biology, 2016, 219, 3861-3865.	1.7	25
98	Social Regulation of the Brain: Sex, Size and Status. Novartis Foundation Symposium, 2008, , 169-186.	1.1	23
99	Cognitive Skills Needed for Social Hierarchies. Cold Spring Harbor Symposia on Quantitative Biology, 2014, 79, 229-236.	1.1	23
100	Social behaviour: can it change the brain?. Animal Behaviour, 2015, 103, 259-265.	1.9	23
101	Localization and expression of insulin-like growth factor in the teleost retina. Visual Neuroscience, 1995, 12, 457-461.	1.0	22
102	Nonuniform distribution of cell proliferation in the adult teleost retina. Brain Research, 1996, 712, 40-44.	2.2	22
103	Identification of prohormones and pituitary neuropeptides in the African cichlid, Astatotilapia burtoni. BMC Genomics, 2016, 17, 660.	2.8	22
104	Response of Male Cichlid Fish, Haplochromis burtoni, Reared in Isolation to Models of Conspecifics. Zeitschrift FÃ¼r Tierpsychologie, 1980, 54, 85-93.	0.2	19
105	Two types of dominant male cichlid fish: behavioral and hormonal characteristics. Biology Open, 2016, 5, 1061-1071.	1.2	19
106	Cell movement and cell cycle dynamics in the retina of the adult teleostHaplochromis burtoni. , 1997, 388, 435-443.		18
107	Nasotemporal asymmetry during teleost retinal growth: preserving an area of specialization. Journal of Neurobiology, 1999, 41, 435-442.	3.6	17
108	Social regulation of cortisol receptor gene expression. Journal of Experimental Biology, 2014, 217, 3221-8.	1.7	17

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109	Eye movements in the African cichlid fish,Haplochromis burtoni. Journal of Comparative Physiology A: Neuroethology, Sensory, Neural, and Behavioral Physiology, 1985, 156, 199-208.	1.6	16
110	How does Behavior Change the Brain? Multiple Methods to Answer Old Questions. Integrative and Comparative Biology, 2003, 43, 771-779.	2.0	16
111	Heterogeneous nuclear ribonucleoprotein A/B and G inhibits the transcription of gonadotropin-releasing-hormone 1. Molecular and Cellular Neurosciences, 2008, 37, 69-84.	2.2	14
112	The Value of Comparative Animal Research: Kroghâ€™s Principle Facilitates Scientific Discoveries. Policy Insights From the Behavioral and Brain Sciences, 2018, 5, 118-125.	2.4	14
113	Social Crowding during Development Causes Changes in GnRH1 DNA Methylation. PLoS ONE, 2015, 10, e0142043.	2.5	12
114	The Repeated Evolution of Behavior. Frontiers in Ecology and Evolution, 2017, 4, .	2.2	11
115	Genome-wide effects of social status on DNA methylation in the brain of a cichlid fish, Astatotilapia burtoni. BMC Genomics, 2019, 20, 699.	2.8	10
116	Behavioral evolution contributes to hindbrain diversification among Lake Malawi cichlid fish. Scientific Reports, 2019, 9, 19994.	3.3	10
117	A behavioral logic underlying aggression in an African cichlid fish. Ethology, 2021, 127, 572-581.	1.1	10
118	The effect of observers on behavior and the brain during aggressive encounters. Behavioural Brain Research, 2015, 292, 174-183.	2.2	9
119	Social regulation of the brain: sex, size and status. Novartis Foundation Symposium, 2002, 244, 169-84; discussion 184-6, 203-6, 253-7.	1.1	9
120	Timing and location of rhodopsin expression in newly born rod photoreceptors in the adult teleost retina. Developmental Brain Research, 2004, 151, 193-197.	1.7	8
121	A Sampled Randomization Test for Examining Single Cells of Behavioural Transition Matrices. Behaviour, 1979, 69, 217-227.	0.8	7
122	Regulation of gonadotropin-releasing hormone-1 gene transcription by members of the purine-rich element-binding protein family. American Journal of Physiology - Endocrinology and Metabolism, 2010, 298, E524-E533.	3.5	7
123	Rhythmic expressed clock regulates the transcription of proliferating cellular nuclear antigen in teleost retina. Experimental Eye Research, 2017, 160, 21-30.	2.6	6
124	Mechanistic target of rapamycin (mTOR) implicated in plasticity of the reproductive axis during social status transitions. General and Comparative Endocrinology, 2019, 282, 113209.	1.8	5
125	Control of testes mass by androgen receptor paralogs in a cichlid. Journal of Comparative Physiology B: Biochemical, Systemic, and Environmental Physiology, 2022, 192, 107-114.	1.5	4
126	More than meets the eye. Behavioral and Brain Sciences, 1987, 10, 378-379.	0.7	3

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127	Animal Cooperation: Keeping a Clean(ing) Reputation. Current Biology, 2011, 21, R508-R510.	3.9	3
128	Optical quality during crystalline lens growth (reply). Nature, 1984, 312, 292-292.	27.8	2
129	Social Regulation of Sex: How the Brain Controls Reproductive Circuits. , 2017, , 19-30.		2
130	Gonadotropin-Releasing Hormone Receptors: Where Did They Come From?. Endocrinology, 2009, 150, 2507-2508.	2.8	1
131	Neurobiology of behavior. Current Opinion in Neurobiology, 2010, 20, 746-747.	4.2	1
132	Systems biology meets behavior. Proceedings of the National Academy of Sciences of the United States of America, 2011, 108, 17861-17862.	7.1	1
133	Neuroethology according to Hoyle. Behavioral and Brain Sciences, 1984, 7, 387-388.	0.7	0
134	2074v Alpha1-Beta1 and Alpha6-Beta1-Integrin. , 2008, , 1-1.		0