Linda Z Holland

List of Publications by Year
in descending order

109 papers	7,343 citations	53794 45 h-index	58581 82 g-index
111 all docs	111 docs citations	111 times ranked	4377 citing authors

#	Article	IF	Citations
1	The amphioxus genome and the evolution of the chordate karyotype. Nature, 2008, 453, 1064-1071.	27.8	1,496
2	The amphioxus genome illuminates vertebrate origins and cephalochordate biology. Genome Research, 2008, 18, 1100-1111.	5.5	456
3	Axial patterning in cephalochordates and the evolution of the organizer. Nature, 2007, 445, 613-617.	27.8	242
4	Paxâ€"Sixâ€"Eyaâ€"Dach network during amphioxus development: Conservation in vitro but context specificity in vivo. Developmental Biology, 2007, 306, 143-159.	2.0	158
5	Three Amphioxus Wnt Genes (AmphiWnt3, AmphiWnt5, and AmphiWnt6) Associated with the Tail Bud: the Evolution of Somitogenesis in Chordates. Developmental Biology, 2001, 240, 262-273.	2.0	139
6	Evolution of bilaterian central nervous systems: a single origin?. EvoDevo, 2013, 4, 27.	3.2	139
7	Retinoic acid signaling and the evolution of chordates. International Journal of Biological Sciences, 2006, 2, 38-47.	6.4	136
8	Evolution of neural crest and placodes: amphioxus as a model for the ancestral vertebrate?. Journal of Anatomy, 2001, 199, 85-98.	1.5	127
9	<i>AmphiPax3/7</i>, an amphioxus paired box gene: insights into chordate myogenesis, neurogenesis, and the possible evolutionary precursor of definitive vertebrate neural crest. Evolution & Development, 1999, 1, 153-165.	2.0	118
10	A retinoic acid-Hox hierarchy controls both anterior/posterior patterning and neuronal specification in the developing central nervous system of the cephalochordate amphioxus. Developmental Biology, 2006, 296, 190-202.	2.0	116
11	Evolution of Lactate Dehydrogenase-A Homologs of Barracuda Fishes (GenusSphyraena) from Different Thermal Environments:Â Differences in Kinetic Properties and Thermal Stability Are Due to Amino Acid Substitutions Outside the Active Siteâ€,â€¡. Biochemistry, 1997, 36, 3207-3215.	2.5	115
12	Chordate origins of the vertebrate central nervous system. Current Opinion in Neurobiology, 1999, 9, 596-602.	4.2	114
13	The retinoic acid signaling pathway regulates anterior/posterior patterning in the nerve cord and pharynx of amphioxus, a chordate lacking neural crest. Development (Cambridge), 2002, 129, 2905-2916.	2.5	110
14	Chordate roots of the vertebrate nervous system: expanding the molecular toolkit. Nature Reviews Neuroscience, 2009, 10, 736-746.	10.2	102
15	A Gbx homeobox gene in amphioxus: Insights into ancestry of the ANTP class and evolution of the midbrain/hindbrain boundary. Developmental Biology, 2006, 295, 40-51.	2.0	98
16	Retinoic acid signaling acts via Hox1 to establish the posterior limit of the pharynx in the chordate amphioxus. Development (Cambridge), 2005, 132, 61-73.	2.5	96
17	Heads or Tails? Amphioxus and the Evolution of Anteriorâ€"Posterior Patterning in Deuterostomes. Developmental Biology, 2002, 241, 209-228.	2.0	90
18	TheCiona intestinalis genome: When the constraints are off. BioEssays, 2003, 25, 529-532.	2.5	89

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19	Cephalochordate (Amphioxus) Embryos: Procurement, Culture, and Basic Methods. Methods in Cell Biology, 2004, 74, 195-215.	1.1	86
20	Sequence and developmental expression of amphioxus AmphiNk2-1 : insights into the evolutionary origin of the vertebrate thyroid gland and forebrain. Development Genes and Evolution, 1999, 209, 254-259.	0.9	85
21	Evolutionary Conservation of the Presumptive Neural Plate Markers AmphiSox1/2/3 and AmphiNeurogenin in the Invertebrate Chordate Amphioxus. Developmental Biology, 2000, 226, 18-33.	2.0	85
22	An amphioxus nodal gene (AmphiNodal) with early symmetrical expression in the organizer and mesoderm and later asymmetrical expression associated with left-right axis formation. Evolution & Development, 2002, 4, 418-425.	2.0	83
23	An amphioxus winged helix/forkhead gene,AmphiFoxD: Insights into vertebrate neural crest evolution. Developmental Dynamics, 2002, 225, 289-297.	1.8	82
24	Opposing Nodal/Vg1 and BMP signals mediate axial patterning in embryos of the basal chordate amphioxus. Developmental Biology, 2010, 344, 377-389.	2.0	81
25	AmphiBMP2/4, an amphioxus bone morphogenetic protein closely related toDrosophila decapentaplegic and vertebrate BMP2 and BMP4: Insights into evolution of dorsoventral axis specification. Developmental Dynamics, 1998, 213, 130-139.	1.8	76
26	Retinoic acid influences anteroposterior positioning of epidermal sensory neurons and their gene expression in a developing chordate (amphioxus). Proceedings of the National Academy of Sciences of the United States of America, 2004, 101, 10320-10325.	7.1	75
27	The Transcriptome of an Amphioxus, Asymmetron lucayanum, from the Bahamas: A Window into Chordate Evolution. Genome Biology and Evolution, 2014, 6, 2681-2696.	2.5	72
28	Retinoic acid and Wnt/Î²-catenin have complementary roles in anterior/posterior patterning embryos of the basal chordate amphioxus. Developmental Biology, 2009, 332, 223-233.	2.0	70
29	Tunicates. Current Biology, 2016, 26, R146-R152.	3.9	70
30	Fertilization in Oikopleura dioica (Tunicata, Appendicularia): Acrosome reaction, cortical reaction and sperm-egg fusion. Zoomorphology, 1988, 108, 229-243.	0.8	68
31	Asymmetric localization of germline markers Vasa and Nanos during early development in the amphioxus Branchiostoma floridae. Developmental Biology, 2011, 353, 147-159.	2.0	66
32	A new look at an old question: when did the second whole genome duplication occur in vertebrate evolution?. Genome Biology, 2018, 19, 209.	8.8	63
33	Characterization of amphioxus AmphiWnt8 : insights into the evolution of patterning of the embryonic dorsoventral axis. Evolution & Development, 2000, 2, 85-92.	2.0	62
34	Sequence and Expression of Amphioxus Alkali Myosin Light Chain (AmphiMLC-alk) Throughout Development: Implications for Vertebrate Myogenesis. Developmental Biology, 1995, 171, 665-676.	2.0	61
35	Expression of estrogenâ€receptor related receptors in amphioxus and zebrafish: implications for the evolution of posterior brain segmentation at the invertebrateâ€toâ€vertebrate transition. Evolution & Development, 2005, 7, 223-233.	2.0	59
36	Tissue-specific expression of FoxD reporter constructs in amphioxus embryos. Developmental Biology, 2004, 274, 452-461.	2.0	58

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37	Body-plan evolution in the Bilateria: early antero-posterior patterning and the deuterostomeâ€“protostome dichotomy. Current Opinion in Genetics and Development, 2000, 10, 434-442.	3.3	56
38	A cDNA resource for the cephalochordate amphioxus Branchiostoma floridae. Development Genes and Evolution, 2008, 218, 723-727.	0.9	55
39	Serotoninâ€containing Cells in the Nervous System and Other Tissues During Ontogeny of a Lancelet, <i>Branchiostoma floridae</i>. Acta Zoologica, 1993, 74, 195-204.	0.8	53
40	Retinoic acid signaling targets Hox genes during the amphioxus gastrula stage: Insights into early anteriorâ€“posterior patterning of the chordate body plan. Developmental Biology, 2010, 338, 98-106.	2.0	53
41	Characterization and Developmental Expression of the Amphioxus Homolog of Notch (AmphiNotch): Evolutionary Conservation of Multiple Expression Domains in Amphioxus and Vertebrates. Developmental Biology, 2001, 232, 493-507.	2.0	52
42	Evolution of neural crest and placodes: amphioxus as a model for the ancestral vertebrate?. Journal of Anatomy, 2001, 199, 85-98.	1.5	52
43	Scenarios for the making of vertebrates. Nature, 2015, 520, 450-455.	27.8	51
44	Fine Structural Study of the Cortical Reaction and Formation of the Egg Coats in a Lancelet (=) Tj ETQq0 0 0 rgBT /Overlock 10 Tf 50 46 Biological Bulletin, 1989, 176, 111-122.	1.8	49
45	Nuclear Î²-catenin promotes non-neural ectoderm and posterior cell fates in amphioxus embryos. Developmental Dynamics, 2005, 233, 1430-1443.	1.8	49
46	Expression of somite segmentation genes in amphioxus: a clock without a wavefront?. Development Genes and Evolution, 2008, 218, 599-611.	0.9	48
47	Engrailed Expression during Development of a Lamprey, Lampetra japonica: A Possible Clue to Homologies between Agnathan and Gnathostome Muscles of the Mandibular Arch. (lamprey/engrailed/mandibular arch/myogenesis/homology). Development Growth and Differentiation, 1993, 35, 153-160.	1.5	47
48	Non-neural ectoderm is really neural: evolution of developmental patterning mechanisms in the non-neural ectoderm of chordates and the problem of sensory cell homologies. Journal of Experimental Zoology Part B: Molecular and Developmental Evolution, 2005, 304B, 304-323.	1.3	46
49	Amphioxus and the Utility of Molecular Genetic Data for Hypothesizing Body Part Homologies between Distantly Related Animals. American Zoologist, 1999, 39, 630-640.	0.7	45
50	AmphiFoxQ2, a novel winged helix/forkhead gene, exclusively marks the anterior end of the amphioxus embryo. Development Genes and Evolution, 2003, 213, 102-105.	0.9	45
51	Developmental Gene Expression in Amphioxus: New Insights into the Evolutionary Origin of Vertebrate Brain Regions, Neural Crest, and Rostrocaudal Segmentation. American Zoologist, 1998, 38, 647-658.	0.7	44
52	AmphioxusAmphiDelta: evolution of delta protein structure, segmentation, and neurogenesis. Genesis, 2007, 45, 113-122.	1.6	43
53	A chordate with a difference. Nature, 2007, 447, 153-154.	27.8	43
54	Gene Duplication, Co-Option and Recruitment during the Origin of the Vertebrate Brain from the Invertebrate Chordate Brain. Brain, Behavior and Evolution, 2008, 72, 91-105.	1.7	43

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55	Amphioxus and the evolution of head segmentation. Integrative and Comparative Biology, 2008, 48, 630-646.	2.0	43
56	Characterization of amphioxusamphivent, an evolutionarily conserved marker for chordate ventral mesoderm. Genesis, 2001, 29, 172-179.	1.6	39
57	Evolution of new characters after whole genome duplications: Insights from amphioxus. Seminars in Cell and Developmental Biology, 2013, 24, 101-109.	5.0	39
58	Characterization of an amphioxusWnt gene,AmphiWnt11, with possible roles in myogenesis and tail outgrowth. Genesis, 2000, 27, 1-5.	1.6	38
59	Amphioxus Whole-Mount In Situ Hybridization. Cold Spring Harbor Protocols, 2009, 2009, pdb.prot5286.	0.3	38
60	The origin and evolution of chordate nervous systems. Philosophical Transactions of the Royal Society B: Biological Sciences, 2015, 370, 20150048.	4.0	38
61	Genomics, evolution and development of amphioxus and tunicates: The Goldilocks principle. Journal of Experimental Zoology Part B: Molecular and Developmental Evolution, 2015, 324, 342-352.	1.3	38
62	Differential mesodermal expression of two amphioxus MyoD family members (AmphiMRF1 and) Tj ETQq0 0 0 rgBT /Overlock 10 Tf 50 46	0.8	36
63	A revised fate map for amphioxus and the evolution of axial patterning in chordates. Integrative and Comparative Biology, 2007, 47, 360-372.	2.0	36
64	Stage- and tissue-specific patterns of cell division in embryonic and larval tissues of amphioxus during normal development. Evolution & Development, 2006, 8, 142-149.	2.0	35
65	Laboratory Spawning and Development of the Bahama Lancelet, <i>Asymmetron lucayanum</i> (Cephalochordata): Fertilization Through Feeding Larvae. Biological Bulletin, 2010, 219, 132-141.	1.8	35
66	Essential role of Dkk3 for head formation by inhibiting Wnt/Î²â€catenin and Nodal/Vg1 signaling pathways in the basal chordate amphioxus. Evolution & Development, 2012, 14, 338-350.	2.0	35
67	NSF workshop report: Discovering general principles of nervous system organization by comparing brain maps across species. Journal of Comparative Neurology, 2014, 522, 1445-1453.	1.6	35
68	Characterization of two amphioxusWnt genes (AmphiWnt4 andAmphiWnt7b) with early expression in the developing central nervous system. , 2000, 217, 205-215.		34
69	The basal chordate amphioxus as a simple model for elucidating developmental mechanisms in vertebrates. Birth Defects Research Part C: Embryo Today Reviews, 2008, 84, 175-187.	3.6	34
70	Characterization and developmental expression of AmphiNk2-2 , an NK2 class homeobox gene from amphioxus (Phylum Chordata; Subphylum Cephalochordata). Development Genes and Evolution, 1998, 208, 100-105.	0.9	33
71	Evolution of basal deuterostome nervous systems. Journal of Experimental Biology, 2015, 218, 637-645.	1.7	33
72	The retinoic acid signaling pathway regulates anterior/posterior patterning in the nerve cord and pharynx of amphioxus, a chordate lacking neural crest. Development (Cambridge), 2002, 129, 2905-16.	2.5	32

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73	Cephalochordates (Amphioxus or Lancelets): A Model for Understanding the Evolution of Chordate Characters: Figure 1.. Cold Spring Harbor Protocols, 2009, 2009, pdb.emo130.	0.3	31
74	An amphioxus LIM-homeobox gene, <i>AmphiLim1/5</i>, expressed early in the invaginating organizer region and later in differentiating cells of the kidney and central nervous system. International Journal of Biological Sciences, 2006, 2, 110-116.	6.4	30
75	Differential gene expression and intracellular mRNA localization of amphioxus actin isoforms throughout development: Implications for conserved mechanisms of chordate development. Development Genes and Evolution, 1997, 207, 203-215.	0.9	28
76	Roles of retinoic acid and Tbx1/10 in pharyngeal segmentation: amphioxus and the ancestral chordate condition. EvoDevo, 2014, 5, 36.	3.2	27
77	The Evolution of Alternative Splicing in the Pax Family: The View from the Basal Chordate Amphioxus. Journal of Molecular Evolution, 2008, 66, 605-620.	1.8	26
78	Early development of cephalochordates (amphioxus). Wiley Interdisciplinary Reviews: Developmental Biology, 2012, 1, 167-183.	5.9	26
79	Functional equivalency of amphioxus and vertebrate Pax258 transcription factors suggests that the activation of mid-hindbrain specific genes in vertebrates occurs via the recruitment of Pax regulatory elements. Gene, 2002, 282, 143-150.	2.2	23
80	Conserved Noncoding Elements in the Most Distant Genera of Cephalochordates: The Goldilocks Principle. Genome Biology and Evolution, 2016, 8, 2387-2405.	2.5	23
81	Sequence and developmental expression ofAmphiTob, an amphioxus homolog of vertebrateTob in thePC3/BTG1/Tob family of tumor suppressor genes. Developmental Dynamics, 1997, 210, 11-18.	1.8	22
82	Developmental expression of the three iroquois genes of amphioxus (BfIrxA, BfIrxB, and BfIrxC) with special attention to the gastrula organizer and anteroposterior boundaries in the central nervous system. Gene Expression Patterns, 2009, 9, 329-334.	0.8	21
83	The amphioxus T-box gene, AmphiTbx15/18/22, illuminates the origins of chordate segmentation. Evolution & Development, 2006, 8, 119-129.	2.0	20
84	The fine structure of the growth stage oocytes of a lancelet (= amphioxus),Branchiostoma lanceolatum. Invertebrate Reproduction and Development, 1991, 19, 107-122.	0.8	19
85	Expression of theAmphiTcfgene in amphioxus: Insights into the evolution of the TCF/LEF gene family during vertebrate evolution. Developmental Dynamics, 2006, 235, 3396-3403.	1.8	19
86	The Florida amphioxus (Cephalochordata) hosts larvae of the tapeworm <i>Acanthobothrium brevissime</i>: natural history, anatomy and taxonomic identification of the parasite. Acta Zoologica, 2009, 90, 75-86.	0.8	18
87	COVID-19 microthrombosis: unusually large VWF multimers are a platform for activation of the alternative complement pathway under cytokine storm. International Journal of Hematology, 2022, 115, 457-469.	1.6	18
88	A proposal to sequence the amphioxus genome submitted to the joint genome institute of the US department of energy. The Journal of Experimental Zoology, 2003, 300B, 5-22.	1.4	17
89	Fine Structure of the Mesothelia and Extracellular Materials in the Coelomic Fluid of the Fin Boxes, Myocoels and Sclerocoels of a Lancelet, <i>Branchiostoma floridae</i> (Cephalochordata = Acrania). Acta Zoologica, 1990, 71, 225-234.	0.8	15
90	Cis-regulation of the amphioxus engrailed gene: Insights into evolution of a muscle-specific enhancer. Mechanisms of Development, 2007, 124, 532-542.	1.7	15

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91	Alternative Splicing in Development and Function of Chordate Endocrine Systems: A Focus on Pax Genes. Integrative and Comparative Biology, 2010, 50, 22-34.	2.0	12
92	Analyses of Gene Function in Amphioxus Embryos by Microinjection of mRNAs and Morpholino Oligonucleotides. Methods in Molecular Biology, 2011, 770, 423-438.	0.9	11
93	Tail regression induced by elevated retinoic acid signaling in amphioxus larvae occurs by tissue remodeling, not cell death. Evolution & Development, 2011, 13, 427-435.	2.0	11
94	Hybrids Between the Florida Amphioxus (Branchiostoma floridae) and the Bahamas Lancelet (Asymmetron lucayanum): Developmental Morphology and Chromosome Counts. Biological Bulletin, 2015, 228, 13-24.	1.8	11
95	"Insights of Early Chordate Genomics: Endocrinology and Development in Amphioxus, Tunicates and Lampreys": Introduction to the symposium. Integrative and Comparative Biology, 2010, 50, 17-21.	2.0	10
96	The Function and Developmental Expression of Alternatively Spliced Isoforms of Amphioxus and <i>Xenopus laevis Pax2/5/8</i> Genes: Revealing Divergence at the Invertebrate to Vertebrate Transition. Journal of Experimental Zoology Part B: Molecular and Developmental Evolution, 2012, 318, 555-571.	1.3	10
97	The Fine Structure of the Testis of a Lancelet (=Amphioxus), <i>Branchiostoma floridae</i> (Phylum) Tj ETQq1 1 0.784314 rgBT /Overlo	0.8	9
98	The ups and downs of amphioxus biology: a history. International Journal of Developmental Biology, 2017, 61, 575-583.	0.6	9
99	Cephalochordates: A window into vertebrate origins. Current Topics in Developmental Biology, 2021, 141, 119-147.	2.2	8
100	A SINE in the genome of the cephalochordate amphioxus is an Alu element. International Journal of Biological Sciences, 2006, 2, 61-65.	6.4	8
101	Amphioxus genomics. Briefings in Functional Genomics, 2012, 11, 87-88.	2.7	6
102	The evolution of genes encoding for green fluorescent proteins: insights from cephalochordates (amphioxus). Scientific Reports, 2016, 6, 28350.	3.3	6
103	AmphiBMP2/4, an amphioxus bone morphogenetic protein closely related to Drosophila decapentaplegic and vertebrate BMP2 and BMP4: Insights into evolution of dorsoventral axis specification. Developmental Dynamics, 1998, 213, 130-139.	1.8	6
104	Cephalochordata. , 2015, , 91-133.		5
105	Nodal and Hedgehog synergize in gill slit formation during development of the cephalochordate <i>Branchiostoma floridae</i>. Development (Cambridge), 2018, 145, .	2.5	5
106	Laboratory Culture and Mutagenesis of Amphioxus (Branchiostoma floridae). Methods in Molecular Biology, 2021, 2219, 1-29.	0.9	5
107	The invertebrate chordate amphioxus gives clues to vertebrate origins. Current Topics in Developmental Biology, 2022, 147, 563-594.	2.2	3
108	Sequence and developmental expression of AmphiTob, an amphioxus homolog of vertebrate Tob in the PC3/BTG1/Tob family of tumor suppressor genes. Developmental Dynamics, 1997, 210, 11-18.	1.8	2

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109	BIO. Evolution & Development, 2010, 12, 109-112.	2.0	0