Stephen W Wilson

List of Publications by Year
in descending order

141 papers	15,134 citations	10389 72 h-index	19190 118 g-index
167 all docs	167 docs citations	167 times ranked	14672 citing authors

#	Article	IF	Citations
1	Tissue macrophages act as cellular chaperones for vascular anastomosis downstream of VEGF-mediated endothelial tip cell induction. Blood, 2010, 116, 829-840.	1.4	932
2	Silberblick/Wnt11 mediates convergent extension movements during zebrafish gastrulation. Nature, 2000, 405, 76-81.	27.8	919
3	Early Steps in the Development of the Forebrain. Developmental Cell, 2004, 6, 167-181.	7.0	407
4	MicroRNAs show a wide diversity of expression profiles in the developing and mature central nervous system. Genome Biology, 2007, 8, R173.	9.6	338
5	Induction and Dorsoventral Patterning of the Telencephalon. Neuron, 2000, 28, 641-651.	8.1	306
6	Mutations in Radial Spoke Head Protein Genes RSPH9 and RSPH4A Cause Primary Ciliary Dyskinesia with Central-Microtubular-Pair Abnormalities. American Journal of Human Genetics, 2009, 84, 197-209.	6.2	303
7	The habenular nuclei: a conserved asymmetric relay station in the vertebrate brain. Philosophical Transactions of the Royal Society B: Biological Sciences, 2009, 364, 1005-1020.	4.0	290
8	Establishment of the Telencephalon during Gastrulation by Local Antagonism of Wnt Signaling. Neuron, 2002, 35, 255-265.	8.1	288
9	Retinoic acid signalling in the zebrafish embryo is necessary during pre-segmentation stages to pattern the anterior-posterior axis of the CNS and to induce a pectoral fin bud. Development (Cambridge), 2002, 129, 2851-2865.	2.5	259
10	A Nodal Signaling Pathway Regulates the Laterality of Neuroanatomical Asymmetries in the Zebrafish Forebrain. Neuron, 2000, 28, 399-409.	8.1	257
11	Guidelines for morpholino use in zebrafish. PLoS Genetics, 2017, 13, e1007000.	3.5	255
12	Distinct roles for Fgf, Wnt and retinoic acid in posteriorizing the neural ectoderm. Development (Cambridge), 2002, 129, 4335-4346.	2.5	247
13	N-cadherin mediates retinal lamination, maintenance of forebrain compartments and patterning of retinal neurites. Development (Cambridge), 2003, 130, 2479-2494.	2.5	244
14	A mutation in the Gsk3-binding domain of zebrafish Masterblind/Axin1 leads to a fate transformation of telencephalon and eyes to diencephalon. Genes and Development, 2001, 15, 1427-1434.	5.9	242
15	Mutations in SLC39A14 disrupt manganese homeostasis and cause childhood-onset parkinsonismâ€“dystonia. Nature Communications, 2016, 7, 11601.	12.8	233
16	Asymmetry in the epithalamus of vertebrates. Journal of Anatomy, 2001, 199, 63-84.	1.5	232
17	Prickle 1 regulates cell movements during gastrulation and neuronal migration in zebrafish. Development (Cambridge), 2003, 130, 4037-4046.	2.5	231
18	Regulatory gene expression boundaries demarcate sites of neuronal differentiation in the embryonic zebrafish forebrain. Neuron, 1994, 13, 1039-1053.	8.1	215

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19	A small population of anterior cells patterns the forebrain during zebrafish gastrulation. Nature, 1998, 391, 788-792.	27.8	210
20	Development of social behavior in young zebrafish. Frontiers in Neural Circuits, 2015, 9, 39.	2.8	209
21	Development of Noradrenergic Neurons in the Zebrafish Hindbrain Requires BMP, FGF8, and the Homeodomain Protein Soulless/Phox2a. Neuron, 1999, 24, 555-566.	8.1	207
22	Midline Signals Regulate Retinal Neurogenesis in Zebrafish. Neuron, 2000, 27, 251-263.	8.1	206
23	Early Stages of Zebrafish Eye Formation Require the Coordinated Activity of Wnt11, Fz5, and the Wnt/Î²-Catenin Pathway. Neuron, 2005, 47, 43-56.	8.1	203
24	fsi Zebrafish Show Concordant Reversal of Laterality of Viscera, Neuroanatomy, and a Subset of Behavioral Responses. Current Biology, 2005, 15, 844-850.	3.9	201
25	Mutations in the Zebrafish Unmask Shared Regulatory Pathways Controlling the Development of Catecholaminergic Neurons. Developmental Biology, 1999, 208, 473-487.	2.0	200
26	Laterotopic Representation of Left-Right Information onto the Dorso-Ventral Axis of a Zebrafish Midbrain Target Nucleus. Current Biology, 2005, 15, 238-243.	3.9	191
27	Local Tissue Interactions across the Dorsal Midline of the Forebrain Establish CNS Laterality. Neuron, 2003, 39, 423-438.	8.1	175
28	Estrogens Suppress a Behavioral Phenotype in Zebrafish Mutants of the Autism Risk Gene, CNTNAP2. Neuron, 2016, 89, 725-733.	8.1	170
29	The Nodal Pathway Acts Upstream of Hedgehog Signaling to Specify Ventral Telencephalic Identity. Neuron, 2001, 29, 341-351.	8.1	158
30	Antibodies against pax6 immunostain amacrine and ganglion cells and neuronal progenitors, but not rod precursors, in the normal and regenerating retina of the goldfish. Journal of Neurobiology, 1996, 29, 399-413.	3.6	152
31	Hedgehog signalling maintains the optic stalk-retinal interface through the regulation of Vax gene activity. Development (Cambridge), 2003, 130, 955-968.	2.5	151
32	<i>pax2.1</i>is required for the development of thyroid follicles in zebrafish. Development (Cambridge), 2002, 129, 3751-3760.	2.5	150
33	Slb/Wnt11 controls hypoblast cell migration and morphogenesis at the onset of zebrafish gastrulation. Development (Cambridge), 2003, 130, 5375-5384.	2.5	145
34	Eph/Ephrin Signaling Regulates the Mesenchymal-to-Epithelial Transition of the Paraxial Mesoderm during Somite Morphogenesis. Current Biology, 2003, 13, 1571-1582.	3.9	142
35	Regulation of developing myelin sheath elongation by oligodendrocyte calcium transients in vivo. Nature Neuroscience, 2018, 21, 24-28.	14.8	138
36	Left-Right Asymmetry Is Required for the Habenulae to Respond to Both Visual and Olfactory Stimuli. Current Biology, 2014, 24, 440-445.	3.9	136

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37	A role for the extraembryonic yolk syncytial layer in patterning the zebrafish embryo suggested by properties of the hex gene. Current Biology, 1999, 9, 1131-S4.	3.9	134
38	Zebrafish pax[b] is involved in the formation of the midbrainâ€“hindbrain boundary. Nature, 1992, 360, 87-89.	27.8	131
39	floating head and masterblind Regulate Neuronal Patterning in the Roof of the Forebrain. Neuron, 1997, 18, 43-57.	8.1	131
40	A simple and effective F0 knockout method for rapid screening of behaviour and other complex phenotypes. ELife, 2021, 10, .	6.0	131
41	Recursive splicing in long vertebrate genes. Nature, 2015, 521, 371-375.	27.8	128
42	Encoding asymmetry within neural circuits. Nature Reviews Neuroscience, 2012, 13, 832-843.	10.2	125
43	Axonal trajectories and distribution of GABAergic spinal neurons in wildtype and mutant zebrafish lacking floor plate cells. Journal of Comparative Neurology, 1992, 326, 263-272.	1.6	124
44	Yap and Taz regulate retinal pigment epithelial cell fate. Development (Cambridge), 2015, 142, 3021-32.	2.5	123
45	Convergent extension movements and ciliary function are mediated by ofd1 , a zebrafish orthologue of the human oral-facial-digital type 1 syndrome gene. Human Molecular Genetics, 2009, 18, 289-303.	2.9	116
46	Dynamic Coupling of Pattern Formation and Morphogenesis in the Developing Vertebrate Retina. PLoS Biology, 2009, 7, e1000214.	5.6	115
47	Programmed Cell Death in Zebrafish Rohon Beard Neurons Is Influenced by TrkC1/NT-3 Signaling. Developmental Biology, 2000, 226, 220-230.	2.0	100
48	Retinoic acid receptor signaling regulates choroid fissure closure through independent mechanisms in the ventral optic cup and periocular mesenchyme. Proceedings of the National Academy of Sciences of the United States of America, 2011, 108, 8698-8703.	7.1	99
49	Morphogenesis underlying the development of the everted teleost telencephalon. Neural Development, 2012, 7, 32.	2.4	97
50	A Useful Approach to Identify Novel Small-Molecule Inhibitors of Wnt-Dependent Transcription. Cancer Research, 2010, 70, 5963-5973.	0.9	96
51	Distinct roles for Fgf, Wnt and retinoic acid in posteriorizing the neural ectoderm. Development (Cambridge), 2002, 129, 4335-46.	2.5	95
52	Expression of zebrafish GATA 3 (gta3) during gastrulation and neurulation suggests a role in the specification of cell fate. Mechanisms of Development, 1995, 51, 169-182.	1.7	94
53	Combinatorial Fgf and Bmp signalling patterns the gastrula ectoderm into prospective neural and epidermal domains. Development (Cambridge), 2004, 131, 3581-3592.	2.5	94
54	The ATPase-dependent chaperoning activity of Hsp90a regulates thick filament formation and integration during skeletal muscle myofibrillogenesis. Development (Cambridge), 2008, 135, 1147-1156.	2.5	94

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55	Mutation in Rab3 GTPase-Activating Protein (RAB3GAP) Noncatalytic Subunit in a Kindred with Martsolf Syndrome. American Journal of Human Genetics, 2006, 78, 702-707.	6.2	91
56	Wnt/Axin1/Î²-Catenin Signaling Regulates Asymmetric Nodal Activation, Elaboration, and Concordance of CNS Asymmetries. Neuron, 2007, 55, 393-405.	8.1	90
57	Distinct and cooperative roles for Nodal and Hedgehog signals during hypothalamic development. Development (Cambridge), 2002, 129, 3055-3065.	2.5	90
58	Lefty Antagonism of Squint Is Essential for Normal Gastrulation. Current Biology, 2002, 12, 2129-2135.	3.9	89
59	Retinoic acid signalling in the zebrafish embryo is necessary during pre-segmentation stages to pattern the anterior-posterior axis of the CNS and to induce a pectoral fin bud. Development (Cambridge), 2002, 129, 2851-65.	2.5	87
60	Precocious Acquisition of Neuroepithelial Character in the Eye Field Underlies the Onset of Eye Morphogenesis. Developmental Cell, 2013, 27, 293-305.	7.0	86
61	An Fgf8-Dependent Bistable Cell Migratory Event Establishes CNS Asymmetry. Neuron, 2009, 61, 27-34.	8.1	84
62	Lmx1b is essential for survival of periocular mesenchymal cells and influences Fgf-mediated retinal patterning in zebrafish. Developmental Biology, 2009, 332, 287-298.	2.0	84
63	Afferent Connectivity of the Zebrafish Habenulae. Frontiers in Neural Circuits, 2016, 10, 30.	2.8	84
64	Border disputes: do boundaries play a role in growth-cone guidance?. Trends in Neurosciences, 1993, 16, 316-323.	8.6	82
65	Brain asymmetry is encoded at the level of axon terminal morphology. Neural Development, 2008, 3, 9.	2.4	82
66	Breaking symmetry: The zebrafish as a model for understanding leftâ€right asymmetry in the developing brain. Developmental Neurobiology, 2012, 72, 269-281.	3.0	82
67	Conserved and divergent patterns of <i>Reelin</i> expression in the zebrafish central nervous system. Journal of Comparative Neurology, 2002, 450, 73-93.	1.6	81
68	Monorail/Foxa2 regulates floorplate differentiation and specification of oligodendrocytes, serotonergic raphe neurones and cranial motoneurones. Development (Cambridge), 2005, 132, 645-658.	2.5	81
69	Hedgehog and Fgf signaling pathways regulate the development oftphR-expressing serotonergic raphe neurons in zebrafish embryos. Journal of Neurobiology, 2004, 60, 275-288.	3.6	80
70	Six3 functions in anterior neural plate specification by promoting cell proliferation and inhibiting Bmp4 expression. Development (Cambridge), 2005, 132, 2401-2413.	2.5	80
71	Reduced TFAP2A function causes variable optic fissure closure and retinal defects and sensitizes eye development to mutations in other morphogenetic regulators. Human Genetics, 2009, 126, 791-803.	3.8	80
72	Heparan Sulfate 6-O-Sulfotransferase Is Essential for Muscle Development in Zebrafish. Journal of Biological Chemistry, 2003, 278, 31118-31127.	3.4	79

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73	Neurogenin1 is a determinant of zebrafish basal forebrain dopaminergic neurons and is regulated by the conserved zinc finger protein Tof/Fezl. Proceedings of the National Academy of Sciences of the United States of America, 2006, 103, 5143-5148.	7.1	78
74	Pax proteins and eye development. Current Opinion in Neurobiology, 1996, 6, 49-56.	4.2	77
75	Nodal signalling imposes left-right asymmetry upon neurogenesis in the habenular nuclei. Development (Cambridge), 2009, 136, 1549-1557.	2.5	76
76	Flamingo regulates epiboly and convergence/extension movements through cell cohesive and signalling functions during zebrafish gastrulation. Development (Cambridge), 2009, 136, 383-392.	2.5	75
77	A Family of Acid-sensing Ion Channels from the Zebrafish. Journal of Biological Chemistry, 2004, 279, 18783-18791.	3.4	73
78	The zebrafish homologue of the ret receptor and its pattern of expression during embryogenesis. Oncogene, 1997, 14, 879-889.	5.9	69
79	MicroRNA 218 Mediates the Effects of Tbx5a Over-Expression on Zebrafish Heart Development. PLoS ONE, 2012, 7, e50536.	2.5	69
80	Lef1-dependent Wnt/Î²-catenin signalling drives the proliferative engine that maintains tissue homeostasis during lateral line development. Development (Cambridge), 2011, 138, 3931-3941.	2.5	65
81	The paired domain-containing nuclear factorPax[b] is expressed in specific commissural interneurons in zebrafish embryos. Journal of Neurobiology, 1992, 23, 933-946.	3.6	64
82	Anf: a novel class of vertebrate homeobox genes expressed at the anterior end of the main embryonic axis. Gene, 1997, 200, 25-34.	2.2	64
83	A pioneering growth cone in the embryonic zebrafish brain.. Proceedings of the National Academy of Sciences of the United States of America, 1991, 88, 2293-2296.	7.1	63
84	Inhibition of Wnt/Axin/Î²-catenin pathway activity promotes ventral CNS midline tissue to adopt hypothalamic rather than floorplate identity. Development (Cambridge), 2004, 131, 5923-5933.	2.5	61
85	A zebrafish model of CLN2 disease is deficient in tripeptidyl peptidase 1 and displays progressive neurodegeneration accompanied by a reduction in proliferation. Brain, 2013, 136, 1488-1507.	7.6	58
86	Distribution of Pax6 protein during eye development suggests discrete roles in proliferative and differentiated visual cells. Development Genes and Evolution, 1997, 206, 363-369.	0.9	55
87	Ash1a and Neurogenin1 function downstream of Floating head to regulate epiphysial neurogenesis. Development (Cambridge), 2003, 130, 2455-2466.	2.5	52
88	Tcf7l2 Is Required for Left-Right Asymmetric Differentiation of Habenular Neurons. Current Biology, 2014, 24, 2217-2227.	3.9	52
89	Cdon acts as a Hedgehog decoy receptor during proximal-distal patterning of the optic vesicle. Nature Communications, 2014, 5, 4272.	12.8	52
90	Eph/Ephrin signalling maintains eye field segregation from adjacent neural plate territories during forebrain morphogenesis. Development (Cambridge), 2013, 140, 4193-4202.	2.5	51

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91	The zebrafish <i>flotte lotte</i> mutant reveals that the local retinal environment promotes the differentiation of proliferating precursors emerging from their stem cell niche. Development (Cambridge), 2010, 137, 2107-2115.	2.5	50
92	Solute carrier family 3 member 2 (Slc3a2) controls yolk syncytial layer (YSL) formation by regulating microtubule networks in the zebrafish embryo. Proceedings of the National Academy of Sciences of the United States of America, 2012, 109, 3371-3376.	7.1	49
93	Initial tract formation in the vertebrate brain. Progress in Brain Research, 1994, 102, 79-93.	1.4	48
94	Transcription factor 7-like 1 is involved in hypothalamoâ€"pituitary axis development in mice and humans. Proceedings of the National Academy of Sciences of the United States of America, 2016, 113, E548-57.	7.1	47
95	Hedgehog signaling patterns the outgrowth of unpaired skeletal appendages in zebrafish. BMC Developmental Biology, 2007, 7, 75.	2.1	46
96	Opposing Shh and Fgf signals initiate nasotemporal patterning of the retina. Development (Cambridge), 2015, 142, 3933-42.	2.5	46
97	HESX1- and TCF3-mediated repression of Wnt/Î²-catenin targets is required for normal development of the anterior forebrain. Development (Cambridge), 2011, 138, 4931-4942.	2.5	44
98	Watching eyes take shape. Current Opinion in Genetics and Development, 2015, 32, 73-79.	3.3	43
99	Cell Behaviors during Closure of the Choroid Fissure in the Developing Eye. Frontiers in Cellular Neuroscience, 2018, 12, 42.	3.7	43
100	Continued growth and circuit building in the anamniote visual system. Developmental Neurobiology, 2012, 72, 328-345.	3.0	40
101	The Î±2Î´-like Protein Cachd1 Increases N-type Calcium Currents and Cell Surface Expression and Competes with Î±2Î´-1. Cell Reports, 2018, 25, 1610-1621.e5.	6.4	40
102	Continuous growth of the motor system in the axolotl. Journal of Comparative Neurology, 1991, 303, 534-550.	1.6	39
103	Distinct and cooperative roles for Nodal and Hedgehog signals during hypothalamic development. Development (Cambridge), 2002, 129, 3055-65.	2.5	37
104	Characterisation of five novel zebrafish Eph -related receptor tyrosine kinases suggests roles in patterning the neural plate. Development Genes and Evolution, 1997, 206, 515-531.	0.9	36
105	Asymmetry in the epithalamus of vertebrates. Journal of Anatomy, 2001, 199, 63-84.	1.5	32
106	Long-range evolutionary constraints reveal cis-regulatory interactions on the human X chromosome. Nature Communications, 2015, 6, 6904.	12.8	31
107	De Novo Missense Variants in FBXW11 Cause Diverse Developmental Phenotypes Including Brain, Eye, and Digit Anomalies. American Journal of Human Genetics, 2019, 105, 640-657.	6.2	31
108	Novel hypophysiotropic AgRP2 neurons and pineal cells revealed by BAC transgenesis in zebrafish. Scientific Reports, 2017, 7, 44777.	3.3	30

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109	Analysis of axon tract formation in the zebrafish brain: the role of territories of gene expression and their boundaries. Cell and Tissue Research, 1997, 290, 189-196.	2.9	27
110	Antagonism between Gdf6a and retinoic acid pathways controls timing of retinal neurogenesis and growth of the eye in zebrafish. Development (Cambridge), 2016, 143, 1087-98.	2.5	26
111	Isolation, expression and regulation of a zebrafish paraxis homologue. Mechanisms of Development, 1998, 78, 85-89.	1.7	23
112	Daam1a mediates asymmetric habenular morphogenesis by regulating dendritic and axonal outgrowth. Development (Cambridge), 2013, 140, 3997-4007.	2.5	23
113	Compensatory growth renders Tcf7l1a dispensable for eye formation despite its requirement in eye field specification. ELife, 2019, 8, .	6.0	21
114	Induction and patterning of trunk and tail neural ectoderm by the homeobox gene <i>eve1</i> in zebrafish embryos. Proceedings of the National Academy of Sciences of the United States of America, 2010, 107, 3564-3569.	7.1	17
115	Left/right asymmetric collective migration of parapineal cells is mediated by focal FGF signaling activity in leading cells. Proceedings of the National Academy of Sciences of the United States of America, 2018, 115, E9812-E9821.	7.1	16
116	Looking to the future of zebrafish as a model to understand the genetic basis of eye disease. Human Genetics, 2019, 138, 993-1000.	3.8	15
117	Identification of alternatively spliced dab1 isoforms in zebrafish. Development Genes and Evolution, 2006, 216, 291-299.	0.9	14
118	Copy number variants in patients with intellectual disability affect the regulation of ARX transcription factor gene. Human Genetics, 2015, 134, 1163-1182.	3.8	14
119	Sox1a mediates the ability of the parapineal to impart habenular left-right asymmetry. ELife, 2019, 8, .	6.0	14
120	The zebrafish issue: 25â€...years on. Development (Cambridge), 2021, 148, .	2.5	14
121	Vaccination of Piglets up to 1 Week of Age with a Single-Dose Mycoplasma hyopneumoniae Vaccine Induces Protective Immunity within 2 Weeks against Virulent Challenge in the Presence of Maternally Derived Antibodies. Vaccine Journal, 2013, 20, 720-724.	3.1	13
122	Cloning and developmental expression of zebrafish pdzrn3. International Journal of Developmental Biology, 2011, 55, 989-993.	0.6	12
123	Full Transcriptome Analysis of Early Dorsoventral Patterning in Zebrafish. PLoS ONE, 2013, 8, e70053.	2.5	12
124	Characterization of paralogous uncx transcription factor encoding genes in zebrafish. Gene: X, 2019, 721, 100011.	2.3	11
125	Funduscopy in Adult Zebrafish and Its Application to Isolate Mutant Strains with Ocular Defects. PLoS ONE, 2010, 5, e15427.	2.5	11
126	Acquisition of regional and cellular identities in the developing zebrafish nervous system. Current Opinion in Neurobiology, 1992, 2, 9-15.	4.2	10

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127	Abrogation of Stem Loop Binding Protein (Slbp) function leads to a failure of cells to transition from proliferation to differentiation, retinal coloboma and midline axon guidance deficits. PLoS ONE, 2019, 14, e0211073.	2.5	9
128	Allele-specific gene expression can underlie altered transcript abundance in zebrafish mutants. ELife, 2022, 11, .	6.0	9
129	Kidins220/ARMS interacts with Pdzrn3, a protein containing multiple binding domains. Biochimie, 2012, 94, 2054-2057.	2.6	8
130	Developmentally regulated Tcf7l2 splice variants mediate transcriptional repressor functions during eye formation. ELife, 2019, 8, .	6.0	8
131	Identification of germline competent chimaeras by copulatory plug genotyping. Transgenic Research, 2011, 20, 429-433.	2.4	7
132	Zebrafish neurobiology: From development to circuit function and behaviour. Developmental Neurobiology, 2012, 72, 215-217.	3.0	7
133	Tissue-Specific Requirement for the GINS Complex During Zebrafish Development. Frontiers in Cell and Developmental Biology, 2020, 8, 373.	3.7	5
134	Eph Receptors and Ephrins Are Key Regulators of Morphogenesis. , 2000, , 123-149.		5
135	Loss of <i>slc39a14</i> causes simultaneous manganese hypersensitivity and deficiency in zebrafish. DMM Disease Models and Mechanisms, 2022, 15, .	2.4	4
136	A Structural Atlas of the Developing Zebrafish Telencephalon Based on Spatially-Restricted Transgene Expression. Frontiers in Neuroanatomy, 2022, 16, .	1.7	4
137	Yap and Taz regulate retinal pigment epithelial cell fate. Journal of Cell Science, 2015, 128, e1.1-e1.1.	2.0	2
138	Antibodies against pax6 immunostain amacrine and ganglion cells and neuronal progenitors, but not rod precursors, in the normal and regenerating retina of the goldfish. Journal of Neurobiology, 1996, 29, 399-413.	3.6	1
139	Clues from clueless. Current Biology, 1993, 3, 536-539.	3.9	0
140	Nigel Holder (July 2, 1953â€"December 11, 1998). Developmental Biology, 1999, 208, 253-254.	2.0	0
141	Analysis of axon tract formation in the zebrafish brain: the role of territories of gene expression and their boundaries. , 1997, , 189-196.		0