Abigail S. Tucker

List of Publications by Year
in descending order

145 papers	6,959 citations	66343 42 h-index	69250 77 g-index
152 all docs	152 docs citations	152 times ranked	5464 citing authors

#	Article	IF	Citations
1	The cutting-edge of mammalian development; how the embryo makes teeth. Nature Reviews Genetics, 2004, 5, 499-508.	16.3	525
2	Transformation of Tooth Type Induced by Inhibition of BMP Signaling. Science, 1998, 282, 1136-1138.	12.6	392
3	Gene defect in ectodermal dysplasia implicates a death domain adapter in development. Nature, 2001, 414, 913-916.	27.8	342
4	Salivary gland development. Seminars in Cell and Developmental Biology, 2007, 18, 237-244.	5.0	290
5	Molecular Genetics of Tooth Morphogenesis and Patterning: The Right Shape in the Right Place. Journal of Dental Research, 1999, 78, 826-834.	5.2	194
6	Activin is an essential early mesenchymal signal in tooth development that is required for patterning of the murine dentition. Genes and Development, 1998, 12, 2636-2649.	5.9	181
7	Tooth Agenesis: from Molecular Genetics to Molecular Dentistry. Journal of Dental Research, 2008, 87, 617-623.	5.2	179
8	Interactions between Bmp-4 and Msx-1 act to restrict gene expression to odontogenic mesenchyme. Developmental Dynamics, 1998, 212, 533-539.	1.8	150
9	Current knowledge of tooth development: patterning and mineralization of the murine dentition. Journal of Anatomy, 2009, 214, 502-515.	1.5	138
10	The activation level of the TNF family receptor, Edar, determines cusp number and tooth number during tooth development. Developmental Biology, 2004, 268, 185-194.	2.0	135
11	Evolution of the mammalian middle ear and jaw: adaptations and novel structures. Journal of Anatomy, 2013, 222, 147-160.	1.5	117
12	The pharyngeal pouches and clefts: Development, evolution, structure and derivatives. Seminars in Cell and Developmental Biology, 2010, 21, 325-332.	5.0	114
13	Ror2knockout mouse as a model for the developmental pathology of autosomal recessive Robinow syndrome. Developmental Dynamics, 2004, 229, 400-410.	1.8	113
14	Embryonic bauplans and the developmental origins of facial diversity and constraint. Development (Cambridge), 2014, 141, 1059-1063.	2.5	112
15	Fgf and Bmp signals repress the expression of Bapx1 in the mandibular mesenchyme and control the position of the developing jaw joint. Developmental Biology, 2004, 266, 138-150.	2.0	109
16	Loss of teeth and enamel in tetrapods: fossil record, genetic data and morphological adaptations. Journal of Anatomy, 2009, 214, 477-501.	1.5	109
17	Bapx1 regulates patterning in the middle ear: altered regulatory role in the transition from the proximal jaw during vertebrate evolution. Development (Cambridge), 2004, 131, 1235-1245.	2.5	108
18	Expression of Axin2 indicates a role for canonical Wnt signaling in development of the crown and root during preâ€•and postnatal tooth development. Developmental Dynamics, 2010, 239, 160-167.	1.8	95

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19	Lineage tracing of the endoderm during oral development. Developmental Dynamics, 2012, 241, 1183-1191.	1.8	95
20	Evolution and developmental diversity of tooth regeneration. Seminars in Cell and Developmental Biology, 2014, 25-26, 71-80.	5.0	89
21	Initiation and patterning of the snake dentition are dependent on Sonic Hedgehog signaling. Developmental Biology, 2008, 319, 132-145.	2.0	87
22	Dual Origin of the Epithelium of the Mammalian Middle Ear. Science, 2013, 339, 1453-1456.	12.6	86
23	Neural crest cells provide species-specific patterning information in the developing branchial skeleton. Evolution & Development, 2004, 6, 32-40.	2.0	84
24	Sonic hedgehog in the pharyngeal endoderm controls arch pattern via regulation of Fgf8 in head ectoderm. Developmental Biology, 2007, 303, 244-258.	2.0	81
25	Fgf10-Sox9 are essential for establishment of distal progenitor cells during salivary gland development. Development (Cambridge), 2017, 144, 2294-2305.	2.5	79
26	Death in the Life of a Tooth. Journal of Dental Research, 2004, 83, 11-16.	5.2	76
27	Tooth-bone morphogenesis during postnatal stages of mouse first molar development. Journal of Anatomy, 2011, 218, 699-716.	1.5	69
28	Early Regression of the Dental Lamina Underlies the Development of Diphyodont Dentitions. Journal of Dental Research, 2012, 91, 491-498.	5.2	68
29	Mouse models of tooth abnormalities. European Journal of Oral Sciences, 2008, 116, 1-10.	1.5	66
30	Cell lineage of primary and secondary enamel knots. Developmental Dynamics, 2005, 233, 754-759.	1.8	62
31	Tail bud determination in the vertebrate embryo. Current Biology, 1995, 5, 807-813.	3.9	59
32	Enamel-free teeth: Tbx1 deletion affects amelogenesis in rodent incisors. Developmental Biology, 2009, 328, 493-505.	2.0	54
33	Evolution of the hypoxia-sensitive cells involved in amniote respiratory reflexes. ELife, 2017, 6, .	6.0	54
34	The origin of the stapes and relationship to the otic capsule and oval window. Developmental Dynamics, 2012, 241, 1396-1404.	1.8	53
35	Odontogenesis in the Veiled Chameleon (Chamaeleo calyptratus). Archives of Oral Biology, 2013, 58, 118-133.	1.8	53
36	A role for suppressed incisor cuspal morphogenesis in the evolution of mammalian heterodont dentition. Proceedings of the National Academy of Sciences of the United States of America, 2010, 107, 92-97.	7.1	51

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37	Traf6 is essential for murine tooth cusp morphogenesis. Developmental Dynamics, 2004, 229, 131-135.	1.8	50
38	Contribution of mesoderm to the developing dental papilla. International Journal of Developmental Biology, 2011, 55, 59-64.	0.6	50
39	Contribution of the tooth bud mesenchyme to alveolar bone. Journal of Experimental Zoology Part B: Molecular and Developmental Evolution, 2009, 312B, 510-517.	1.3	49
40	Epithelial stratification and placode invagination are separable functions in early morphogenesis of the molar tooth. Development (Cambridge), 2016, 143, 670-81.	2.5	48
41	Organized Emergence of Multiple-Generations of Teeth in Snakes Is Dysregulated by Activation of Wnt/Beta-Catenin Signalling. PLoS ONE, 2013, 8, e74484.	2.5	48
42	The development of complex tooth shape in reptiles. Frontiers in Physiology, 2014, 5, 74.	2.8	46
43	Joint formation in the middle ear: Lessons from the mouse and guinea pig. Developmental Dynamics, 2006, 235, 1326-1333.	1.8	45
44	A regulatory relationship between Tbx1 and FGF signaling during tooth morphogenesis and ameloblast lineage determination. Developmental Biology, 2008, 320, 39-48.	2.0	45
45	Interactions of the Tooth and Bone during Development. Journal of Dental Research, 2013, 92, 1129-1135.	5.2	45
46	Multiple Cranial Organ Defects after Conditionally Knocking Out Fgf10 in the Neural Crest. Frontiers in Physiology, 2016, 7, 488.	2.8	45
47	Organized Tooth-specific Cellular Differentiation Stimulated by BMP4. Journal of Dental Research, 2005, 84, 603-606.	5.2	44
48	A new developmental mechanism for the separation of the mammalian middle ear ossicles from the jaw. Proceedings of the Royal Society B: Biological Sciences, 2017, 284, 20162416.	2.6	44
49	Meckelâ€™s cartilage breakdown offers clues to mammalian middle ear evolution. Nature Ecology and Evolution, 2017, 1, 93.	7.8	43
50	Major evolutionary transitions and innovations: the tympanic middle ear. Philosophical Transactions of the Royal Society B: Biological Sciences, 2017, 372, 20150483.	4.0	43
51	No evidence for ventrally migrating neural tube cells from the mid- and hindbrain. Developmental Dynamics, 2002, 223, 163-167.	1.8	42
52	Fate map of the dental mesenchyme: Dynamic development of the dental papilla and follicle. Developmental Biology, 2012, 366, 244-254.	2.0	42
53	Dynamic relationship of the epithelium and mesenchyme during salivary gland initiation: the role of Fgf10. Biology Open, 2013, 2, 981-989.	1.2	41
54	Defects in middle ear cavitation cause conductive hearing loss in the Tcof1 mutant mouse. Human Molecular Genetics, 2010, 19, 1551-1560.	2.9	40

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55	Craniofacial development: current concepts in the molecular basis of Treacher Collins syndrome. British Journal of Oral and Maxillofacial Surgery, 2013, 51, 384-388.	0.8	40
56	The Impact of theEdaPathway on Tooth Root Development. Journal of Dental Research, 2017, 96, 1290-1297.	5.2	39
57	Viperous fangs: Development and evolution of the venom canal. Mechanisms of Development, 2008, 125, 786-796.	1.7	38
58	Tooth development is independent of a Hox patterning programme. Developmental Dynamics, 2002, 225, 332-335.	1.8	36
59	Species-specific modifications of mandible shape reveal independent mechanisms for growth and initiation of the coronoid. EvoDevo, 2015, 6, 35.	3.2	36
60	Independent induction and formation of the dorsal and ventral fins inXenopus laevis. Developmental Dynamics, 2004, 230, 461-467.	1.8	35
61	Tooth development in a model reptile: functional and null generation teeth in the gecko Paroedura picta. Journal of Anatomy, 2012, 221, 195-208.	1.5	35
62	The buccohypophyseal canal is an ancestral vertebrate trait maintained by modulation in sonic hedgehog signaling. BMC Biology, 2013, 11, 27.	3.8	35
63	Molecular control of odontogenic patterning: positional dependent initiation and morphogenesis. European Journal of Oral Sciences, 1998, 106, 44-47.	1.5	34
64	Amelogenin in cranioâ€facial development: the tooth as a model to study the role of amelogenin during embryogenesis. Journal of Experimental Zoology Part B: Molecular and Developmental Evolution, 2009, 312B, 445-457.	1.3	34
65	Non-apoptotic functions of caspase-7 during osteogenesis. Cell Death and Disease, 2014, 5, e1366-e1366.	6.3	34
66	Revitalising the rudimentary replacement dentition in the mouse. Development (Cambridge), 2019, 146, .	2.5	33
67	Shh signalling restricts the expression of Gcm2 and controls the position of the developing parathyroids. Developmental Biology, 2011, 353, 194-205.	2.0	32
68	Embryonic development of the monitor lizard, Varanus indicus. Amphibia - Reptilia, 2012, 33, 451-468.	0.5	32
69	The Intertwined Evolution and Development of Sutures and Cranial Morphology. Frontiers in Cell and Developmental Biology, 2021, 9, 653579.	3.7	31
70	Caspaseâ€7 participates in differentiation of cells forming dental hard tissues. Development Growth and Differentiation, 2013, 55, 615-621.	1.5	30
71	Development and Integration of the Ear. Current Topics in Developmental Biology, 2015, 115, 213-232.	2.2	30
72	The role of transforming growth factorâ€Î² signalling in the patterning of the proximal processes of the murine dentary. Developmental Dynamics, 2008, 237, 1604-1613.	1.8	28

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73	Morphogenesis and bone integration of the mouse mandibular third molar. European Journal of Oral Sciences, 2011, 119, 265-274.	1.5	28
74	Diverse Fate of an Enigmatic Structure: 200 Years of Meckelâ€™s Cartilage. Frontiers in Cell and Developmental Biology, 2020, 8, 821.	3.7	28
75	Incudomalleal joint formation: the roles of apoptosis, migration and downregulation. BMC Developmental Biology, 2007, 7, 134.	2.1	27
76	Activation of Pro-apoptotic Caspases in Non-apoptotic Cells During Odontogenesis and Related Osteogenesis. Frontiers in Physiology, 2018, 9, 174.	2.8	27
77	Apoptosis of Premigratory Neural Crest Cells in Rhombomeres 3 and 5: Consequences for Patterning of the Branchial Region. Developmental Biology, 2002, 251, 118-128.	2.0	26
78	Apoptotic Signaling in Mouse Odontogenesis. OMICS A Journal of Integrative Biology, 2012, 16, 60-70.	2.0	26
79	Apoptosis in Early Salivary Gland Duct Morphogenesis and Lumen Formation. Journal of Dental Research, 2016, 95, 277-283.	5.2	26
80	Fate of the Molar Dental Lamina in the Monophyodont Mouse. PLoS ONE, 2015, 10, e0127543.	2.5	25
81	Molar tooth development in caspase-3 deficient mice. International Journal of Developmental Biology, 2006, 50, 491-7.	0.6	24
82	Recombinant EDA or Sonic Hedgehog rescue the branching defect in Ectodysplasin A pathway mutant salivary glands in vitro. Developmental Dynamics, 2010, 239, 2674-2684.	1.8	23
83	Hearing Loss in a Mouse Model of 22q11.2 Deletion Syndrome. PLoS ONE, 2013, 8, e80104.	2.5	23
84	A defect in early myogenesis causes Otitis media in two mouse models of 22q11.2 Deletion Syndrome. Human Molecular Genetics, 2015, 24, 1869-1882.	2.9	23
85	Salivary Gland Adaptations: Modification of the Glands for Novel Uses. Frontiers of Oral Biology, 2010, 14, 21-31.	1.5	21
86	Distinct spatiotemporal roles of hedgehog signalling during chick and mouse cranial base and axial skeleton development. Developmental Biology, 2012, 371, 203-214.	2.0	21
87	Root and Eruption Defects in c-Fos Mice Are Driven by Loss of Osteoclasts. Journal of Dental Research, 2015, 94, 1724-1731.	5.2	21
88	Epithelial topography for repetitive tooth formation. Biology Open, 2015, 4, 1625-1634.	1.2	20
89	The Slice Culture Method for Following Development of Tooth Germs In Explant Culture. Journal of Visualized Experiments, 2013, , e50824.	0.3	19
90	Neutron scanning reveals unexpected complexity in the enamel thickness of an herbivorous Jurassic reptile. Journal of the Royal Society Interface, 2018, 15, 20180039.	3.4	19

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91	Primary enamel knot cell death in Apaf-1 and caspase-9 deficient mice. Archives of Oral Biology, 2007, 52, 15-19.	1.8	18
92	Developmental aspects of the tympanic membrane: Shedding light on function and disease. Genesis, 2020, 58, e23348.	1.6	18
93	Defects and rescue of the minor salivary glands in Eda pathway mutants. Developmental Biology, 2011, 349, 137-146.	2.0	17
94	Caspase-7 in molar tooth development. Archives of Oral Biology, 2012, 57, 1474-1481.	1.8	17
95	Expression and characterization of c-Myb in prenatal odontogenesis. Development Growth and Differentiation, 2011, 53, 793-803.	1.5	16
96	Complex patterns of tooth replacement revealed in the fruit bat (Eidolon helvum). Journal of Anatomy, 2016, 229, 847-856.	1.5	16
97	Developmental mechanisms driving complex tooth shape in reptiles. Developmental Dynamics, 2020, 249, 441-464.	1.8	16
98	Understanding the development of the respiratory glands. Developmental Dynamics, 2015, 244, 525-539.	1.8	15
99	Developmental mechanisms underlying differential claw expression in the autopodia of geckos. EvoDevo, 2015, 6, 8.	3.2	15
100	Mapping the distribution of stem/progenitor cells across the middle ear during homeostasis and inflammation. Development (Cambridge), 2018, 145, .	2.5	15
101	Transient role of the middle ear as a lower jaw support across mammals. ELife, 2020, 9, .	6.0	15
102	A mesenchymal to epithelial switch in Fgf10 expression specifies an evolutionary-conserved population of ionocytes in salivary glands. Cell Reports, 2022, 39, 110663.	6.4	15
103	Apoptosis-related factors (Fas receptor, Fas ligand, FADD) in early tooth development of the field vole (Microtus agrestis). Archives of Oral Biology, 2005, 50, 165-169.	1.8	14
104	Apoptosis-associated protein expression in human salivary gland morphogenesis. Archives of Oral Biology, 2016, 69, 71-81.	1.8	14
105	High yield expression of biologically active recombinant full length human tuftelin protein in baculovirus-infected insect cells. Protein Expression and Purification, 2009, 68, 90-98.	1.3	12
106	Localization of câ€‹scp›MYB‹/scp› in differentiated cells during postnatal molar and alveolar bone development. European Journal of Oral Sciences, 2012, 120, 495-504.	1.5	12
107	Salivary Gland Dysplasia in Fgf10 Heterozygous Mice: A New Mouse Model of Xerostomia. Current Molecular Medicine, 2015, 15, 674-82.	1.3	12
108	Epithelial dynamics shed light on mechanisms underlying ear canal defects. Development (Cambridge), 2020, 147, .	2.5	11

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109	A comparison of metrics for quantifying cranial suture complexity. Journal of the Royal Society Interface, 2020, 17, 20200476.	3.4	10
110	Inhibition of Aurora Kinase B activity disrupts development and differentiation of salivary glands. Cell Death Discovery, 2021, 7, 16.	4.7	10
111	Cell proliferation and apoptosis in the primary enamel knot measured by flow cytometry of laser microdissected samples. Archives of Oral Biology, 2010, 55, 570-575.	1.8	9
112	Getting out of an egg: Merging of tooth germs to create an egg tooth in the snake. Developmental Dynamics, 2020, 249, 199-208.	1.8	9
113	Craniofacial transitions: the role of EMT and MET during head development. Development (Cambridge), 2021, 148, .	2.5	9
114	Anatomy and Development of the Mammalian External Auditory Canal: Implications for Understanding Canal Disease and Deformity. Frontiers in Cell and Developmental Biology, 2020, 8, 617354.	3.7	9
115	Role of c-Myb in chondrogenesis. Bone, 2015, 76, 97-106.	2.9	8
116	FGF and EDA pathways control initiation and branching of distinct subsets of developing nasal glands. Developmental Biology, 2016, 419, 348-356.	2.0	8
117	Balance Between Tooth Size and Tooth Number Is Controlled by Hyaluronan. Frontiers in Physiology, 2020, 11, 996.	2.8	8
118	Reawakening of Ancestral Dental Potential as a Mechanism to Explain Dental Pathologies. Integrative and Comparative Biology, 2020, 60, 619-629.	2.0	8
119	FGF10 is an essential regulator of tracheal submucosal gland morphogenesis. Developmental Biology, 2019, 451, 158-166.	2.0	7
120	Characteristics of aquaporin 1, 3, and 5 expression during early murine salivary gland development. Journal of Anatomy, 2021, 238, 794-806.	1.5	7
121	Non-apoptotic role for caspase-7 in hair follicles and the surrounding tissue. Journal of Molecular Histology, 2015, 46, 443-455.	2.2	6
122	An Essential Requirement for Fgf10 in Pinna Extension Sheds Light on Auricle Defects in LADD Syndrome. Frontiers in Cell and Developmental Biology, 2020, 8, 609643.	3.7	6
123	The TMJ Disc Is a Common Ancestral Feature in All Mammals, as Evidenced by the Presence of a Rudimentary Disc During Monotreme Development. Frontiers in Cell and Developmental Biology, 2020, 8, 356.	3.7	6
124	Cryptophthalmos, dental anomalies, oral vestibule defect, and a novel FREM2 mutation. Journal of Human Genetics, 2022, 67, 115-118.	2.3	6
125	Interactions between Bmpâ€4 and Msxâ€1 act to restrict gene expression to odontogenic mesenchyme. Developmental Dynamics, 1998, 212, 533-539.	1.8	6
126	The effect of caspase-3 inhibition on interdigital tissue regression in explant cultures of developing mouse limbs. Animal Cells and Systems, 2012, 16, 295-301.	2.2	5

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127	Molecular biology of the mammalian dentary: insights into how complex skeletal elements can be shaped during development and evolution. , 2012, , 207-229.		5
128	Caspase Inhibition Affects the Expression of Autophagy-Related Molecules in Chondrocytes. Cartilage, 2021, 13, 956S-968S.	2.7	5
129	Comparing development and regeneration in the submandibular gland highlights distinct mechanisms. Journal of Anatomy, 2021, 238, 1371-1385.	1.5	5
130	Expanding genotypic and phenotypic spectrums of <scp>LTBP3</scp> variants in dental anomalies and short stature syndrome. Clinical Genetics, 2022, 102, 66-71.	2.0	5
131	Development of the Vestibular Lamina in Human Embryos: Morphogenesis and Vestibule Formation. Frontiers in Physiology, 2020, 11, 753.	2.8	4
132	Morphology and regression of the dental lamina. Developmental Biology, 2011, 356, 254-255.	2.0	2
133	Q&A: Morphological insights into evolution. BMC Biology, 2017, 15, 83.	3.8	2
134	Impact of hypofunctional occlusion on upper and lower molars after cessation of root development in adult mice. European Journal of Orthodontics, 2016, 39, cjw051.	2.4	1
135	Editorial: Contemporary Models in Ectodermal Organ Development, Maintenance and Regeneration. Frontiers in Physiology, 2021, 12, 758271.	2.8	1
136	Interactions between Bmp-4 and Msx-1 act to restrict gene expression to odontogenic mesenchyme. , 1998, 212, 533.		1
137	Salivary Gland Development in Culture. Methods in Molecular Biology, 2022, 2403, 277-294.	0.9	1
138	Title Pages / List of Contents / Preface. Frontiers of Oral Biology, 2010, , I-VII.	1.5	0
139	Phenotype variation in Treacher Collins Syndrome: from missense to splice site mutations. British Journal of Oral and Maxillofacial Surgery, 2013, 51, 276-277.	0.8	0
140	A Critique of the Toxicoferan Hypothesis. , 2015, , 1-15.		0
141	Introduction. Journal of Anatomy, 2016, 228, 215-216.	1.5	0
142	Nr2fs Take the Upper Hand in the Upper Jaw. Developmental Cell, 2018, 44, 275-276.	7.0	0
143	B.BerkovitzR. P.ShellisThe Teeth of Mammalian Vertebrates. Elsevier, published 17th August 2018. Hardcover ISBN:9780128028186. eBook ISBN:9780128028193.. Journal of Anatomy, 2021, 238, 215-215.	1.5	0
144	A Critique of the Toxicoferan Hypothesis. Toxinology, 2017, , 69-86.	0.2	0

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145	Identification and characterisation of spontaneous mutations causing deafness from a targeted knockout programme. BMC Biology, 2022, 20, 67.	3.8	0