Deterministic HOX Patterning in Human Pluripotent St

Stem Cell Reports

4, 632-644

DOI: 10.1016/j.stemcr.2015.02.018

Citation Report

#	Article	IF	Citations
1	Neuromesodermal progenitors and the making of the spinal cord. Development (Cambridge), 2015, 142, 2864-2875.	1.2	282
2	Generating trunk neural crest from human pluripotent stem cells. Scientific Reports, 2016, 6, 19727.	1.6	63
3	Modeling ALS with motor neurons derived from human induced pluripotent stem cells. Nature Neuroscience, 2016, 19, 542-553.	7.1	252
4	Hox-Mediated Spatial and Temporal Coding of Stem Cells in Homeostasis and Neoplasia. Stem Cells and Development, 2016, 25, 1282-1289.	1.1	15
5	Neural tube morphogenesis in synthetic 3D microenvironments. Proceedings of the National Academy of Sciences of the United States of America, 2016, 113, E6831-E6839.	3.3	186
6	Early molecular events during retinoic acid induced differentiation of neuromesodermal progenitors. Biology Open, 2016, 5, 1821-1833.	0.6	37
7	Generation of highly enriched V2a interneurons from mouse embryonic stem cells. Experimental Neurology, 2016, 277, 305-316.	2.0	26
8	HOX genes: Major actors in resistance to selective endocrine response modifiers. Biochimica Et Biophysica Acta: Reviews on Cancer, 2016, 1865, 105-110.	3.3	12
9	Evo-engineering and the cellular and molecular origins of the vertebrate spinal cord. Developmental Biology, 2017, 432, 3-13.	0.9	66
10	A Gene Regulatory Network Balances Neural and Mesoderm Specification during Vertebrate Trunk Development. Developmental Cell, 2017, 41, 243-261.e7.	3.1	210
11	Zebrafish Znfl1 proteins control the expression of hoxb1b gene in the posterior neuroectoderm by acting upstream of pou5f3 and sall4 genes. Journal of Biological Chemistry, 2017, 292, 13045-13055.	1.6	16
12	Deriving, regenerating, and engineering CNS tissues using human pluripotent stem cells. Current Opinion in Biotechnology, 2017, 47, 36-42.	3.3	7
13	Pluripotent stem cell-derived organoids: using principles of developmental biology to grow human tissues in a dish. Development (Cambridge), 2017, 144, 958-962.	1.2	230
14	Transcriptome analysis reveals determinant stages controlling human embryonic stem cell commitment to neuronal cells. Journal of Biological Chemistry, 2017, 292, 19590-19604.	1.6	29
15	Wnt/Î²â€catenin signaling during early vertebrate neural development. Developmental Neurobiology, 2017, 77, 1239-1259.	1.5	58
16	Programming microphysiological systems for childrenâ€™s health protection. Experimental Biology and Medicine, 2017, 242, 1586-1592.	1.1	13
17	Stem cells for spinal cord injury: Strategies to inform differentiation and transplantation. Biotechnology and Bioengineering, 2017, 114, 245-259.	1.7	43
18	Collinear Hox-Hox interactions are involved in patterning the vertebrate anteroposterior (A-P) axis. PLoS ONE, 2017, 12, e0175287.	1.1	18

#	Article	IF	Citations
19	Cooperation Between T-Box Factors Regulates the Continuous Segregation of Germ Layers During Vertebrate Embryogenesis. Current Topics in Developmental Biology, 2017, 122, 117-159.	1.0	11
20	Single-injection ex ovo transplantation method for broad spinal cord engraftment of human pluripotent stem cell-derived motor neurons. Journal of Neuroscience Methods, 2018, 298, 16-23.	1.3	2
21	Wnt/Yes-Associated Protein Interactions During Neural Tissue Patterning of Human Induced Pluripotent Stem Cells. Tissue Engineering - Part A, 2018, 24, 546-558.	1.6	25
22	Depletion of HOXA5 inhibits the osteogenic differentiation and proliferation potential of stem cells from the apical papilla. Cell Biology International, 2018, 42, 45-52.	1.4	8
23	Transcriptionally dynamic progenitor populations organised around a stable niche drive axial patterning. Development (Cambridge), 2019, 146, .	1.2	48
24	Two Tier Hox Collinearity Mediates Vertebrate Axial Patterning. Frontiers in Cell and Developmental Biology, 2018, 6, 102.	1.8	5
25	Subcutaneous Maturation of Neural Stem Cell-Loaded Hydrogels Forms Region-Specific Neuroepithelium. Cells, 2018, 7, 173.	1.8	13
26	Efficient derivation of sympathetic neurons from human pluripotent stem cells with a defined condition. Scientific Reports, 2018, 8, 12865.	1.6	39
27	A human iPSC line capable of differentiating into functional macrophages expressing ZsGreen: a tool for the study and in vivo tracking of therapeutic cells. Philosophical Transactions of the Royal Society B: Biological Sciences, 2018, 373, 20170219.	1.8	35
28	The Long Road to Making Muscle In Vitro. Current Topics in Developmental Biology, 2018, 129, 123-142.	1.0	24
29	Three-dimensional induction of dorsal, intermediate and ventral spinal cord tissues from human pluripotent stem cells. Development (Cambridge), 2018, 145, .	1.2	113
30	Generation and post-injury integration of human spinal cord neural stem cells. Nature Methods, 2018, 15, 723-731.	9.0	132
31	Biological processes and signal transduction pathways regulated by the protein methyltransferase SETD7 and their significance in cancer. Signal Transduction and Targeted Therapy, 2018, 3, 19.	7.1	68
32	Smchd1 regulates long-range chromatin interactions on the inactive X chromosome and at Hox clusters. Nature Structural and Molecular Biology, 2018, 25, 766-777.	3.6	84
33	Neural differentiation, selection and transcriptomic profiling of human neuromesodermal progenitors-like cells in vitro. Development (Cambridge), 2018, 145, .	1.2	48
34	Modeling Mammalian Gastrulation With Embryonic Stem Cells. Current Topics in Developmental Biology, 2018, 129, 1-23.	1.0	23
35	Modeling Neurological Disorders with Human Pluripotent Stem Cell-Derived Astrocytes. International Journal of Molecular Sciences, 2019, 20, 3862.	1.8	20
36	Restoring Motor Neurons in Spinal Cord Injury With Induced Pluripotent Stem Cells. Frontiers in Cellular Neuroscience, 2019, 13, 369.	1.8	27

#	Article	IF	Citations
37	Inferring Regulatory Programs Governing Region Specificity of Neuroepithelial Stem Cells during Early Hindbrain and Spinal Cord Development. Cell Systems, 2019, 9, 167-186.e12.	2.9	13
38	Sall4 regulates neuromesodermal progenitors and their descendants during body elongation in mouse embryos. Development (Cambridge), 2019, 146, .	1.2	22
39	A novel self-organizing embryonic stem cell system reveals signaling logic underlying the patterning of human ectoderm. Development (Cambridge), 2019, 146, .	1.2	44
40	Spatiotemporal Control of Morphogen Delivery to Pattern Stem Cell Differentiation in Threeâ€Dimensional Hydrogels. Current Protocols in Stem Cell Biology, 2019, 51, e97.	3.0	5
41	A 3D culture model of innervated human skeletal muscle enables studies of the adult neuromuscular junction. ELife, 2019, 8, .	2.8	169
42	NeuroMesodermal Progenitors (NMPs): a comparative study between Pluripotent Stem Cells and Embryo derived populations. Development (Cambridge), 2019, 146, .	1.2	29
43	Engineering biomaterials to control the neural differentiation of stem cells. Brain Research Bulletin, 2019, 150, 50-60.	1.4	17
44	FGF Modulates the Axial Identity of Trunk hPSC-Derived Neural Crest but Not the Cranial-Trunk Decision. Stem Cell Reports, 2019, 12, 920-933.	2.3	43
45	Filling the Gap: Neural Stem Cells as A Promising Therapy for Spinal Cord Injury. Pharmaceuticals, 2019, 12, 65.	1.7	64
46	An Epiblast Stem Cell derived multipotent progenitor population for axial extension. Development (Cambridge), 2019, 146, .	1.2	27
47	Characterization and Therapeutic Application of Mesenchymal Stem Cells with Neuromesodermal Origin from Human Pluripotent Stem Cells. Theranostics, 2019, 9, 1683-1697.	4.6	22
49	Vertebrate hox temporal collinearity: does it exist and what is itâ€™s function?. Cell Cycle, 2019, 18, 523-530.	1.3	12
50	Spatiotemporal control and modeling of morphogen delivery to induce gradient patterning of stem cell differentiation using fluidic channels. Biomaterials Science, 2019, 7, 1358-1371.	2.6	18
51	Establishing neuronal diversity in the spinal cord: a time and a place. Development (Cambridge), 2019, 146, .	1.2	208
52	3D Printing of Neural Tissues Derived from Human Induced Pluripotent Stem Cells Using a Fibrin-Based Bioink. ACS Biomaterials Science and Engineering, 2019, 5, 234-243.	2.6	114
53	Neural induction of porcineâ€induced pluripotent stem cells and further differentiation using glioblastomaâ€cultured medium. Journal of Cellular and Molecular Medicine, 2019, 23, 2052-2063.	1.6	16
54	Kidney organoids in translational medicine: Disease modeling and regenerative medicine. Developmental Dynamics, 2020, 249, 34-45.	0.8	33
55	Modeling Brain Disorders Using Induced Pluripotent Stem Cells. Cold Spring Harbor Perspectives in Biology, 2020, 12, a035659.	2.3	28

#	Article	IF	Citations
56	A critical look: Challenges in differentiating human pluripotent stem cells into desired cell types and organoids. Wiley Interdisciplinary Reviews: Developmental Biology, 2020, 9, e368.	5.9	27
57	Engineered tissues and strategies to overcome challenges in drug development. Advanced Drug Delivery Reviews, 2020, 158, 116-139.	6.6	26
58	Differential abilities to engage inaccessible chromatin diversify vertebrate HOX binding patterns. Development (Cambridge), 2020, 147, .	1.2	34
59	Accelerated differentiation of human pluripotent stem cells into neural lineages via an early intermediate ectoderm population. Stem Cells, 2020, 38, 1400-1408.	1.4	13
60	Fabrication of homotypic neural ribbons as a multiplex platform optimized for spinal cord delivery. Scientific Reports, 2020, 10, 12939.	1.6	12
61	Cerebellar Differentiation from Human Stem Cells Through Retinoid, Wnt, and Sonic Hedgehog Pathways. Tissue Engineering - Part A, 2021, 27, 881-893.	1.6	15
62	Cell therapy for spinal cord injury by using human iPSC-derived region-specific neural progenitor cells. Molecular Brain, 2020, 13, 120.	1.3	51
63	Retinoic Acid Accelerates the Specification of Enteric Neural Progenitors from In-Vitro-Derived Neural Crest. Stem Cell Reports, 2020, 15, 557-565.	2.3	19
64	Species-specific pace of development is associated with differences in protein stability. Science, 2020, 369, .	6.0	163
65	Anteroposterior Wnt-RA Gradient Defines Adhesion and Migration Properties of Neural Progenitors in Developing Spinal Cord. Stem Cell Reports, 2020, 15, 898-911.	2.3	10
66	Generating ventral spinal organoids from human induced pluripotent stem cells. Methods in Cell Biology, 2020, 159, 257-277.	0.5	13
67	Transplanting neural progenitor cells to restore connectivity after spinal cord injury. Nature Reviews Neuroscience, 2020, 21, 366-383.	4.9	151
68	Regulating Retinoic Acid Availability during Development and Regeneration: The Role of the CYP26 Enzymes. Journal of Developmental Biology, 2020, 8, 6.	0.9	17
69	Recent Advancements in Engineering Strategies for Manipulating Neural Stem Cell Behavior. Current Tissue Microenvironment Reports, 2020, 1, 41-47.	1.3	2
71	Self-Organizing 3D Human Trunk Neuromuscular Organoids. Cell Stem Cell, 2020, 26, 172-186.e6.	5.2	177
72	Bioengineering tissue morphogenesis and function in human neural organoids. Seminars in Cell and Developmental Biology, 2021, 111, 52-59.	2.3	22
73	Cross-Comparison of Human iPSC Motor Neuron Models of Familial and Sporadic ALS Reveals Early and Convergent Transcriptomic Disease Signatures. Cell Systems, 2021, 12, 159-175.e9.	2.9	33
74	NEUBOrg: Artificially Induced Pluripotent Stem Cell-Derived Brain Organoid to Model and Study Genetics of Alzheimerâ€™s Disease Progression. Frontiers in Aging Neuroscience, 2021, 13, 643889.	1.7	5

#	Article	IF	Citations
75	In vitro models of spinal motor circuitâ€™s development in mammals: achievements and challenges. Current Opinion in Neurobiology, 2021, 66, 240-249.	2.0	10
76	FutureTox IV Workshop Summary: Predictive Toxicology for Healthy Children. Toxicological Sciences, 2021, 180, 198-211.	1.4	15
77	Understanding axial progenitor biology in vivo and in vitro. Development (Cambridge), 2021, 148, .	1.2	57
78	Dynamic extrinsic pacing of the HOX clock in human axial progenitors controls motor neuron subtype specification. Development (Cambridge), 2021, 148, .	1.2	37
79	Defining the signalling determinants of a posterior ventral spinal cord identity in human neuromesodermal progenitor derivatives. Development (Cambridge), 2021, 148, .	1.2	16
80	Stem Cell Neurodevelopmental Solutions for Restorative Treatments of the Human Trunk and Spine. Frontiers in Cellular Neuroscience, 2021, 15, 667590.	1.8	13
81	Artificially Induced Pluripotent Stem Cell-Derived Whole-Brain Organoid for Modelling the Pathophysiology of Metachromatic Leukodystrophy and Drug Repurposing. Biomedicines, 2021, 9, 440.	1.4	5
82	Exploring the biological domain of the neural embryonic stem cell test (ESTn): Morphogenetic regulators, Hox genes and cell types, and their usefulness as biomarkers for embryotoxicity screening. Toxicology, 2021, 454, 152735.	2.0	1
83	Embryonal Neuromesodermal Progenitors for Caudal Central Nervous System and Tissue Development. Journal of Korean Neurosurgical Society, 2021, 64, 359-366.	0.5	5
84	An adverse outcome pathway on the disruption of retinoic acid metabolism leading to developmental craniofacial defects. Toxicology, 2021, 458, 152843.	2.0	11
85	Transplantable human motor networks as a neuron-directed strategy for spinal cord injury. IScience, 2021, 24, 102827.	1.9	7
88	In Vitro Generation of Posterior Motor Neurons from Human Pluripotent Stem Cells. Current Protocols, 2021, 1, e244.	1.3	5
89	Establishment of the vertebrate body plan: Rethinking gastrulation through stem cell models of early embryogenesis. Developmental Cell, 2021, 56, 2405-2418.	3.1	21
91	Spatiotemporal contribution of neuromesodermal progenitor-derived neural cells in the elongation of developing mouse spinal cord. Life Sciences, 2021, 282, 119393.	2.0	14
92	The nephric mesenchyme lineage of intermediate mesoderm is derived from Tbx6-expressing derivatives of neuro-mesodermal progenitors via BMP-dependent Osr1 function. Developmental Biology, 2021, 478, 155-162.	0.9	7
104	Rostrocaudal Areal Patterning of Human PSC-Derived Cortical Neurons by FGF8 Signaling. ENeuro, 2018, 5, ENEURO.0368-17.2018.	0.9	11
105	The Application of Neural Stem/Progenitor Cells for Regenerative Therapy of Spinal Cord Injury. Current Stem Cell Research and Therapy, 2019, 14, 495-503.	0.6	13
106	Human axial progenitors generate trunk neural crest cells in vitro. ELife, 2018, 7, .	2.8	81

#	Article	IF	Citations
107	Engineering induction of singular neural rosette emergence within hPSC-derived tissues. ELife, 2018, 7, .	2.8	81
115	Methods for Controlled Induction of Singular Rosette Cytoarchitecture Within Human Pluripotent Stem Cell-Derived Neural Multicellular Assemblies. Methods in Molecular Biology, 2021, 2258, 193-203.	0.4	1
117	Axial Stem Cells and the Formation of the Vertebrate Body. Learning Materials in Biosciences, 2020, , 131-158.	0.2	2
119	Developing nociceptor-selective treatments for acute and chronic pain. Science Translational Medicine, 2021, 13, eabj9837.	5.8	22
120	Fully Characterized Mature Human iPS- and NMP-Derived Motor Neurons Thrive Without Neuroprotection in the Spinal Contusion Cavity. Frontiers in Cellular Neuroscience, 2021, 15, 725195.	1.8	5
121	Human stem cell models of neurodegeneration: From basic science of amyotrophic lateral sclerosis to clinical translation. Cell Stem Cell, 2022, 29, 11-35.	5.2	39
122	Dynamic Epigenetic Regulation of miR-10 Family Governs the Caudalization of Floor Plate Neural Progenitors. Re:GEN Open, 2021, 1, 117-129.	0.7	3
123	Hoxb1 Regulates Distinct Signaling Pathways in Neuromesodermal and Hindbrain Progenitors to Promote Cell Survival and Specification. Stem Cells, 2022, 40, 175-189.	1.4	1
124	Breaking constraint of mammalian axial formulae. Nature Communications, 2022, 13, 243.	5.8	8
125	Shaping axial identity during human pluripotent stem cell differentiation to neural crest cells. Biochemical Society Transactions, 2022, 50, 499-511.	1.6	4
126	Insights into Human-Induced Pluripotent Stem Cell-Derived Astrocytes in Neurodegenerative Disorders. Biomolecules, 2022, 12, 344.	1.8	9
127	Neural Organoids, a Versatile Model for Neuroscience. Molecules and Cells, 2022, 45, 53-64.	1.0	6
129	Rostrocaudal patterning and neural crest differentiation of human pre-neural spinal cord progenitors inÂvitro. Stem Cell Reports, 2022, 17, 894-910.	2.3	16
130	The Evolution of Complex Muscle Cell In Vitro Models to Study Pathomechanisms and Drug Development of Neuromuscular Disease. Cells, 2022, 11, 1233.	1.8	7
131	Heads or tails: making the spinal cord. Developmental Biology, 2022, 485, 80-92.	0.9	2
132	Towards clinical applications of in vitro-derived axial progenitors. Developmental Biology, 2022, 489, 110-117.	0.9	1
134	SOX transcription factors direct TCF-independent WNT/Î²-catenin responsive transcription to govern cell fate in human pluripotent stem cells. Cell Reports, 2022, 40, 111247.	2.9	21
135	Bioengineering the human spinal cord. Frontiers in Cell and Developmental Biology, 0, 10, .	1.8	5

#	Article	IF	Citations
136	Early anteroposterior regionalisation of human neural crest is shaped by a pro-mesodermal factor. ELife, 0, 11, .	2.8	6
137	Diseased, differentiated and difficult: Strategies for improved engineering of in vitro neurological systems. Frontiers in Cellular Neuroscience, 0, 16, .	1.8	2
138	Modular derivation of diverse, regionally discrete human posterior CNS neurons enables discovery of transcriptomic patterns. Science Advances, 2022, 8, .	4.7	6
139	Dynamic 3D Combinatorial Generation of hPSCâ€Derived Neuromesodermal Organoids With Diverse Regional and Cellular Identities. Current Protocols, 2022, 2, .	1.3	6
140	Pluripotent stem cell strategies for rebuilding the human brain. Frontiers in Aging Neuroscience, 0, 14, .	1.7	6
141	Mammalian gastrulation: signalling activity and transcriptional regulation of cell lineage differentiation and germ layer formation. Biochemical Society Transactions, 2022, 50, 1619-1631.	1.6	3
142	Spinal interneurons and cell transplantation. , 2023, , 381-422.		2
143	Reconstituting human somitogenesis in vitro. Nature, 2023, 614, 509-520.	13.7	40
144	Nr6a1 controls Hox expression dynamics and is a master regulator of vertebrate trunk development. Nature Communications, 2022, 13, .	5.8	7
145	Understanding and modeling nerveâ€“cancer interactions. DMM Disease Models and Mechanisms, 2023, 16, .	1.2	4
147	Progress and challenges in directing the differentiation of human iPSCs into spinal motor neurons. Frontiers in Cell and Developmental Biology, 0, 10, .	1.8	5
149	hPSC-derived sacral neural crest enables rescue in a severe model of Hirschsprungâ€™s disease. Cell Stem Cell, 2023, 30, 264-282.e9.	5.2	15
157	Applications of Induced Pluripotent Stem Cell-Derived Glia in Brain Disease Research and Treatment. Handbook of Experimental Pharmacology, 2023, , .	0.9	0
159	From signalling to form: the coordination of neural tube patterning. Current Topics in Developmental Biology, 2023, , .	1.0	1