Frederic Charron

List of Publications by Year in Descending Order

65 papers	6,430 citations	35 h-index	80 g-index
88 ext. papers	7,253 ext. citations	11.8 avg, IF	5.41 L-index

#	Paper	IF	Citations
65	Nonconventional axon guidance cues: Hedgehog, TGF-β/BMP, and Wnts in axon guidance **2020**, 175-199		
64	Sonic hedgehog accelerates DNA replication to cause replication stress promoting cancer initiation in medulloblastoma.. *Nature Cancer*, **2020**, 1, 840-854	15.4	5
63	De Novo Pathogenic Variants in N-cadherin Cause a Syndromic Neurodevelopmental Disorder with Corpus Collosum, Axon, Cardiac, Ocular, and Genital Defects. *American Journal of Human Genetics*, **2019**, 105, 854-868	11	17
62	The Shh receptor Boc is important for myelin formation and repair. *Development (Cambridge)*, **2019**, 146,	6.6	10
61	Boc Acts via Numb as a Shh-Dependent Endocytic Platform for Ptch1 Internalization and Shh-Mediated Axon Guidance. *Neuron*, **2019**, 102, 1157-1171.e5	13.9	17
60	Recent advances in SHH medulloblastoma progression: tumor suppressor mechanisms and the tumor microenvironment. *F1000Research*, **2019**, 8,	3.6	7
59	The Ciliary Protein Arl13b Functions Outside of the Primary Cilium in Shh-Mediated Axon Guidance. *Cell Reports*, **2019**, 29, 3356-3366.e3	10.6	18
58	Overexpression of Desmoglein 2 in a Mouse Model of Gorlin Syndrome Enhances Spontaneous Basal Cell Carcinoma Formation through STAT3-Mediated Gli1 Expression. *Journal of Investigative Dermatology*, **2019**, 139, 300-307	4.3	9
57	Long-Range Guidance of Spinal Commissural Axons by Netrin1 and Sonic Hedgehog from Midline Floor Plate Cells. *Neuron*, **2019**, 101, 635-647.e4	13.9	42
56	Sonic Hedgehog Is a Remotely Produced Cue that Controls Axon Guidance Trans-axonally at a Midline Choice Point. *Neuron*, **2018**, 97, 326-340.e4	13.9	38
55	Polarized Dock Activity Drives Shh-Mediated Axon Guidance. *Developmental Cell*, **2018**, 46, 410-425.e7	10.2	17
54	Axon Guidance: Gained in Translation. *Neuron*, **2018**, 99, 1-2	13.9	23
53	Loss of Dcc in the spinal cord is sufficient to cause a deficit in lateralized motor control and the switch to a hopping gait. *Developmental Dynamics*, **2018**, 247, 620-629	2.9	5
52	Sonic Hedgehog Guides Axons via Zipcode Binding Protein 1-Mediated Local Translation. *Journal of Neuroscience*, **2017**, 37, 1685-1695	6.6	31
51	Cellular Functions of the Autism Risk Factor PTCHD1 in Mice. *Journal of Neuroscience*, **2017**, 37, 11993-12005	6.6	15
50	Linking Hedgehog, Translation, and mTORC1 in Medulloblastoma. *Developmental Cell*, **2017**, 43, 655-656	10.2	2
49	Evasion of cell senescence in SHH medulloblastoma. *Cell Cycle*, **2016**, 15, 2102-2107	4.7	6

48	Evasion of Cell Senescence Leads to Medulloblastoma Progression. *Cell Reports*, **2016**, 14, 2925-37	10.6	26
47	Neurons diversify astrocytes in the adult brain through sonic hedgehog signaling. *Science*, **2016**, 351, 849-54	33.3	155
46	Mesocortical Dopamine Phenotypes in Mice Lacking the Sonic Hedgehog Receptor Cdon. *ENeuro*, **2016**, 3,	3.9	7
45	Integration of shallow gradients of Shh and Netrin-1 guides commissural axons. *PLoS Biology*, **2015**, 13, e1002119	9.7	48
44	Synergistic integration of Netrin and ephrin axon guidance signals by spinal motor neurons. *ELife*, **2015**, 4,	8.9	45
43	Signaling from Within: Endocytic Trafficking of the Robo Receptor Is Required for Midline Axon Repulsion. *PLoS Genetics*, **2015**, 11, e1005441	6	
42	The Shh receptor Boc promotes progression of early medulloblastoma to advanced tumors. *Developmental Cell*, **2014**, 31, 34-47	10.2	35
41	Pioneer midbrain longitudinal axons navigate using a balance of Netrin attraction and Slit repulsion. *Neural Development*, **2014**, 9, 17	3.9	18
40	Ihog and Boi elicit Hh signaling via Ptc but do not aid Ptc in sequestering the Hh ligand. *Development (Cambridge)*, **2014**, 141, 3879-88	6.6	3
39	Switching responses: spatial and temporal regulators of axon guidance. *Molecular Neurobiology*, **2014**, 49, 1077-86	6.2	24
38	Signaling mechanisms of non-conventional axon guidance cues: the Shh, BMP and Wnt morphogens. *Current Opinion in Neurobiology*, **2013**, 23, 965-73	7.6	73
37	Lateralization of motor control in the human nervous system: genetics of mirror movements. *Current Opinion in Neurobiology*, **2013**, 23, 109-18	7.6	12
36	Nonconventional Axon Guidance Cues **2013**, 127-149		
35	Essential role for ligand-dependent feedback antagonism of vertebrate hedgehog signaling by PTCH1, PTCH2 and HHIP1 during neural patterning. *Development (Cambridge)*, **2013**, 140, 3423-34	6.6	51
34	N-cadherin relocalizes from the periphery to the center of the synapse after transient synaptic stimulation in hippocampal neurons. *PLoS ONE*, **2013**, 8, e79679	3.7	17
33	14-3-3 proteins regulate a cell-intrinsic switch from sonic hedgehog-mediated commissural axon attraction to repulsion after midline crossing. *Neuron*, **2012**, 76, 735-49	13.9	75
32	Boc and Gas1 each form distinct Shh receptor complexes with Ptch1 and are required for Shh-mediated cell proliferation. *Developmental Cell*, **2011**, 20, 788-801	10.2	175
31	Overlapping roles and collective requirement for the coreceptors GAS1, CDO, and BOC in SHH pathway function. *Developmental Cell*, **2011**, 20, 775-87	10.2	205

30	VEGF mediates commissural axon chemoattraction through its receptor Flk1. *Neuron*, **2011**, 70, 966-78	13.9	113
29	Midline axon guidance and human genetic disorders. *Clinical Genetics*, **2011**, 80, 226-34	4	36
28	The Hedgehog pathway promotes blood-brain barrier integrity and CNS immune quiescence. *Science*, **2011**, 334, 1727-31	33.3	513
27	14-3-3 proteins regulate protein kinase a activity to modulate growth cone turning responses. *Journal of Neuroscience*, **2010**, 30, 14059-67	6.6	40
26	Segregation of ipsilateral retinal ganglion cell axons at the optic chiasm requires the Shh receptor Boc. *Journal of Neuroscience*, **2010**, 30, 266-75	6.6	68
25	Mutations in DCC cause congenital mirror movements. *Science*, **2010**, 328, 592	33.3	114
24	Ihog and Boi are essential for Hedgehog signaling in Drosophila. *Neural Development*, **2010**, 5, 28	3.9	37
23	Longitudinal axons are guided by Slit/Robo signals from the floor plate. *Cell Adhesion and Migration* , **2010**, 4, 337-41	3.2	14
22	Dissection and culture of commissural neurons from embryonic spinal cord. *Journal of Visualized Experiments*, **2010**,	1.6	17
21	OR.81. Astrocyte-secreted Sonic Hedgehog Supports CNS Anti-inflammatory Activity and Promotes Optimal Human Blood Brain Barrier Functioning. *Clinical Immunology*, **2009**, 131, S34	9	2
20	Sonic hedgehog guides axons through a noncanonical, Src-family-kinase-dependent signaling pathway. *Neuron*, **2009**, 62, 349-62	13.9	213
19	A novel conserved evx1 enhancer links spinal interneuron morphology and cis-regulation from fish to mammals. *Developmental Biology*, **2009**, 325, 422-33	3.1	29
18	Dscam guides embryonic axons by Netrin-dependent and -independent functions. *Development (Cambridge)*, **2008**, 135, 3839-48	6.6	89
17	Pioneer longitudinal axons navigate using floor plate and Slit/Robo signals. *Development (Cambridge)*, **2008**, 135, 3643-53	6.6	52
16	The Hedgehog, TGF-beta/BMP and Wnt families of morphogens in axon guidance. *Advances in Experimental Medicine and Biology*, **2007**, 621, 116-33	3.6	54
15	Boc is a receptor for sonic hedgehog in the guidance of commissural axons. *Nature*, **2006**, 444, 369-73	50.4	231
14	Novel brain wiring functions for classical morphogens: a role as graded positional cues in axon guidance. *Development (Cambridge)*, **2005**, 132, 2251-62	6.6	190
13	Interaction with GATA transcription factors provides a mechanism for cell-specific effects of c-Fos. *Oncogene*, **2003**, 22, 8403-12	9.2	23

12	The morphogen sonic hedgehog is an axonal chemoattractant that collaborates with netrin-1 in midline axon guidance. *Cell*, **2003**, 113, 11-23	56.2	521
11	Neurotrophins and netrins require calcineurin/NFAT signaling to stimulate outgrowth of embryonic axons. *Cell*, **2003**, 113, 657-70	56.2	305
10	GATA-4 is a nuclear mediator of mechanical stretch-activated hypertrophic program. *Journal of Biological Chemistry*, **2003**, 278, 23807-16	5.4	93
9	Tissue-specific GATA factors are transcriptional effectors of the small GTPase RhoA. *Genes and Development*, **2001**, 15, 2702-19	12.6	181
8	A murine model of Holt-Oram syndrome defines roles of the T-box transcription factor Tbx5 in cardiogenesis and disease. *Cell*, **2001**, 106, 709-21	56.2	833
7	Cardiac Development and Regulation of Cardiac Transcription **2001**, 705-717		
6	GATA-dependent recruitment of MEF2 proteins to target promoters. *EMBO Journal*, **2000**, 19, 2046-55	13	268
5	Cardiac tissue enriched factors serum response factor and GATA-4 are mutual coregulators. *Molecular and Cellular Biology*, **2000**, 20, 7550-8	4.8	164
4	GATA transcription factors and cardiac development. *Seminars in Cell and Developmental Biology*, **1999**, 10, 85-91	7.5	198
3	Cooperative interaction between GATA-4 and GATA-6 regulates myocardial gene expression. *Molecular and Cellular Biology*, **1999**, 19, 4355-65	4.8	197
2	Transcription factor SCL is required for c-kit expression and c-Kit function in hemopoietic cells. *Journal of Experimental Medicine*, **1998**, 188, 439-50	16.6	66
1	The cardiac transcription factors Nkx2-5 and GATA-4 are mutual cofactors. *EMBO Journal*, **1997**, 16, 5687-96	13	533