Jerry Silver

List of Publications by Year in Descending Order

142 papers	18,950 citations	68 h-index	137 g-index
147 ext. papers	20,539 ext. citations	7.5 avg, IF	6.85 L-index

#	Paper	IF	Citations
142	An adult-stage transcriptional program for survival of serotonergic connectivity.. *Cell Reports*, **2022**, 39, 110711	10.6	1
141	New insights into glial scar formation after spinal cord injury. *Cell and Tissue Research*, **2021**, 1	4.2	13
140	Histomorphometry in Peripheral Nerve Regeneration: Comparison of Different Axon Counting Methods. *Journal of Surgical Research*, **2021**, 268, 354-362	2.5	0
139	A meta-analysis of functional outcomes in rat sciatic nerve injury models. *Microsurgery*, **2021**, 41, 286-295	2.1	2
138	Cathepsins in neuronal plasticity. *Neural Regeneration Research*, **2021**, 16, 26-35	4.5	10
137	Regulation of autophagy by inhibitory CSPG interactions with receptor PTPσ and its impact on plasticity and regeneration after spinal cord injury. *Experimental Neurology*, **2020**, 328, 113276	5.7	17
136	Intravital imaging of immune cells and their interactions with other cell types in the spinal cord: Experiments with multicolored moving cells. *Experimental Neurology*, **2019**, 320, 112972	5.7	3
135	Novel F-Labeled Radioligands for Positron Emission Tomography Imaging of Myelination in the Central Nervous System. *Journal of Medicinal Chemistry*, **2019**, 62, 4902-4914	8.3	6
134	Lmx1b is required at multiple stages to build expansive serotonergic axon architectures. *ELife*, **2019**, 8,	8.9	17
133	LAR and PTPσ receptors are negative regulators of oligodendrogenesis and oligodendrocyte integrity in spinal cord injury. *Glia*, **2019**, 67, 125-145	9	28
132	The Biology of Regeneration Failure and Success After Spinal Cord Injury. *Physiological Reviews*, **2018**, 98, 881-917	47.9	280
131	Perturbing chondroitin sulfate proteoglycan signaling through LAR and PTPσ receptors promotes a beneficial inflammatory response following spinal cord injury. *Journal of Neuroinflammation*, **2018**, 15, 90	10.1	48
130	Perspectives on "the biology of spinal cord regeneration success and failure". *Neural Regeneration Research*, **2018**, 13, 1358-1359	4.5	1
129	Rapid and robust restoration of breathing long after spinal cord injury. *Nature Communications*, **2018**, 9, 4843	17.4	38
128	Modulation of proteoglycan receptor PTPσ enhances MMP-2 activity to promote recovery from multiple sclerosis. *Nature Communications*, **2018**, 9, 4126	17.4	29
127	Modulation of Receptor Protein Tyrosine Phosphatase Sigma Increases Chondroitin Sulfate Proteoglycan Degradation through Cathepsin B Secretion to Enhance Axon Outgrowth. *Journal of Neuroscience*, **2018**, 38, 5399-5414	6.6	25
126	Targeting the cytoskeleton with an FDA approved drug to promote recovery after spinal cord injury. *Experimental Neurology*, **2018**, 306, 260-262	5.7	1

(2014-2017)

125	Discovery of 1,2,3-Triazole Derivatives for Multimodality PET/CT/Cryoimaging of Myelination in the Central Nervous System. *Journal of Medicinal Chemistry*, **2017**, 60, 987-999	8.3	10
124	A Latent Propriospinal Network Can Restore Diaphragm Function after High Cervical Spinal Cord Injury. *Cell Reports*, **2017**, 21, 654-665	10.6	27
123	Combinatory repair strategy to promote axon regeneration and functional recovery after chronic spinal cord injury. *Scientific Reports*, **2017**, 7, 9018	4.9	27
122	Phasic inhibition as a mechanism for generation of rapid respiratory rhythms. *Proceedings of the National Academy of Sciences of the United States of America*, **2017**, 114, 12815-12820	11.5	25
121	The glial scar is more than just astrocytes. *Experimental Neurology*, **2016**, 286, 147-149	5.7	53
120	Neurite Outgrowth Assay. *Bio-protocol*, **2016**, 6,	0.9	6
119	"Targeting astrocytes in CNS injury and disease: A translational research approach". *Progress in Neurobiology*, **2016**, 144, 173-87	10.9	105
118	Disrupting protein tyrosine phosphatase σ does not prevent sympathetic axonal dieback following myocardial infarction. *Experimental Neurology*, **2016**, 276, 1-4	5.7	1
117	NG2+ progenitors derived from embryonic stem cells penetrate glial scar and promote axonal outgrowth into white matter after spinal cord injury. *Stem Cells Translational Medicine*, **2015**, 4, 401-11	6.9	32
116	Large animal and primate models of spinal cord injury for the testing of novel therapies. *Experimental Neurology*, **2015**, 269, 154-68	5.7	55
115	Neuroscience. Systemically treating spinal cord injury. *Science*, **2015**, 348, 285-6	33.3	18
114	Modulation of the proteoglycan receptor PTPσ promotes recovery after spinal cord injury. *Nature*, **2015**, 518, 404-8	50.4	280
113	Enhanced regeneration and functional recovery after spinal root avulsion by manipulation of the proteoglycan receptor PTPσ *Scientific Reports*, **2015**, 5, 14923	4.9	27
112	Intravenous multipotent adult progenitor cell treatment decreases inflammation leading to functional recovery following spinal cord injury. *Scientific Reports*, **2015**, 5, 16795	4.9	54
111	Peripheral Nerve Transplantation Combined with Acidic Fibroblast Growth Factor and Chondroitinase Induces Regeneration and Improves Urinary Function in Complete Spinal Cord Transected Adult Mice. *PLoS ONE*, **2015**, 10, e0139335	3.7	27
110	Central nervous system regenerative failure: role of oligodendrocytes, astrocytes, and microglia. *Cold Spring Harbor Perspectives in Biology*, **2014**, 7, a020602	10.2	203
109	Functional regeneration beyond the glial scar. *Experimental Neurology*, **2014**, 253, 197-207	5.7	426
108	High-resolution intravital imaging reveals that blood-derived macrophages but not resident microglia facilitate secondary axonal dieback in traumatic spinal cord injury. *Experimental Neurology*, **2014**, 254, 109-20	5.7	139

107	Contributions of chondroitin sulfate proteoglycans to neurodevelopment, injury, and cancer. *Current Opinion in Neurobiology*, **2014**, 27, 171-8	7.6	54
106	Entrapment via synaptic-like connections between NG2 proteoglycan+ cells and dystrophic axons in the lesion plays a role in regeneration failure after spinal cord injury. *Journal of Neuroscience*, **2014**, 34, 16369-84	6.6	84
105	Chondroitin sulfate proteoglycans potently inhibit invasion and serve as a central organizer of the brain tumor microenvironment. *Journal of Neuroscience*, **2013**, 33, 15603-17	6.6	93
104	Demonstrating efficacy in preclinical studies of cellular therapies for spinal cord injury - how much is enough?. *Experimental Neurology*, **2013**, 248, 30-44	5.7	42
103	Nerve regeneration restores supraspinal control of bladder function after complete spinal cord injury. *Journal of Neuroscience*, **2013**, 33, 10591-606	6.6	82
102	Extravascular CX3CR1+ cells extend intravascular dendritic processes into intact central nervous system vessel lumen. *Microscopy and Microanalysis*, **2013**, 19, 778-90	0.5	22
101	The effect of long-term release of Shh from implanted biodegradable microspheres on recovery from spinal cord injury in mice. *Biomaterials*, **2012**, 33, 2892-901	15.6	33
100	Fibronectin inhibits chronic pain development after spinal cord injury. *Journal of Neurotrauma*, **2012**, 29, 589-99	5.4	27
99	Oncomodulin affords limited regeneration to injured sensory axons in vitro and in vivo. *Experimental Neurology*, **2012**, 233, 708-16	5.7	10
98	Treatments to restore respiratory function after spinal cord injury and their implications for regeneration, plasticity and adaptation. *Experimental Neurology*, **2012**, 235, 18-25	5.7	21
97	Leukocyte common antigen-related phosphatase is a functional receptor for chondroitin sulfate proteoglycan axon growth inhibitors. *Journal of Neuroscience*, **2011**, 31, 14051-66	6.6	240
96	Functional regeneration of respiratory pathways after spinal cord injury. *Nature*, **2011**, 475, 196-200	50.4	296
95	The unusual response of serotonergic neurons after CNS Injury: lack of axonal dieback and enhanced sprouting within the inhibitory environment of the glial scar. *Journal of Neuroscience*, **2011**, 31, 5605-16	6.6	79
94	Multipotent adult progenitor cells prevent macrophage-mediated axonal dieback and promote regrowth after spinal cord injury. *Journal of Neuroscience*, **2011**, 31, 944-53	6.6	121
93	Adult NG2+ cells are permissive to neurite outgrowth and stabilize sensory axons during macrophage-induced axonal dieback after spinal cord injury. *Journal of Neuroscience*, **2010**, 30, 255-65	6.6	143
92	Serotonergic neurons migrate radially through the neuroepithelium by dynamin-mediated somal translocation. *Journal of Neuroscience*, **2010**, 30, 420-30	6.6	39
91	Much Ado about Nogo. *Neuron*, **2010**, 66, 619-21	13.9	7
90	Immature astrocytes promote CNS axonal regeneration when combined with chondroitinase ABC. *Developmental Neurobiology*, **2010**, 70, 826-41	3.2	66

89	Shedding light on restoring respiratory function after spinal cord injury. *Frontiers in Molecular Neuroscience*, **2009**, 2, 18	6.1	11
88	PTPsigma is a receptor for chondroitin sulfate proteoglycan, an inhibitor of neural regeneration. *Science*, **2009**, 326, 592-6	33.3	510
87	Overcoming macrophage-mediated axonal dieback following CNS injury. *Journal of Neuroscience*, **2009**, 29, 9967-76	6.6	179
86	CNS regeneration: only on one condition. *Current Biology*, **2009**, 19, R444-6	6.3	12
85	Increased chondroitin sulfate proteoglycan expression in denervated brainstem targets following spinal cord injury creates a barrier to axonal regeneration overcome by chondroitinase ABC and neurotrophin-3. *Experimental Neurology*, **2008**, 209, 426-45	5.7	142
84	CNS injury, glial scars, and inflammation: Inhibitory extracellular matrices and regeneration failure. *Experimental Neurology*, **2008**, 209, 294-301	5.7	742
83	Multipotent embryonic spinal cord stem cells expanded by endothelial factors and Shh/RA promote functional recovery after spinal cord injury. *Experimental Neurology*, **2008**, 209, 510-22	5.7	40
82	Electrical stimulation of intact peripheral sensory axons in rats promotes outgrowth of their central projections. *Experimental Neurology*, **2008**, 210, 238-47	5.7	111
81	Another barrier to regeneration in the CNS: activated macrophages induce extensive retraction of dystrophic axons through direct physical interactions. *Journal of Neuroscience*, **2008**, 28, 9330-41	6.6	265
80	Light-induced rescue of breathing after spinal cord injury. *Journal of Neuroscience*, **2008**, 28, 11862-70	6.6	130
79	Contributions of the Bunge laboratory. *Journal of Spinal Cord Medicine*, **2008**, 31, 270-1	1.9	1
78	GLIAL CELLS, INFLAMMATION, AND CNS TRAUMA: MODULATION OF THE INFLAMMATORY ENVIRONMENT AFTER INJURY CAN LEAD TO LONG-DISTANCE REGENERATION BEYOND THE GLIAL SCAR **2008**, 59-94		3
77	The role of extracellular matrix in CNS regeneration. *Current Opinion in Neurobiology*, **2007**, 17, 120-7	7.6	392
76	Combining an autologous peripheral nervous system "bridge" and matrix modification by chondroitinase allows robust, functional regeneration beyond a hemisection lesion of the adult rat spinal cord. *Journal of Neuroscience*, **2006**, 26, 7405-15	6.6	266
75	Chondroitinase ABC digestion of the perineuronal net promotes functional collateral sprouting in the cuneate nucleus after cervical spinal cord injury. *Journal of Neuroscience*, **2006**, 26, 4406-14	6.6	253
74	The role of proteoglycans in Schwann cell/astrocyte interactions and in regeneration failure at PNS/CNS interfaces. *Molecular and Cellular Neurosciences*, **2005**, 28, 18-29	4.8	86
73	Prelesion but Not Postlesion Inflammation Plus Proteoglycan Degradation Results in Functional Regeneration. *Neurosurgery*, **2005**, 57, 405-405	3.2	5
72	Chronic enhancement of the intrinsic growth capacity of sensory neurons combined with the degradation of inhibitory proteoglycans allows functional regeneration of sensory axons through the dorsal root entry zone in the mammalian spinal cord. *Journal of Neuroscience*, **2005**, 25, 8066-76	6.6	179

71	Studies on the development and behavior of the dystrophic growth cone, the hallmark of regeneration failure, in an in vitro model of the glial scar and after spinal cord injury. *Journal of Neuroscience*, **2004**, 24, 6531-9	6.6	216
70	Astrocyte-associated fibronectin is critical for axonal regeneration in adult white matter. *Journal of Neuroscience*, **2004**, 24, 9282-90	6.6	149
69	A novel DNA enzyme reduces glycosaminoglycan chains in the glial scar and allows microtransplanted dorsal root ganglia axons to regenerate beyond lesions in the spinal cord. *Journal of Neuroscience*, **2004**, 24, 1393-7	6.6	161
68	Keratan sulfate proteoglycan phosphacan regulates mossy fiber outgrowth and regeneration. *Journal of Neuroscience*, **2004**, 24, 462-73	6.6	29
67	Regeneration beyond the glial scar. *Nature Reviews Neuroscience*, **2004**, 5, 146-56	13.5	2298
66	Precursors of neurons, neuroglia, and ependymal cells in the CNS: what are they? Where are they from? How do they get where they are going?. *Glia*, **2003**, 43, 6-18	9	92
65	Pet-1 ETS gene plays a critical role in 5-HT neuron development and is required for normal anxiety-like and aggressive behavior. *Neuron*, **2003**, 37, 233-47	13.9	371
64	The extracellular matrix in axon regeneration. *Progress in Brain Research*, **2002**, 137, 333-49	2.9	112
63	The critical role of basement membrane-independent laminin gamma 1 chain during axon regeneration in the CNS. *Journal of Neuroscience*, **2002**, 22, 3144-60	6.6	89
62	Robust regeneration of adult sensory axons in degenerating white matter of the adult rat spinal cord. *Journal of Neuroscience*, **1999**, 19, 5810-22	6.6	525
61	Beyond the Glial Scar: Cellular and Molecular Mechanisms by which Glial Cells Contribute to CNS Regenerative Failure **1999**, 55-II		33
60	Does CNS Myelin Inhibit Axon Regeneration?. *Neuroscientist*, **1999**, 5, 12-18	7.6	5
59	Glial fibrillary acidic protein is necessary for mature astrocytes to react to beta-amyloid. *Glia*, **1999**, 25, 390-403	9	43
58	Cellular and molecular mechanisms of glial scarring and progressive cavitation: in vivo and in vitro analysis of inflammation-induced secondary injury after CNS trauma. *Journal of Neuroscience*, **1999**, 19, 8182-98	6.6	481
57	Adult axon regeneration in adult CNS white matter. *Trends in Neurosciences*, **1998**, 21, 515	13.3	24
56	Astrocytes regulate microglial phagocytosis of senile plaque cores of AlzheimerB disease. *Experimental Neurology*, **1998**, 149, 329-40	5.7	188
55	Complement depletion reduces macrophage infiltration and activation during Wallerian degeneration and axonal regeneration. *Journal of Neuroscience*, **1998**, 18, 6713-22	6.6	108
54	A role for tectal midline glia in the unilateral containment of retinocollicular axons. *Journal of Neuroscience*, **1998**, 18, 8344-55	6.6	21

53	Activated macrophages and the blood-brain barrier: inflammation after CNS injury leads to increases in putative inhibitory molecules. *Experimental Neurology*, **1997**, 148, 587-603	5.7	218
52	Regeneration of adult axons in white matter tracts of the central nervous system. *Nature*, **1997**, 390, 680-3	50.4	696
51	Glial cell extracellular matrix: boundaries for axon growth in development and regeneration. *Cell and Tissue Research*, **1997**, 290, 379-84	4.2	206
50	Fibroblast growth factor receptor function is required for the orderly projection of ganglion cell axons in the developing mammalian retina. *Molecular and Cellular Neurosciences*, **1996**, 8, 120-8	4.8	69
49	A potent inhibitor of neurite outgrowth that predominates in the extracellular matrix of reactive astrocytes. *International Journal of Developmental Neuroscience*, **1996**, 14, 153-75	2.7	102
48	Regenerative failure: a potential mechanism for neuritic dystrophy in AlzheimerB disease. *Experimental Neurology*, **1996**, 142, 103-10	5.7	33
47	Reduction of extraneural scarring by ADCON-T/N after surgical intervention. *Neurosurgery*, **1996**, 38, 976-83; discussion 983-4	3.2	92
46	Proteoglycans and other repulsive molecules in glial boundaries during development and regeneration of the nervous system. *Progress in Brain Research*, **1996**, 108, 149-63	2.9	81
45	Injury-induced proteoglycans inhibit the potential for laminin-mediated axon growth on astrocytic scars. *Experimental Neurology*, **1995**, 136, 32-43	5.7	392
44	Unique changes of ganglion cell growth cone behavior following cell adhesion molecule perturbations: a time-lapse study of the living retina. *Molecular and Cellular Neurosciences*, **1995**, 6, 433-49	4.8	88
43	Multiple factors govern intraretinal axon guidance: a time-lapse study. *Molecular and Cellular Neurosciences*, **1995**, 6, 413-32	4.8	87
42	Cell and molecular analysis of the developing and adult mouse subventricular zone of the cerebral hemispheres. *Journal of Comparative Neurology*, **1995**, 361, 249-66	3.4	214
41	Glial Cell Extracellular Matrix in AlzheimerB Disease **1995**, 158-170		
40	Inhibitory molecules in development and regeneration. *Journal of Neurology*, **1994**, 242, S22-4	5.5	83
39	Regional differences in reactive gliosis induced by substrate-bound beta-amyloid. *Experimental Neurology*, **1994**, 130, 56-66	5.7	51
38	Cortical development and topographic maps: patterns of cell dispersion in developing cerebral cortex. *Current Opinion in Neurobiology*, **1994**, 4, 108-11	7.6	14
37	Establishment and neurite outgrowth properties of neonatal and adult rat olfactory bulb glial cell lines. *Brain Research*, **1993**, 619, 199-213	3.7	82
36	Chondroitin sulfate proteoglycans are associated with the lesions of AlzheimerB disease. *Experimental Neurology*, **1993**, 121, 149-52	5.7	134

35	beta-Amyloid of AlzheimerÕs disease induces reactive gliosis that inhibits axonal outgrowth. *Experimental Neurology*, **1993**, 124, 289-98	5.7	113
34	Immunocytochemical demonstration of early appearing astroglial structures that form boundaries and pathways along axon tracts in the fetal brain. *Journal of Comparative Neurology*, **1993**, 328, 415-36	3.4	175
33	Formation of the retinal ganglion cell and optic fiber layers. *Journal of Neurobiology*, **1991**, 22, 85-96		72
32	Molecular and cellular characterization of the glial roof plate of the spinal cord and optic tectum: a possible role for a proteoglycan in the development of an axon barrier. *Developmental Biology*, **1990**, 138, 359-76	3.1	356
31	Maturation of astrocytes in vitro alters the extent and molecular basis of neurite outgrowth. *Developmental Biology*, **1990**, 138, 377-90	3.1	280
30	Astrocyte-polymer implants promote regeneration of dorsal root fibers into the adult mammalian spinal cord. *Experimental Neurology*, **1990**, 109, 57-69	5.7	89
29	A comparison of the regeneration potential of dorsal root fibers into gray or white matter of the adult rat spinal cord. *Experimental Neurology*, **1990**, 109, 90-7	5.7	28
28	Sulfated proteoglycans in astroglial barriers inhibit neurite outgrowth in vitro. *Experimental Neurology*, **1990**, 109, 111-30	5.7	641
27	Failure of the subcallosal sling to develop after embryonic X-irradiation is correlated with absence of the cavum septi. *Journal of Comparative Neurology*, **1990**, 299, 462-9	3.4	10
26	Development of intersecting CNS fiber tracts: the corpus callosum and its perforating fiber pathway. *Journal of Comparative Neurology*, **1988**, 272, 177-90	3.4	42
25	Death of the subcallosal glial sling is correlated with formation of the cavum septi pellucidi. *Journal of Comparative Neurology*, **1988**, 272, 191-202	3.4	35
24	Transplantation of immature and mature astrocytes and their effect on scar formation in the lesioned central nervous system. *Progress in Brain Research*, **1988**, 78, 353-61	2.9	55
23	Is astrocyte laminin involved in axon guidance in the mammalian CNS?. *Developmental Biology*, **1988**, 130, 774-85	3.1	185
22	Astrocyte transplantation induces callosal regeneration in postnatal acallosal mice. *Annals of the New York Academy of Sciences*, **1987**, 495, 185-206	6.5	20
21	Growth pattern of pioneering chick spinal cord axons. *Developmental Biology*, **1987**, 123, 375-88	3.1	43
20	Transplantation of Neural Tissue from Fetuses. *Science*, **1987**, 235, 1307-1308	33.3	4
19	Changing role of forebrain astrocytes during development, regenerative failure, and induced regeneration upon transplantation. *Journal of Comparative Neurology*, **1986**, 251, 23-43	3.4	338
18	Studies on the factors that govern directionality of axonal growth in the embryonic optic nerve and at the chiasm of mice. *Journal of Comparative Neurology*, **1984**, 223, 238-51	3.4	174

17	Guidance of optic axons in vivo by a preformed adhesive pathway on neuroepithelial endfeet. *Developmental Biology*, **1984**, 106, 485-99	3.1	357
16	Development and aging of the eye in mice with inherited optic nerve aplasia: histopathological studies. *Experimental Eye Research*, **1984**, 38, 257-66	3.7	7
15	Effects of gonadal steroids on the in vivo binding of [125I]alpha-bungarotoxin to the suprachiasmatic nucleus. *Brain Research*, **1984**, 290, 67-75	3.7	33
14	Studies on cell migration and axon guidance in the developing distal auditory system of the mouse. *Journal of Comparative Neurology*, **1983**, 215, 359-69	3.4	118
13	Crystallin synthesis in the lens rudiment of a strain of mice with congenital anophthalmia. *Experimental Eye Research*, **1983**, 36, 551-7	3.7	27
12	Development of the outer plexiform layer in albino rats. *Current Eye Research*, **1982**, 2, 295-9	2.9	16
11	Effects of ovariectomy on the binding of [125I]-alpha bungarotoxin (2.2 and 3.3) to the suprachiasmatic nucleus of the hypothalamus: an in vivo autoradiographic analysis. *Brain Research*, **1982**, 247, 355-64	3.7	36
10	Axonal guidance during development of the great cerebral commissures: descriptive and experimental studies, in vivo, on the role of preformed glial pathways. *Journal of Comparative Neurology*, **1982**, 210, 10-29	3.4	513
9	Investigation of circadian rhythms in a genetically anophthalmic mouse strain: Correlation of activity patterns with suprachiasmatic nuclei hypogenesis. *Journal of Comparative Physiology A: Neuroethology, Sensory, Neural, and Behavioral Physiology*, **1982**, 149, 333-338	2.3	23
8	Inverted Xenopus eye primordia develop into anatomically inverted eyes. *Developmental Biology*, **1981**, 86, 510-4	3.1	5
7	Axonal guidance during development of the optic nerve: the role of pigmented epithelia and other extrinsic factors. *Journal of Comparative Neurology*, **1981**, 202, 521-38	3.4	209
6	A mechanism for the guidance and topographic patterning of retinal ganglion cell axons. *Journal of Comparative Neurology*, **1980**, 189, 101-11	3.4	286
5	Studies on the development of the eye cup and optic nerve in normal mice and in mutants with congenital optic nerve aplasia. *Developmental Biology*, **1979**, 68, 175-90	3.1	187
4	A route for direct retinal input to the preoptic hypothalamus: dendritic projections into the optic chiasm. *American Journal of Anatomy*, **1979**, 155, 391-401		18
3	Abnormal development of the suprachiasmatic nuclei of the hypothalamus in a strain of genetically anophthalmic mice. *Journal of Comparative Neurology*, **1977**, 176, 589-606	3.4	44
2	Effects ofthe glial scar and extracellular matrix molecules on axon regeneration376-391		
1	Effects of the glial scar and extracellular matrix molecules on axon regeneration390-404		