Machelle T Pardue

List of Publications by Year in Descending Order

116 papers	3,250 citations	32 h-index	51 g-index
120 ext. papers	3,936 ext. citations	4.3 avg, IF	5.41 L-index

#	Paper	IF	Citations
116	Candidate pathways for retina to scleral signaling in refractive eye growth.. *Experimental Eye Research*, **2022**, 109071	3.7	3
115	Evaluation of Spatially Targeted Scleral Stiffening on Neuroprotection in a Rat Model of Glaucoma.. *Translational Vision Science and Technology*, **2022**, 11, 7	3.3	2
114	ON than OFF pathway disruption leads to greater deficits in visual function and retinal dopamine signaling.. *Experimental Eye Research*, **2022**, 220, 109091	3.7	0
113	Melanopsin modulates refractive development and myopia. *Experimental Eye Research*, **2021**, 214, 108866	3.7	2
112	Impacts of high fat diet on ocular outcomes in rodent models of visual disease. *Experimental Eye Research*, **2021**, 204, 108440	3.7	7
111	IMI 2021 Yearly Digest **2021**, 62, 7		6
110	Initiation of L-DOPA Treatment After Detection of Diabetes-Induced Retinal Dysfunction Reverses Retinopathy and Provides Neuroprotection in Rats. *Translational Vision Science and Technology*, **2021**, 10, 8	3.3	3
109	Prehabilitative exercise hastens recovery from isoflurane in diabetic and non-diabetic rats. *Neuroscience Letters*, **2021**, 751, 135808	3.3	0
108	Light Environment Influences Developmental Programming of the Metabolic and Visual Systems in Mice **2021**, 62, 22		2
107	Tribbles Homolog 3 Mediates the Development and Progression of Diabetic Retinopathy. *Diabetes*, **2021**, 70, 1738-1753	0.9	2
106	Reducing acetylated tau is neuroprotective in brain injury. *Cell*, **2021**, 184, 2715-2732.e23	56.2	18
105	Violet light suppresses lens-induced myopia via neuropsin (OPN5) in mice. *Proceedings of the National Academy of Sciences of the United States of America*, **2021**, 118,	11.5	11
104	Tauroursodeoxycholic Acid Protects Retinal and Visual Function in a Mouse Model of Type 1 Diabetes. *Pharmaceutics*, **2021**, 13,	6.4	5
103	Using retinal function to define ischemic exclusion criteria for animal models of glaucoma. *Experimental Eye Research*, **2021**, 202, 108354	3.7	5
102	A biphasic approach for characterizing tensile, compressive and hydraulic properties of the sclera. *Journal of the Royal Society Interface*, **2021**, 18, 20200634	4.1	4
101	Voluntary oral dosing for precise experimental compound delivery in adult rats. *Laboratory Animals*, **2021**, 236772211016926	2.6	1
100	Developmental chronodisruption alters placental signaling in mice. *PLoS ONE*, **2021**, 16, e0255296	3.7	0

99	Dependence of visual and cognitive outcomes on animal holder configuration in a rodent model of blast overpressure exposure. *Vision Research*, **2021**, 188, 162-173	2.1	1
98	Ambient Light Regulates Retinal Dopamine Signaling and Myopia Susceptibility **2021**, 62, 28		14
97	AxoNet: A deep learning-based tool to count retinal ganglion cell axons. *Scientific Reports*, **2020**, 10, 8034	4.9	14
96	Increased endogenous dopamine prevents myopia in mice. *Experimental Eye Research*, **2020**, 193, 107956	3.7	16
95	Short-Wavelength (Violet) Light Protects Mice From Myopia Through Cone Signaling **2020**, 61, 13		21
94	Novel Detection and Restorative Levodopa Treatment for Preclinical Diabetic Retinopathy. *Diabetes*, **2020**, 69, 1518-1527	0.9	15
93	In vivo Structural Assessments of Ocular Disease in Rodent Models using Optical Coherence Tomography. *Journal of Visualized Experiments*, **2020**,	1.6	1
92	Topography and pachymetry maps for mouse corneas using optical coherence tomography. *Experimental Eye Research*, **2020**, 190, 107868	3.7	5
91	Seasonally variant gene expression in full-term human placenta. *FASEB Journal*, **2020**, 34, 10431-10442	0.9	4
90	Assessment of Visual and Retinal Function Following In Vivo Genipin-Induced Scleral Crosslinking. *Translational Vision Science and Technology*, **2020**, 9, 8	3.3	9
89	Altered ocular parameters from circadian clock gene disruptions. *PLoS ONE*, **2019**, 14, e0217111	3.7	18
88	Menopause exacerbates visual dysfunction in experimental glaucoma. *Experimental Eye Research*, **2019**, 186, 107706	3.7	12
87	IMI - Report on Experimental Models of Emmetropization and Myopia **2019**, 60, M31-M88		130
86	Low-Intensity Exercise in Mice Is Sufficient to Protect Retinal Function During Light-Induced Retinal Degeneration **2019**, 60, 1328-1335		10
85	Wheel running exercise protects against retinal degeneration in the I307N rhodopsin mouse model of inducible autosomal dominant retinitis pigmentosa. *Molecular Vision*, **2019**, 25, 462-476	2.3	11
84	Initial Assessment of Lactate as Mediator of Exercise-Induced Retinal Protection. *Advances in Experimental Medicine and Biology*, **2019**, 1185, 451-455	3.6	2
83	Lack of cone mediated retinal function increases susceptibility to form-deprivation myopia in mice. *Experimental Eye Research*, **2019**, 180, 226-230	3.7	11
82	Retinal Deficits Precede Cognitive and Motor Deficits in a Rat Model of Type II Diabetes **2019**, 60, 123-133		13

81	Neuroprotective strategies for retinal disease. *Progress in Retinal and Eye Research*, **2018**, 65, 50-76	20.5	99
80	Long-Term Functional and Structural Consequences of Primary Blast Overpressure to the Eye. *Journal of Neurotrauma*, **2018**, 35, 2104-2116	5.4	22
79	Circadian rhythms, refractive development, and myopia. *Ophthalmic and Physiological Optics*, **2018**, 38, 217-245	4.1	71
78	TrkB signalling pathway mediates the protective effects of exercise in the diabetic rat retina. *European Journal of Neuroscience*, **2018**, 47, 1254-1265	3.5	23
77	Daily visual stimulation in the critical period enhances multiple aspects of vision through BDNF-mediated pathways in the mouse retina. *PLoS ONE*, **2018**, 13, e0192435	3.7	12
76	Faster emergence behavior from ketamine/xylazine anesthesia with atipamezole versus yohimbine. *PLoS ONE*, **2018**, 13, e0199087	3.7	12
75	Dopamine Deficiency Mediates Early Rod-Driven Inner Retinal Dysfunction in Diabetic Mice **2018**, 59, 572-581		24
74	Dim Light Exposure and Myopia in Children **2018**, 59, 4804-4811		23
73	Neurosteroid allopregnanolone reduces ipsilateral visual cortex potentiation following unilateral optic nerve injury. *Experimental Neurology*, **2018**, 306, 138-148	5.7	5
72	Dopamine signaling and myopia development: What are the key challenges. *Progress in Retinal and Eye Research*, **2017**, 61, 60-71	20.5	124
71	Physical Activity and Quality of Life in Retinitis Pigmentosa. *Journal of Ophthalmology*, **2017**, 2017, 6950642	2	13
70	The RNA-binding protein, ZC3H14, is required for proper poly(A) tail length control, expression of synaptic proteins, and brain function in mice. *Human Molecular Genetics*, **2017**, 26, 3663-3681	5.6	19
69	Whole-eye electrical stimulation therapy preserves visual function and structure in P23H-1 rats. *Experimental Eye Research*, **2016**, 149, 75-83	3.7	22
68	IRBP deficiency permits precocious ocular development and myopia. *Molecular Vision*, **2016**, 22, 1291-1308	2.3	11
67	Tauroursodeoxycholic Acid Protects Retinal Function and Structure in rd1 Mice. *Advances in Experimental Medicine and Biology*, **2016**, 854, 431-6	3.6	19
66	Exercise and Cyclic Light Preconditioning Protect Against Light-Induced Retinal Degeneration and Evoke Similar Gene Expression Patterns. *Advances in Experimental Medicine and Biology*, **2016**, 854, 443-8	3.6	9
65	Development of Experimental Myopia in Chicks in a Natural Environment **2016**, 57, 4779-89		31
64	Altered Refractive Development in Mice With Reduced Levels of Retinal Dopamine **2016**, 57, 4412-4419		28

63	Genome-Wide Scleral Micro- and Messenger-RNA Regulation During Myopia Development in the Mouse **2016**, 57, 6089-6097		21
62	Progesterone treatment shows greater protection in brain vs. retina in a rat model of middle cerebral artery occlusion: Progesterone receptor levels may play an important role. *Restorative Neurology and Neuroscience*, **2016**, 34, 947-963	2.8	24
61	Molecular and Biochemical Aspects of the Retina on Refraction. *Progress in Molecular Biology and Translational Science*, **2015**, 134, 249-67	4	23
60	Potential Role of Exercise in Retinal Health. *Progress in Molecular Biology and Translational Science*, **2015**, 134, 491-502	4	5
59	ON pathway mutations increase susceptibility to form-deprivation myopia. *Experimental Eye Research*, **2015**, 137, 79-83	3.7	44
58	Arrestin 1 and Cone Arrestin 4 Have Unique Roles in Visual Function in an All-Cone Mouse Retina **2015**, 56, 7618-28		9
57	In Vivo Imaging of Retinal Oxidative Stress Using a Reactive Oxygen Species-Activated Fluorescent Probe **2015**, 56, 5862-70		32
56	Integration of Perforated Subretinal Prostheses With Retinal Tissue. *Translational Vision Science and Technology*, **2015**, 4, 5	3.3	10
55	Progesterone treatment in two rat models of ocular ischemia **2015**, 56, 2880-91		21
54	Visual Cone Arrestin 4 Contributes to Visual Function and Cone Health **2015**, 56, 5407-16		14
53	Neuroprotective Effects of Voluntary Exercise in an Inherited Retinal Degeneration Mouse Model **2015**, 56, 6839-46		34
52	Dopamine deficiency contributes to early visual dysfunction in a rodent model of type 1 diabetes. *Journal of Neuroscience*, **2014**, 34, 726-36	6.6	90
51	Aerobic exercise protects retinal function and structure from light-induced retinal degeneration. *Journal of Neuroscience*, **2014**, 34, 2406-12	6.6	56
50	Inner retinal preservation in rat models of retinal degeneration implanted with subretinal photovoltaic arrays. *Experimental Eye Research*, **2014**, 128, 34-42	3.7	5
49	Severity of middle cerebral artery occlusion determines retinal deficits in rats. *Experimental Neurology*, **2014**, 254, 206-15	5.7	15
48	Refractive index measurement of the mouse crystalline lens using optical coherence tomography. *Experimental Eye Research*, **2014**, 125, 62-70	3.7	14
47	Rodent Hyperglycemia-Induced Inner Retinal Deficits are Mirrored in Human Diabetes. *Translational Vision Science and Technology*, **2014**, 3, 6	3.3	39
46	Visually-driven ocular growth in mice requires functional rod photoreceptors **2014**, 55, 6272-9		44

45	Neuroprotective effects of low level electrical stimulation therapy on retinal degeneration. *Advances in Experimental Medicine and Biology*, **2014**, 801, 845-51	3.6	9
44	Mouse b-wave mutants. *Documenta Ophthalmologica*, **2014**, 128, 77-89	2.2	35
43	Comparison of refractive development and retinal dopamine in OFF pathway mutant and C57BL/6J wild-type mice. *Molecular Vision*, **2014**, 20, 1318-27	2.3	30
42	Pharmacology of myopia and potential role for intrinsic retinal circadian rhythms. *Experimental Eye Research*, **2013**, 114, 35-47	3.7	105
41	Investigating mechanisms of myopia in mice. *Experimental Eye Research*, **2013**, 114, 96-105	3.7	62
40	Early visual deficits in streptozotocin-induced diabetic long evans rats **2013**, 54, 1370-7		93
39	Subretinal electrical stimulation preserves inner retinal function in RCS rat retina. *Molecular Vision*, **2013**, 19, 995-1005	2.3	15
38	Retinal degeneration increases susceptibility to myopia in mice. *Molecular Vision*, **2013**, 19, 2068-79	2.3	27
37	Assessment of axial length measurements in mouse eyes. *Optometry and Vision Science*, **2012**, 89, 296-303	2.1	37
36	MRI reveals differential regulation of retinal and choroidal blood volumes in rat retina. *NeuroImage*, **2011**, 54, 1063-9	7.9	23
35	Effects of common anesthetics on eye movement and electroretinogram. *Documenta Ophthalmologica*, **2011**, 122, 163-76	2.2	56
34	Manganese-enhanced MRI reveals multiple cellular and vascular layers in normal and degenerated retinas. *Journal of Magnetic Resonance Imaging*, **2011**, 34, 1422-9	5.6	17
33	Effects of subretinal electrical stimulation in mer-KO mice **2011**, 52, 4223-30		20
32	Targeting retinal and choroid neovascularization using the small molecule inhibitor carboxyamidotriazole. *Brain Research Bulletin*, **2010**, 81, 320-6	3.9	8
31	Non-contact measurement of linear external dimensions of the mouse eye. *Journal of Neuroscience Methods*, **2010**, 187, 156-66	3	19
30	The artificial silicon retina in retinitis pigmentosa patients (an American Ophthalmological Association thesis). *Transactions of the American Ophthalmological Society*, **2010**, 108, 120-54		31
29	Retinal expression of Fgf2 in RCS rats with subretinal microphotodiode array **2009**, 50, 4523-30		40
28	Bile acids in treatment of ocular disease. *Journal of Ocular Biology, Diseases, and Informatics*, **2009**, 2, 149-159		84

27	Tauroursodeoxycholic acid preservation of photoreceptor structure and function in the rd10 mouse through postnatal day 30. *Investigative Ophthalmology and Visual Science*, **2008**, 49, 2148-55		72
26	High susceptibility to experimental myopia in a mouse model with a retinal on pathway defect. *Investigative Ophthalmology and Visual Science*, **2008**, 49, 706-12		92
25	Head-mounted goggles for murine form deprivation myopia. *Journal of Neuroscience Methods*, **2007**, 161, 96-100	3	38
24	Test of the paired-flash electroretinographic method in mice lacking b-waves. *Visual Neuroscience*, **2007**, 24, 141-9	1.7	13
23	Retinal prosthetics for the restoration and preservation of vision. *FASEB Journal*, **2007**, 21, A82	0.9	
22	Structural and functional MRI reveals multiple retinal layers. *Proceedings of the National Academy of Sciences of the United States of America*, **2006**, 103, 17525-30	11.5	136
21	Status of the feline retina 5 years after subretinal implantation. *Journal of Rehabilitation Research and Development*, **2006**, 43, 723-32		17
20	Neuroprotection of photoreceptors in the RCS rat after implantation of a subretinal implant in the superior or inferior retina. *Advances in Experimental Medicine and Biology*, **2006**, 572, 321-6	3.6	5
19	Tool from ancient pharmacopoeia prevents vision loss. *Molecular Vision*, **2006**, 12, 1706-14	2.3	70
18	Features of visual function in the naked mole-rat Heterocephalus glaber. *Journal of Comparative Physiology A: Neuroethology, Sensory, Neural, and Behavioral Physiology*, **2005**, 191, 317-30	2.3	57
17	Neuroprotective effect of subretinal implants in the RCS rat. *Investigative Ophthalmology and Visual Science*, **2005**, 46, 674-82		92
16	Eliminating the Ant1 isoform produces a mouse with CPEO pathology but normal ocular motility. *Investigative Ophthalmology and Visual Science*, **2005**, 46, 4555-62		20
15	Possible sources of neuroprotection following subretinal silicon chip implantation in RCS rats. *Journal of Neural Engineering*, **2005**, 2, S39-47	5	46
14	An ENU-induced mutation in Rs1h causes disruption of retinal structure and function. *Molecular Vision*, **2005**, 11, 569-81	2.3	33
13	Performance of the DTL electrode compared to the jet contact lens electrode in clinical testing. *Documenta Ophthalmologica*, **2004**, 108, 77-86	2.2	19
12	Retinal function after subconjunctival injection of carboplatin in fibrin sealant. *Retina*, **2004**, 24, 776-82	3.6	30
11	Immunohistochemical analysis of the outer plexiform layer in the nob mouse shows no abnormalities. *Visual Neuroscience*, **2003**, 20, 267-72	1.7	49
10	Loss of bipolar cells resulting from the expression of bcl-2 directed by the IRBP promoter. *Experimental Eye Research*, **2003**, 77, 477-83	3.7	6

9	Identification of the gene and the mutation responsible for the mouse nob phenotype. *Investigative Ophthalmology and Visual Science*, **2003**, 44, 378-84		94
8	The eyes of mito-mouse: mouse models of mitochondrial disease. *Journal of Neuro-Ophthalmology*, **2002**, 22, 279-85	2.6	12
7	Subretinal implantation of semiconductor-based photodiodes: durability of novel implant designs. *Journal of Rehabilitation Research and Development*, **2002**, 39, 313-21		31
6	Visual evoked potentials to infrared stimulation in normal cats and rats. *Documenta Ophthalmologica*, **2001**, 103, 155-62	2.2	14
5	Immunohistochemical studies of the retina following long-term implantation with subretinal microphotodiode arrays. *Experimental Eye Research*, **2001**, 73, 333-43	3.7	68
4	Age-related changes in human ciliary muscle. *Optometry and Vision Science*, **2000**, 77, 204-10	2.1	56
3	The functional anatomy of the ciliary muscle in four avian species. *Brain, Behavior and Evolution*, **1997**, 49, 295-311	1.5	15
2	A behavioral study of refraction, corneal curvature, and accommodation in raptor eyes. *Canadian Journal of Zoology*, **1997**, 75, 2010-2020	1.5	8
1	A Biphasic Approach for Characterizing Tensile, Compressive, and Hydraulic Properties of the Sclera		1