Patrick S Mcquillen

List of Publications by Citations

106 papers	6,038 citations	37 h-index	77 g-index
116 ext. papers	7,328 ext. citations	6.2 avg, IF	5.32 L-index

#	Paper	IF	Citations
106	Harnessing neuroplasticity for clinical applications. *Brain*, **2011**, 134, 1591-609	11.2	685
105	Abnormal brain development in newborns with congenital heart disease. *New England Journal of Medicine*, **2007**, 357, 1928-38	59.2	586
104	Selective vulnerability of subplate neurons after early neonatal hypoxia-ischemia. *Journal of Neuroscience*, **2003**, 23, 3308-15	6.6	313
103	Temporal and anatomic risk profile of brain injury with neonatal repair of congenital heart defects. *Stroke*, **2007**, 38, 736-41	6.7	288
102	Therapeutic hypothermia after out-of-hospital cardiac arrest in children. *New England Journal of Medicine*, **2015**, 372, 1898-908	59.2	273
101	Neurodevelopmental outcomes after cardiac surgery in infancy. *Pediatrics*, **2015**, 135, 816-25	7.4	262
100	Selective vulnerability in the developing central nervous system. *Pediatric Neurology*, **2004**, 30, 227-35	2.9	226
99	Extensive migration of young neurons into the infant human frontal lobe. *Science*, **2016**, 354,	33.3	209
98	Balloon atrial septostomy is associated with preoperative stroke in neonates with transposition of the great arteries. *Circulation*, **2006**, 113, 280-5	16.7	180
97	Therapeutic Hypothermia after In-Hospital Cardiac Arrest in Children. *New England Journal of Medicine*, **2017**, 376, 318-329	59.2	159
96	Erythropoietin enhances long-term neuroprotection and neurogenesis in neonatal stroke. *Developmental Neuroscience*, **2007**, 29, 321-30	2.2	151
95	Erythropoietin improves functional and histological outcome in neonatal stroke. *Pediatric Research*, **2005**, 58, 106-11	3.2	150
94	Brain injury and development in newborns with critical congenital heart disease. *Neurology*, **2013**, 81, 241-8	6.5	146
93	Perinatal subplate neuron injury: implications for cortical development and plasticity. *Brain Pathology*, **2005**, 15, 250-60	6	121
92	Regional and central venous oxygen saturation monitoring following pediatric cardiac surgery: concordance and association with clinical variables. *Pediatric Critical Care Medicine*, **2007**, 8, 154-60	3	103
91	Congenital heart disease and brain development. *Annals of the New York Academy of Sciences*, **2010** , 1184, 68-86	6.5	98
90	A role for hypoxia-inducible factor-1alpha in desferoxamine neuroprotection. *Neuroscience Letters*, **2005**, 379, 96-100	3.3	98

89	Preoperative brain injury in newborns with transposition of the great arteries. *Annals of Thoracic Surgery*, **2004**, 77, 1698-706	2.7	98
88	Clinically silent preoperative brain injuries do not worsen with surgery in neonates with congenital heart disease. *Journal of Thoracic and Cardiovascular Surgery*, **2010**, 140, 550-7	1.5	95
87	Erythropoietin increases neurogenesis and oligodendrogliosis of subventricular zone precursor cells after neonatal stroke. *Stroke*, **2013**, 44, 753-8	6.7	92
86	Hippocampal and visuospatial learning defects in mice with a deletion of frizzled 9, a gene in the Williams syndrome deletion interval. *Development (Cambridge)*, **2005**, 132, 2917-27	6.6	92
85	Effects of congenital heart disease on brain development. *Progress in Pediatric Cardiology*, **2010**, 29, 79-85	0.4	90
84	A novel p75NTR signaling pathway promotes survival, not death, of immunopurified neocortical subplate neurons. *Journal of Neuroscience*, **2001**, 21, 5121-9	6.6	88
83	Impact of Operative and Postoperative Factors on Neurodevelopmental Outcomes After Cardiac Operations. *Annals of Thoracic Surgery*, **2016**, 102, 843-849	2.7	73
82	Association of Prenatal Diagnosis of Critical Congenital Heart Disease With Postnatal Brain Development and the Risk of Brain Injury. *JAMA Pediatrics*, **2016**, 170, e154450	8.3	72
81	A novel role for p75NTR in subplate growth cone complexity and visual thalamocortical innervation. *Journal of Neuroscience*, **2002**, 22, 3580-93	6.6	67
80	Association Between Diastolic Blood Pressure During Pediatric In-Hospital Cardiopulmonary Resuscitation and Survival. *Circulation*, **2018**, 137, 1784-1795	16.7	66
79	Towards the "baby connectome": mapping the structural connectivity of the newborn brain. *PLoS ONE*, **2012**, 7, e31029	3.7	59
78	Pyramidal tract maturation after brain injury in newborns with heart disease. *Annals of Neurology*, **2006**, 59, 640-51	9.4	59
77	3D global and regional patterns of human fetal subplate growth determined in utero. *Brain Structure and Function*, **2011**, 215, 255-63	4	52
76	The neonatal brain in critical congenital heart disease: Insights and future directions. *NeuroImage*, **2019**, 185, 776-782	7.9	51
75	Neonatal Brain Injury and Timing of Neurodevelopmental Assessment in Patients With Congenital Heart Disease. *Journal of the American College of Cardiology*, **2018**, 71, 1986-1996	15.1	50
74	Neonatal cerebral hypoxia-ischemia impairs plasticity in rat visual cortex. *Journal of Neuroscience*, **2010**, 30, 81-92	6.6	50
73	Reduced Cortical Activity Impairs Development and Plasticity after Neonatal Hypoxia Ischemia. *Journal of Neuroscience*, **2015**, 35, 11946-59	6.6	46
72	Single-ventricle anatomy predicts delayed microstructural brain development. *Pediatric Research*, **2013**, 73, 661-7	3.2	43

71	Trajectory of Mortality and Health-Related Quality of Life Morbidity Following Community-Acquired Pediatric Septic Shock. *Critical Care Medicine*, **2020**, 48, 329-337	1.4	40
70	White matter injury in term neonates with congenital heart diseases: Topology & comparison with preterm newborns. *NeuroImage*, **2019**, 185, 742-749	7.9	38
69	The association between cardiac physiology, acquired brain injury, and postnatal brain growth in critical congenital heart disease. *Journal of Thoracic and Cardiovascular Surgery*, **2018**, 155, 291-300.e3	1.5	34
68	Neurology of congenital heart disease: insight from brain imaging. *Archives of Disease in Childhood: Fetal and Neonatal Edition*, **2007**, 92, F435-7	4.7	34
67	Chest compression rates and pediatric in-hospital cardiac arrest survival outcomes. *Resuscitation*, **2018**, 130, 159-166	4	33
66	Preventing brain injury in newborns with congenital heart disease: brain imaging and innovative trial designs. *Stroke*, **2009**, 40, 327-32	6.7	33
65	Critical Illness Factors Associated With Long-Term Mortality and Health-Related Quality of Life Morbidity Following Community-Acquired Pediatric Septic Shock. *Critical Care Medicine*, **2020**, 48, 319-328	1.4	31
64	A Core Outcome Set for Pediatric Critical Care. *Critical Care Medicine*, **2020**, 48, 1819-1828	1.4	31
63	Diffusion-weighted imaging in fetuses with severe congenital heart defects. *American Journal of Neuroradiology*, **2011**, 32, E21-2	4.4	30
62	Altered fate of subventricular zone progenitor cells and reduced neurogenesis following neonatal stroke. *Developmental Neuroscience*, **2010**, 32, 101-13	2.2	28
61	Ventilation Rates and Pediatric In-Hospital Cardiac Arrest Survival Outcomes. *Critical Care Medicine*, **2019**, 47, 1627-1636	1.4	27
60	Neonatal Hypoxia-Ischemia Causes Functional Circuit Changes in Subplate Neurons. *Cerebral Cortex* , **2019**, 29, 765-776	5.1	25
59	AMPA and metabotropic excitoxicity explain subplate neuron vulnerability. *Neurobiology of Disease*, **2010**, 37, 195-207	7.5	21
58	End-tidal carbon dioxide during pediatric in-hospital cardiopulmonary resuscitation. *Resuscitation*, **2018**, 133, 173-179	4	20
57	Minimizing the risk of preoperative brain injury in neonates with aortic arch obstruction. *Journal of Pediatrics*, **2014**, 165, 1116-1122.e3	3.6	20
56	Cerebral oxygen balance is impaired during repair of aortic coarctation in infants and children. *Journal of Thoracic and Cardiovascular Surgery*, **2005**, 130, 830-6	1.5	19
55	Development of a core outcome set for pediatric critical care outcomes research. *Contemporary Clinical Trials*, **2020**, 91, 105968	2.3	18
54	Predicting developmental outcomes in preterm infants: A simple white matter injury imaging rule. *Neurology*, **2019**, 93, e1231-e1240	6.5	16

53	Wnt-Dependent Oligodendroglial-Endothelial Interactions Regulate White Matter Vascularization and Attenuate Injury. *Neuron*, **2020**, 108, 1130-1145.e5	13.9	15
52	Magnetic resonance imaging in congenital heart disease: what to do with what we see and don't see?. *Circulation*, **2009**, 119, 660-2	16.7	13
51	The association of immediate post cardiac arrest diastolic hypertension and survival following pediatric cardiac arrest. *Resuscitation*, **2019**, 141, 88-95	4	12
50	Pediatric Hematopoietic Cell Transplant Patients Who Survive Critical Illness Frequently Have Significant but Recoverable Decline in Functional Status. *Biology of Blood and Marrow Transplantation*, **2018**, 24, 330-336	4.7	12
49	Unbiased Quantification of Subplate Neuron Loss following Neonatal Hypoxia-Ischemia in a Rat Model. *Developmental Neuroscience*, **2017**, 39, 171-181	2.2	11
48	Diagnosis influences response of cerebral near infrared spectroscopy to intracranial hypertension in children. *Pediatric Critical Care Medicine*, **2010**, 11, 514-22	3	11
47	Functional outcomes among survivors of pediatric in-hospital cardiac arrest are associated with baseline neurologic and functional status, but not with diastolic blood pressure during CPR. *Resuscitation*, **2019**, 143, 57-65	4	10
46	Infection and white matter injury in infants with congenital cardiac disease. *Cardiology in the Young*, **2011**, 21, 562-71	1	10
45	Trajectories and Risk Factors for Altered Physical and Psychosocial Health-Related Quality of Life After Pediatric Community-Acquired Septic Shock. *Pediatric Critical Care Medicine*, **2020**, 21, 869-878	3	10
44	The association of early post-resuscitation hypotension with discharge survival following targeted temperature management for pediatric in-hospital cardiac arrest. *Resuscitation*, **2019**, 141, 24-34	4	9
43	Improving outcomes after pediatric cardiac arrest - the ICU-Resuscitation Project: study protocol for a randomized controlled trial. *Trials*, **2018**, 19, 213	2.8	9
42	Biomarkers for Estimating Risk of Hospital Mortality and Long-Term Quality-of-Life Morbidity After Surviving Pediatric Septic Shock: A Secondary Analysis of the Life After Pediatric Sepsis Evaluation Investigation. *Pediatric Critical Care Medicine*, **2021**, 22, 8-15	3	9
41	Severe Acute Kidney Injury Is Associated With Increased Risk of Death and New Morbidity After Pediatric Septic Shock. *Pediatric Critical Care Medicine*, **2020**, 21, e686-e695	3	9
40	Survival and Hemodynamics During Pediatric Cardiopulmonary Resuscitation for Bradycardia and Poor Perfusion Versus Pulseless Cardiac Arrest. *Critical Care Medicine*, **2020**, 48, 881-889	1.4	8
39	Ferret brain possesses young interneuron collections equivalent to human postnatal migratory streams. *Journal of Comparative Neurology*, **2019**, 527, 2843-2859	3.4	7
38	Fetal brain growth and risk of postnatal white matter injury in critical congenital heart disease. *Journal of Thoracic and Cardiovascular Surgery*, **2021**, 162, 1007-1014.e1	1.5	7
37	Impact of Perioperative Brain Injury and Development on Feeding Modality in Infants With Single Ventricle Heart Disease. *Journal of the American Heart Association*, **2019**, 8, e012291	6	6
36	Health-Related Quality of Life After Community-Acquired Septic Shock in Children With Preexisting Severe Developmental Disabilities. *Pediatric Critical Care Medicine*, **2021**, 22, e302-e313	3	6

35	Survival and Cardiopulmonary Resuscitation Hemodynamics Following Cardiac Arrest in Children With Surgical Compared to Medical Heart Disease. *Pediatric Critical Care Medicine*, **2019**, 20, 1126-1136	3	6
34	The Bayley-III scale may underestimate neurodevelopmental disability after cardiac surgery in infants. *European Journal of Cardio-thoracic Surgery*, **2020**, 57, 63-71	3	5
33	Anticoagulation therapy and the risk of perioperative brain injury in neonates with congenital heart disease. *Journal of Thoracic and Cardiovascular Surgery*, **2019**, 157, 2406-2413.e2	1.5	4
32	Structured Chart Review: Assessment of a Structured Chart Review Methodology. *Hospital Pediatrics*, **2020**, 10, 61-69	2.5	4
31	Prematurity and congenital heart disease. *World Journal for Pediatric & Congenital Heart Surgery*, **2011**, 2, 457-67	1.1	4
30	Inhaled Nitric Oxide Use in Pediatric Hypoxemic Respiratory Failure. *Pediatric Critical Care Medicine*, **2020**, 21, 708-719	3	4
29	Fetal Cerebral Oxygenation Is Impaired in Congenital Heart Disease and Shows Variable Response to Maternal Hyperoxia. *Journal of the American Heart Association*, **2021**, 10, e018777	6	4
28	Stage II palliation of hypoplastic left heart syndrome without cardiopulmonary bypass. *Journal of Thoracic and Cardiovascular Surgery*, **2011**, 141, 400-6	1.5	3
27	Therapeutic Alliance Between Bereaved Parents and Physicians in the PICU. *Pediatric Critical Care Medicine*, **2021**, 22, e243-e252	3	3
26	Caffeine Restores Background EEG Activity Independent of Infarct Reduction after Neonatal Hypoxic Ischemic Brain Injury. *Developmental Neuroscience*, **2020**, 42, 72-82	2.2	3
25	Factors Associated With Functional Impairment After Pediatric Injury. *JAMA Surgery*, **2021**, 156, e212058	5.4	3
24	Association between time of day and CPR quality as measured by CPR hemodynamics during pediatric in-hospital CPR. *Resuscitation*, **2020**, 153, 209-216	4	2
23	Pathophysiology of Hypoxic-Ischemic Brain Injury **2017**, 1686-1695.e4		2
22	The Effect of Size and Asymmetry at Birth on Brain Injury and Neurodevelopmental Outcomes in Congenital Heart Disease. *Pediatric Cardiology*, **2021**, 1	2.1	2
21	Long-Term Neurologic Outcomes in Children With Congenital Heart Disease **2018**, 844-851.e2		1
20	Neonatal brain injury influences structural connectivity and childhood functional outcomes.. *PLoS ONE*, **2022**, 17, e0262310	3.7	1
19	The Association between Therapeutic Alliance and Parental Health Outcomes following a Child's Death in the Pediatric Intensive Care Unit. *Journal of Pediatric Intensive Care*,	1	1
18	1517. *Critical Care Medicine*, **2019**, 47, 734	1.4	1

17	Temporal airway microbiome changes related to ventilator-associated pneumonia in children. *European Respiratory Journal*, **2021**, 57,	13.6	1
16	Aberrant Structural Brain Connectivity in Adolescents with Attentional Problems Who Were Born Prematurely. *American Journal of Neuroradiology*, **2018**, 39, 2140-2147	4.4	1
15	Improvement in Health-Related Quality of Life After Community Acquired Pediatric Septic Shock. *Frontiers in Pediatrics*, **2021**, 9, 675374	3.4	1
14	Lower respiratory tract infections in children requiring mechanical ventilation: a multicentre prospective surveillance study incorporating airway metagenomics.. *Lancet Microbe, The*, **2022**, 3, e284-e293	22.2	1
13	Variability in chest compression rate calculations during pediatric cardiopulmonary resuscitation. *Resuscitation*, **2020**, 149, 127-133	4	0
12	Variation in Arterial and Central Venous Catheter Use in Pediatric Intensive Care Units. *Journal of Intensive Care Medicine*, **2021**, 36, 1250-1257	3.3	0
11	Complicated Grief, Depression and Post-Traumatic Stress Symptoms Among Bereaved Parents following their Child's Death in the Pediatric Intensive Care Unit: A Follow-Up Study. *American Journal of Hospice and Palliative Medicine*, **2021**, 10499091211015913	2.6	0
10	How does the convergence of prematurity and congenital heart disease impact the developing brain?. *Seminars in Perinatology*, **2021**, 45, 151472	3.3	0
9	Effect of Physiologic Point-of-Care Cardiopulmonary Resuscitation Training on Survival With Favorable Neurologic Outcome in Cardiac Arrest in Pediatric ICUs: A Randomized Clinical Trial.. *JAMA - Journal of the American Medical Association*, **2022**, 327, 934-945	27.4	0
8	Commentary: Is the brain spared when the heart is broken?. *Journal of Thoracic and Cardiovascular Surgery*, **2019**, 157, 1994-1995	1.5	
7	204: CARDIOPULMONARY RESUSCITATION QUALITY MEASURED BY DIASTOLIC BLOOD PRESSURE DURING DAY VERSUS NIGHT. *Critical Care Medicine*, **2020**, 48, 84-84	1.4	
6	From death to recovery following hypoxia ischemia: if TGFbeta is a central regulator, is integrin beta8 the switch?. *Neurotoxicity Research*, **2010**, 17, 418-20	4.3	
5	Transfusion-Associated Delirium in Children: No Difference Between Short Storage Versus Standard Issue RBCs.. *Critical Care Medicine*, **2022**, 50, 173-182	1.4	
4	833: CPCCRN FAMILY NETWORK COLLABORATIVE: ENGAGING FAMILIES IN PEDIATRIC CRITICAL CARE RESEARCH. *Critical Care Medicine*, **2020**, 48, 396-396	1.4	
3	Incentive delivery timing and follow-up survey completion in a prospective cohort study of injured children: a randomized experiment comparing prepaid and postpaid incentives. *BMC Medical Research Methodology*, **2021**, 21, 233	4.7	
2	800: The Impact of Therapeutic Alliance on Parental Health Outcomes Following a Child's Death in the PICU. *Critical Care Medicine*, **2021**, 49, 396-396	1.4	
1	Inhaled Nitric Oxide Use and Outcomes in Critically Ill Children With a History of Prematurity. *Respiratory Care*, **2021**, 66, 1549-1559	2.1	