Gareth Ball

List of Publications by Citations

69 papers	2,768 citations	25 h-index	52 g-index
81 ext. papers	3,470 ext. citations	5.9 avg, IF	4.82 L-index

#	Paper	IF	Citations
69	Development of cortical microstructure in the preterm human brain. *Proceedings of the National Academy of Sciences of the United States of America*, **2013**, 110, 9541-6	11.5	227
68	The effect of preterm birth on thalamic and cortical development. *Cerebral Cortex*, **2012**, 22, 1016-24	5.1	221
67	Rich-club organization of the newborn human brain. *Proceedings of the National Academy of Sciences of the United States of America*, **2014**, 111, 7456-61	11.5	217
66	Construction of a consistent high-definition spatio-temporal atlas of the developing brain using adaptive kernel regression. *NeuroImage*, **2012**, 59, 2255-65	7.9	201
65	The influence of preterm birth on the developing thalamocortical connectome. *Cortex*, **2013**, 49, 1711-21	3.8	156
64	Thalamocortical Connectivity Predicts Cognition in Children Born Preterm. *Cerebral Cortex*, **2015**, 25, 4310-8	5.1	150
63	An optimised tract-based spatial statistics protocol for neonates: applications to prematurity and chronic lung disease. *NeuroImage*, **2010**, 53, 94-102	7.9	137
62	Neonatal tract-based spatial statistics findings and outcome in preterm infants. *American Journal of Neuroradiology*, **2012**, 33, 188-94	4.4	135
61	A major continuous allergenic epitope of bovine beta-lactoglobulin recognized by human IgE binding. *Clinical and Experimental Allergy*, **1994**, 24, 758-64	4.1	107
60	Specialization and integration of functional thalamocortical connectivity in the human infant. *Proceedings of the National Academy of Sciences of the United States of America*, **2015**, 112, 6485-90	11.5	104
59	Regional changes in thalamic shape and volume with increasing age. *NeuroImage*, **2012**, 63, 1134-42	7.9	75
58	Whole-brain mapping of structural connectivity in infants reveals altered connection strength associated with growth and preterm birth. *Cerebral Cortex*, **2014**, 24, 2324-33	5.1	71
57	Diffusion tensor imaging in preterm infants with punctate white matter lesions. *Pediatric Research*, **2011**, 69, 561-6	3.2	69
56	Machine-learning to characterise neonatal functional connectivity in the preterm brain. *NeuroImage* , **2016**, 124, 267-275	7.9	66
55	Reinforcement of the Brain's Rich-Club Architecture Following Early Neurodevelopmental Disruption Caused by Very Preterm Birth. *Cerebral Cortex*, **2016**, 26, 1322-35	5.1	57
54	Exploring the multiple-hit hypothesis of preterm white matter damage using diffusion MRI. *NeuroImage: Clinical*, **2018**, 17, 596-606	5.3	54
53	Decreased microglial Wnt/β-catenin signalling drives microglial pro-inflammatory activation in the developing brain. *Brain*, **2019**, 142, 3806-3833	11.2	48

52	The exploration of rotenone as a toxin for inducing Parkinson's disease in rats, for application in BBB transport and PK-PD experiments. *Journal of Pharmacological and Toxicological Methods*, **2008**, 57, 114-30	1.7	48
51	Integrative genomics of microglia implicates DLG4 (PSD95) in the white matter development of preterm infants. *Nature Communications*, **2017**, 8, 428	17.4	47
50	Diffusion magnetic resonance imaging in preterm brain injury. *Neuroradiology*, **2013**, 55 Suppl 2, 65-95	3.2	46
49	Multimodal image analysis of clinical influences on preterm brain development. *Annals of Neurology* , **2017**, 82, 233-246	9.4	40
48	Tractography of the corticospinal tracts in infants with focal perinatal injury: comparison with normal controls and to motor development. *Neuroradiology*, **2012**, 54, 507-16	3.2	39
47	Common genetic variants and risk of brain injury after preterm birth. *Pediatrics*, **2014**, 133, e1655-63	7.4	32
46	Age, sex, and puberty related development of the corpus callosum: a multi-technique diffusion MRI study. *Brain Structure and Function*, **2018**, 223, 2753-2765	4	31
45	Voxel-wise comparisons of cellular microstructure and diffusion-MRI in mouse hippocampus using 3D Bridging of Optically-clear histology with Neuroimaging Data (3D-BOND). *Scientific Reports*, **2018**, 8, 4011	4.9	25
44	Testing the sensitivity of Tract-Based Spatial Statistics to simulated treatment effects in preterm neonates. *PLoS ONE*, **2013**, 8, e67706	3.7	24
43	Executive functions and prefrontal cortex: a matter of persistence?. *Frontiers in Systems Neuroscience*, **2011**, 5, 3	3.5	22
42	Machine learning shows association between genetic variability in and cerebral connectivity in preterm infants. *Proceedings of the National Academy of Sciences of the United States of America*, **2017**, 114, 13744-13749	11.5	21
41	Development of the Corticospinal and Callosal Tracts from Extremely Premature Birth up to 2 Years of Age. *PLoS ONE*, **2015**, 10, e0125681	3.7	21
40	New imaging approaches to evaluate newborn brain injury and their role in predicting developmental disorders. *Current Opinion in Neurology*, **2014**, 27, 168-75	7.1	21
39	Possible relationship between common genetic variation and white matter development in a pilot study of preterm infants. *Brain and Behavior*, **2016**, 6, e00434	3.4	21
38	Characterising brain network topologies: A dynamic analysis approach using heat kernels. *NeuroImage*, **2016**, 141, 490-501	7.9	19
37	Genetic influences on hub connectivity of the human connectome. *Nature Communications*, **2021**, 12, 4237	17.4	17
36	Cortical remodelling in childhood is associated with genes enriched for neurodevelopmental disorders. *NeuroImage*, **2020**, 215, 116803	7.9	16
35	Cortical morphology at birth reflects spatiotemporal patterns of gene expression in the fetal human brain. *PLoS Biology*, **2020**, 18, e3000976	9.7	16

34	Dymeclin deficiency causes postnatal microcephaly, hypomyelination and reticulum-to-Golgi trafficking defects in mice and humans. *Human Molecular Genetics*, **2015**, 24, 2771-83	5.6	15
33	Modelling neuroanatomical variation during childhood and adolescence with neighbourhood-preserving embedding. *Scientific Reports*, **2017**, 7, 17796	4.9	15
32	Multimodal Structural Neuroimaging Markers of Brain Development and ADHD Symptoms. *American Journal of Psychiatry*, **2019**, 176, 57-66	11.9	14
31	Altered white matter and cortical structure in neonates with antenatally diagnosed isolated ventriculomegaly. *NeuroImage: Clinical*, **2016**, 11, 139-148	5.3	13
30	Charting shared developmental trajectories of cortical thickness and structural connectivity in childhood and adolescence. *Human Brain Mapping*, **2019**, 40, 4630-4644	5.9	13
29	Diffusion tensor imaging metrics in neonates-a comparison of manual region-of-interest analysis vs. tract-based spatial statistics. *Pediatric Radiology*, **2013**, 43, 69-79	2.8	10
28	Fractional anisotropy in children with dystonia or spasticity correlates with the selection for DBS or ITB movement disorder surgery. *Neuroradiology*, **2016**, 58, 401-8	3.2	9
27	Network component analysis reveals developmental trajectories of structural connectivity and specific alterations in autism spectrum disorder. *Human Brain Mapping*, **2017**, 38, 4169-4184	5.9	8
26	Brain charts for the human lifespan		8
25	White matter extension of the Melbourne Children□s Regional Infant Brain atlas: M-CRIB-WM. *Human Brain Mapping*, **2020**, 41, 2317-2333	5.9	7
24	Polygenic risk for neuropsychiatric disease and vulnerability to abnormal deep grey matter development. *Scientific Reports*, **2019**, 9, 1976	4.9	7
23	Individual variation in longitudinal postnatal development of the primate brain. *Brain Structure and Function*, **2019**, 224, 1185-1201	4	7
22	A neural window on the emergence of cognition. *Annals of the New York Academy of Sciences*, **2016**, 1369, 7-23	6.5	6
21	Quantifying individual differences in brain morphometry underlying symptom severity in Autism Spectrum Disorders. *Scientific Reports*, **2019**, 9, 9898	4.9	5
20	Individual variation underlying brain age estimates in typical development. *NeuroImage*, **2021**, 235, 118036	7.9	5
19	Loss of the Wnt/□catenin pathway in microglia of the developing brain drives pro-inflammatory activation leading to white matter injury		3
18	The development of structural covariance networks during the transition from childhood to adolescence. *Scientific Reports*, **2021**, 11, 9451	4.9	3
17	Associations Between Neonatal Brain Structure, the Home Environment, and Childhood Outcomes Following Very Preterm Birth. *Biological Psychiatry Global Open Science*, **2021**, 1, 146-155		3

List of Publications

16	Cortical morphology at birth reflects spatio-temporal patterns of gene expression in the fetal human brain		2
15	Normalisation of neonatal brain network measures using stochastic approaches. *Lecture Notes in Computer Science*, **2013**, 16, 574-81	0.9	2
14	Individual Differences in Intrinsic Brain Networks Predict Symptom Severity in Autism Spectrum Disorders. *Cerebral Cortex*, **2021**, 31, 681-693	5.1	2
13	Callosal thickness profiles for prognosticating conversion from mild cognitive impairment to Alzheimer's disease: A classification approach. *Brain and Behavior*, **2018**, 8, e01142	3.4	2
12	Diffusion Imaging in the Developing Brain **2014**, 283-300		1
11	Neonatal amygdala resting-state functional connectivity and socio-emotional development in very preterm children.. *Brain Communications*, **2022**, 4, fcac009	4.5	1
10	Individual variation in longitudinal postnatal development of the primate brain		1
9	White matter tracts related to memory and emotion in very preterm children. *Pediatric Research*, **2021**, 89, 1452-1460	3.2	1
8	Participant followup rate can bias structural imaging measures in longitudinal studies		1
7	Early and late development of hub connectivity in the human brain.. *Current Opinion in Psychology*, **2021**, 44, 321-329	6.2	0
6	Investigating brain structural maturation in children and adolescents born very preterm using the brain age framework.. *NeuroImage*, **2021**, 247, 118828	7.9	0
5	O-055 Fractional Anisotropy In White Matter And Mean Diffusivity In Grey Matter Correlate To Neurodevelopmental Performance Following Hypoxic-ischaemic Encephalopathy. *Archives of Disease in Childhood*, **2014**, 99, A42.3-A43	2.2	
4	Connectomics770-774		
3	197 Serial Diffusion Tensor Imaging Demonstrates: White Matter Microstructure in the Preterm Period is not Related to Gestation at Birth. *Archives of Disease in Childhood*, **2012**, 97, A57-A57	2.2	
2	Parcellation-Independent Multi-Scale Framework for Brain Network Analysis. *Mathematics and Visualization*, **2014**, 23-32	0.6	
1	Integration of Network-Based Biological Knowledge With White Matter Features in Preterm Infants Using the Graph-Guided Group Lasso **2018**, 45-59		