David Howells

List of Publications by Year in Descending Order

104 papers	11,453 citations	43 h-index	107 g-index
113 ext. papers	14,421 ext. citations	7.3 avg, IF	6.01 L-index

#	Paper	IF	Citations
104	What has preclinical systematic review ever done for us?. *BMJ Open Science*, **2022**, 6, e100219	4.6	0
103	Pharmacological PDGFRβ inhibitors imatinib and sunitinib cause human brain pericyte death in vitro.. *Toxicology and Applied Pharmacology*, **2022**, 116025	4.6	
102	Differences in fatigue-like behavior in the lipopolysaccharide and poly I:C inflammatory animal models. *Physiology and Behavior*, **2021**, 232, 113347	3.5	0
101	Combined meta-analysis of preclinical cell therapy studies shows overlapping effect modifiers for multiple diseases.. *BMJ Open Science*, **2021**, 5, e100061	4.6	1
100	Circadian Biology and Stroke. *Stroke*, **2021**, 52, 2180-2190	6.7	5
99	Transcranial contrast-enhanced ultrasound in the rat brain reveals substantial hyperperfusion acutely post-stroke. *Journal of Cerebral Blood Flow and Metabolism*, **2020**, 40, 939-953	7.3	4
98	The ARRIVE guidelines 2.0: updated guidelines for reporting animal research. *BMJ Open Science*, **2020**, 4, e100115	4.6	30
97	Applications of Nanotechnology in the Diagnosis and Therapy of Stroke. *Seminars in Thrombosis and Hemostasis*, **2020**, 46, 592-605	5.3	11
96	Differential susceptibility of human neural progenitors and neurons to ischaemic injury. *Brain Research Bulletin*, **2020**, 156, 25-32	3.9	
95	The ARRIVE guidelines 2.0: Updated guidelines for reporting animal research. *BMC Veterinary Research*, **2020**, 16, 242	2.7	42
94	The ARRIVE guidelines 2.0: Updated guidelines for reporting animal research. *PLoS Biology*, **2020**, 18, e3000410	9.7	757
93	Reporting animal research: Explanation and elaboration for the ARRIVE guidelines 2.0. *PLoS Biology* , **2020**, 18, e3000411	9.7	352
92	The ARRIVE guidelines 2.0: Updated guidelines for reporting animal research. *Journal of Cerebral Blood Flow and Metabolism*, **2020**, 40, 1769-1777	7.3	220
91	The ARRIVE guidelines 2.0: Updated guidelines for reporting animal research. *British Journal of Pharmacology*, **2020**, 177, 3617-3624	8.6	99
90	Longitudinal Stroke Recovery Associated With Dysregulation of Complement System-A Proteomics Pathway Analysis. *Frontiers in Neurology*, **2020**, 11, 692	4.1	2
89	Pericytes and Neurovascular Function in the Healthy and Diseased Brain. *Frontiers in Cellular Neuroscience*, **2019**, 13, 282	6.1	117
88	The effect of rapamycin treatment on cerebral ischemia: A systematic review and meta-analysis of animal model studies. *International Journal of Stroke*, **2019**, 14, 137-145	6.3	12

87	NXY-059, a Failed Stroke Neuroprotectant, Offers No Protection to Stem Cell-Derived Human Neurons. *Journal of Stroke and Cerebrovascular Diseases*, **2018**, 27, 2158-2165	2.8	15
86	Human Ischaemic Cascade Studies Using SH-SY5Y Cells: a Systematic Review and Meta-Analysis. *Translational Stroke Research*, **2018**, 9, 564-574	7.8	19
85	Derivation of phenotypically diverse neural culture from hESC by combining adherent and dissociation methods. *Journal of Neuroscience Methods*, **2018**, 308, 286-293	3	0
84	A complementary role for tetraspanin superfamily member TSSC6 and ADP purinergic P2Y receptor in platelets. *Thrombosis Research*, **2018**, 161, 12-21	8.2	3
83	Hypothermia revisited: Impact of ischaemic duration and between experiment variability. *Journal of Cerebral Blood Flow and Metabolism*, **2017**, 37, 3380-3390	7.3	7
82	Risk of bias reporting in the recent animal focal cerebral ischaemia literature. *Clinical Science*, **2017**, 131, 2525-2532	6.5	16
81	Identification and characterization of outcome measures reported in animal models of epilepsy: Protocol for a systematic review of the literature-A TASK2 report of the AES/ILAE Translational Task Force of the ILAE. *Epilepsia*, **2017**, 58 Suppl 4, 68-77	6.4	5
80	Animal Models of Ischemic Stroke Versus Clinical Stroke: Comparison of Infarct Size, Cause, Location, Study Design, and Efficacy of Experimental Therapies **2017**, 481-523		3
79	Evolution of ischemic damage and behavioural deficit over 6 months after MCAo in the rat: Selecting the optimal outcomes and statistical power for multi-centre preclinical trials. *PLoS ONE*, **2017**, 12, e0171688	3.7	33
78	Standardized mean differences cause funnel plot distortion in publication bias assessments. *ELife*, **2017**, 6,	8.9	83
77	Neuroprotection After Traumatic Brain Injury. *JAMA Neurology*, **2016**, 73, 149-50	17.2	8
76	Olfactory Ensheathing Cell Transplantation in Experimental Spinal Cord Injury: Effect size and Reporting Bias of 62 Experimental Treatments: A Systematic Review and Meta-Analysis. *PLoS Biology*, **2016**, 14, e1002468	9.7	60
75	A Pathway Proteomic Profile of Ischemic Stroke Survivors Reveals Innate Immune Dysfunction in Association with Mild Symptoms of Depression - A Pilot Study. *Frontiers in Neurology*, **2016**, 7, 85	4.1	21
74	Conventional protein kinase C□mediated phosphorylation inhibits collapsin response-mediated protein 2 proteolysis and alleviates ischemic injury in cultured cortical neurons and ischemic stroke-induced mice. *Journal of Neurochemistry*, **2016**, 137, 446-59	6	13
73	Protocol for a retrospective, controlled cohort study of the impact of a change in Nature journalsT editorial policy for life sciences research on the completeness of reporting study design and execution. *Scientometrics*, **2016**, 108, 315-328	3	17
72	STroke imAging pRevention and treatment (START): A longitudinal stroke cohort study: Clinical trials protocol. *International Journal of Stroke*, **2015**, 10, 636-44	6.3	14
71	A combined pre-clinical meta-analysis and randomized confirmatory trial approach to improve data validity for therapeutic target validation. *Scientific Reports*, **2015**, 5, 13428	4.9	26
70	Fish oil supplementation associated with decreased cellular degeneration and increased cellular proliferation 6 weeks after middle cerebral artery occlusion in the rat. *Neuropsychiatric Disease and Treatment*, **2015**, 11, 153-64	3.1	5

69	Risk of Bias in Reports of In Vivo Research: A Focus for Improvement. *PLoS Biology*, **2015**, 13, e1002273	9.7	160
68	Efficacy of antidepressants in animal models of ischemic stroke: a systematic review and meta-analysis. *Stroke*, **2014**, 45, 3055-63	6.7	53
67	Systematic reviews and meta-analysis of preclinical studies: why perform them and how to appraise them critically. *Journal of Cerebral Blood Flow and Metabolism*, **2014**, 34, 737-42	7.3	156
66	Hypothermia protects human neurons. *International Journal of Stroke*, **2014**, 9, 544-52	6.3	18
65	Exercise reduces infarct volume and facilitates neurobehavioral recovery: results from a systematic review and meta-analysis of exercise in experimental models of focal ischemia. *Neurorehabilitation and Neural Repair*, **2014**, 28, 800-12	4.7	32
64	Effect and reporting bias of RhoA/ROCK-blockade intervention on locomotor recovery after spinal cord injury: a systematic review and meta-analysis. *JAMA Neurology*, **2014**, 71, 91-9	17.2	66
63	Bringing rigour to translational medicine. *Nature Reviews Neurology*, **2014**, 10, 37-43	15	87
62	Fish oil diet associated with acute reperfusion related hemorrhage, and with reduced stroke-related sickness behaviors and motor impairment. *Frontiers in Neurology*, **2014**, 5, 14	4.1	8
61	How to increase value and reduce waste when research priorities are set. *Lancet, The*, **2014**, 383, 156-65	40	826
60	Neurotoxicity and Stroke **2014**, 1483-1509		
59	The benefit of hypothermia in experimental ischemic stroke is not affected by pethidine. *International Journal of Stroke*, **2013**, 8, 180-5	6.3	12
58	Hypertension and experimental stroke therapies. *Journal of Cerebral Blood Flow and Metabolism*, **2013**, 33, 1141-7	7.3	28
57	Animal Models of Stroke Versus Clinical Stroke: Comparison of Infarct Size, Cause, Location, Study Design, and Efficacy of Experimental Therapies **2013**, 531-568		2
56	Evidence-based translational medicine. *Stroke*, **2013**, 44, 1466-71	6.7	20
55	A concerted appeal for international cooperation in preclinical stroke research. *Stroke*, **2013**, 44, 1754-60	6.7	81
54	Stem cell transplantation in traumatic spinal cord injury: a systematic review and meta-analysis of animal studies. *PLoS Biology*, **2013**, 11, e1001738	9.7	90
53	Evaluation of excess significance bias in animal studies of neurological diseases. *PLoS Biology*, **2013**, 11, e1001609	9.7	184
52	Stem cell-based therapy for experimental stroke: a systematic review and meta-analysis. *International Journal of Stroke*, **2012**, 7, 582-8	6.3	104

51	The influence of stroke risk factors and comorbidities on assessment of stroke therapies in humans and animals. *International Journal of Stroke*, **2012**, 7, 386-97	6.3	29
50	Improving the efficiency of the development of drugs for stroke. *International Journal of Stroke*, **2012**, 7, 371-7	6.3	42
49	Human in vitro models of ischaemic stroke: a test bed for translation. *Translational Stroke Research*, **2012**, 3, 306-9	7.8	12
48	A novel population of □smooth muscle actin-positive cells activated in a rat model of stroke: an analysis of the spatio-temporal distribution in response to ischemia. *Journal of Cerebral Blood Flow and Metabolism*, **2012**, 32, 2055-65	7.3	20
47	A call for transparent reporting to optimize the predictive value of preclinical research. *Nature*, **2012**, 490, 187-91	50.4	795
46	A multicentre, randomized, double-blinded, placebo-controlled Phase III study to investigate EXtending the time for Thrombolysis in Emergency Neurological Deficits (EXTEND). *International Journal of Stroke*, **2012**, 7, 74-80	6.3	158
45	How to make better use of thrombolytic therapy in acute ischemic stroke. *Nature Reviews Neurology*, **2011**, 7, 400-9	15	108
44	History of animal models of stroke. *International Journal of Stroke*, **2011**, 6, 77-8	6.3	7
43	ŠalvagedŤstroke ischaemic penumbra shows significant injury: studies with the hypoxia tracer FMISO. *Journal of Cerebral Blood Flow and Metabolism*, **2011**, 31, 934-43	7.3	17
42	Preclinical drug evaluation for combination therapy in acute stroke using systematic review, meta-analysis, and subsequent experimental testing. *Journal of Cerebral Blood Flow and Metabolism* , **2011**, 31, 962-75	7.3	58
41	Changes in the solubility and phosphorylation of □synuclein over the course of ParkinsonŤs disease. *Acta Neuropathologica*, **2011**, 121, 695-704	14.3	78
40	A systematic review and meta-analysis of erythropoietin in experimental stroke. *Journal of Cerebral Blood Flow and Metabolism*, **2010**, 30, 961-8	7.3	92
39	Inducing stroke in aged, hypertensive, diabetic rats. *Journal of Cerebral Blood Flow and Metabolism*, **2010**, 30, 729-33	7.3	34
38	Factors affecting the apparent efficacy and safety of tissue plasminogen activator in thrombotic occlusion models of stroke: systematic review and meta-analysis. *Journal of Cerebral Blood Flow and Metabolism*, **2010**, 30, 1905-13	7.3	88
37	An enriched environment improves sensorimotor function post-ischemic stroke. *Neurorehabilitation and Neural Repair*, **2010**, 24, 802-13	4.7	87
36	Can animal models of disease reliably inform human studies?. *PLoS Medicine*, **2010**, 7, e1000245	11.6	803
35	Publication bias in reports of animal stroke studies leads to major overstatement of efficacy. *PLoS Biology*, **2010**, 8, e1000344	9.7	380
34	Modeling Risk Factors and Confounding Effects in Stroke. *Neuromethods*, **2010**, 93-119	0.4	2

33	Reprint: Good laboratory practice: preventing introduction of bias at the bench. *Stroke*, **2009**, 29, 221-3	6.7	236
32	Scope of preclinical testing versus quality control within experiments. *Stroke*, **2009**, 40, e497	6.7	9
31	Characterisation of the timing of binding of the hypoxia tracer FMISO after stroke. *Brain Research*, **2009**, 1288, 135-42	3.7	15
30	Reprint: Good laboratory practice: preventing introduction of bias at the bench. *International Journal of Stroke*, **2009**, 4, 3-5	6.3	23
29	Update of the stroke therapy academic industry roundtable preclinical recommendations. *Stroke*, **2009**, 40, 2244-50	6.7	948
28	Evidence for the efficacy of NXY-059 in experimental focal cerebral ischaemia is confounded by study quality. *Stroke*, **2008**, 39, 2824-9	6.7	241
27	Hypothermia in animal models of acute ischaemic stroke: a systematic review and meta-analysis. *Brain*, **2007**, 130, 3063-74	11.2	355
26	Neuroprotection: where to now?. *Future Neurology*, **2007**, 2, 513-521	1.5	1
25	How can we improve the pre-clinical development of drugs for stroke?. *Trends in Neurosciences*, **2007**, 30, 433-9	13.3	267
24	Striatal dopaminergic neurons are lost with Parkinson's disease progression. *Movement Disorders*, **2006**, 21, 2208-11	7	16
23	1,026 experimental treatments in acute stroke. *Annals of Neurology*, **2006**, 59, 467-77	9.4	1049
22	Characterization of fluoromisonidazole binding in stroke. *Stroke*, **2006**, 37, 1862-7	6.7	16
21	Inflammation following stroke. *Journal of Clinical Neuroscience*, **2006**, 13, 1-8	2.2	154
20	Modification of the method of thread manufacture improves stroke induction rate and reduces mortality after thread-occlusion of the middle cerebral artery in young or aged rats. *Journal of Neuroscience Methods*, **2006**, 155, 285-90	3	99
19	Vampire bat salivary plasminogen activator (desmoteplase) inhibits tissue-type plasminogen activator-induced potentiation of excitotoxic injury. *Stroke*, **2005**, 36, 1241-6	6.7	75
18	Systematic review and metaanalysis of the efficacy of FK506 in experimental stroke. *Journal of Cerebral Blood Flow and Metabolism*, **2005**, 25, 713-21	7.3	144
17	Systematic review and meta-analysis of the efficacy of melatonin in experimental stroke. *Journal of Pineal Research*, **2005**, 38, 35-41	10.4	106
16	Dopaminergic innervation of the human striatum in Parkinson's disease. *Movement Disorders*, **2005**, 20, 810-8	7	24

15	Ischaemic tolerance and mitochondrial uncoupling--can we learn from the cell?. *Cerebrovascular Diseases*, **2005**, 19, 206-8	3.2	
14	Quality of preclinical evidence for neuroprotection in stroke. *Journal of Cerebral Blood Flow and Metabolism*, **2005**, 25, S144-S144	7.3	1
13	Does tissue plasminogen activator mediate neurogeneneration in the 1-methyl-4-phenyl-1, 2, 3, 6-tetrahydropyridine (MPTP) mouse model of Parkinson's disease?. *Journal of Cerebral Blood Flow and Metabolism*, **2005**, 25, S434-S434	7.3	
12	Pooling of animal experimental data reveals influence of study design and publication bias. *Stroke*, **2004**, 35, 1203-8	6.7	399
11	The resistance to ischemia of white and gray matter after stroke. *Annals of Neurology*, **2004**, 56, 695-701	9.4	67
10	Stem cells: do they replace or stimulate?. *Stroke*, **2003**, 34, 2082-3	6.7	6
9	CNS regeneration: clinical possibility or basic science fantasy?. *Journal of Clinical Neuroscience*, **2003**, 10, 523-34	2.2	19
8	Can the time window for administration of thrombolytics in stroke be increased?. *CNS Drugs*, **2003**, 17, 995-1011	6.7	18
7	New dopaminergic neurons in Parkinson's disease striatum. *Lancet, The*, **2000**, 356, 44-5	40	96
6	Effect of chronic angiotensin-converting enzyme inhibition on striatal dopamine content in the MPTP-treated mouse. *Journal of Neurochemistry*, **1999**, 73, 214-9	6	42
5	Leukaemia inhibitory factor prevents injury induced proliferation of striatal dopamine uptake sites. *NeuroReport*, **1995**, 6, 1857-60	1.7	2
4	Cerebrospinal fluid concentrations of pterins and metabolites of serotonin and dopamine in a pediatric reference population. *Pediatric Research*, **1993**, 34, 10-4	3.2	108
3	Surgical damage stimulates proliferation of dopamine uptake sites in normal mouse brain. *Brain Research*, **1993**, 622, 285-8	3.7	14
2	The ARRIVE guidelines 2019: updated guidelines for reporting animal research		32
1	Reporting animal research: Explanation and Elaboration for the ARRIVE guidelines 2019		4