Katey J Rayner

List of Publications by Citations

77 papers	10,700 citations	40 h-index	92 g-index
92 ext. papers	12,504 ext. citations	12.4 avg, IF	5.93 L-index

#	Paper	IF	Citations
77	NLRP3 inflammasomes are required for atherogenesis and activated by cholesterol crystals. *Nature* , **2010**, 464, 1357-61	50.4	2450
76	CD36 ligands promote sterile inflammation through assembly of a Toll-like receptor 4 and 6 heterodimer. *Nature Immunology*, **2010**, 11, 155-61	19.1	1017
75	MiR-33 contributes to the regulation of cholesterol homeostasis. *Science*, **2010**, 328, 1570-3	33.3	911
74	CD36 coordinates NLRP3 inflammasome activation by facilitating intracellular nucleation of soluble ligands into particulate ligands in sterile inflammation. *Nature Immunology*, **2013**, 14, 812-20	19.1	583
73	Inhibition of miR-33a/b in non-human primates raises plasma HDL and lowers VLDL triglycerides. *Nature*, **2011**, 478, 404-7	50.4	542
72	Antagonism of miR-33 in mice promotes reverse cholesterol transport and regression of atherosclerosis. *Journal of Clinical Investigation*, **2011**, 121, 2921-31	15.9	510
71	miR-33a/b contribute to the regulation of fatty acid metabolism and insulin signaling. *Proceedings of the National Academy of Sciences of the United States of America*, **2011**, 108, 9232-7	11.5	489
70	MicroRNA-33-dependent regulation of macrophage metabolism directs immune cell polarization in atherosclerosis. *Journal of Clinical Investigation*, **2015**, 125, 4334-48	15.9	241
69	HDL promotes rapid atherosclerosis regression in mice and alters inflammatory properties of plaque monocyte-derived cells. *Proceedings of the National Academy of Sciences of the United States of America*, **2011**, 108, 7166-71	11.5	239
68	The neuroimmune guidance cue netrin-1 promotes atherosclerosis by inhibiting the emigration of macrophages from plaques. *Nature Immunology*, **2012**, 13, 136-43	19.1	231
67	MicroRNAs in lipid metabolism. *Current Opinion in Lipidology*, **2011**, 22, 86-92	4.4	220
66	Mycobacterium tuberculosis induces the miR-33 locus to reprogram autophagy and host lipid metabolism. *Nature Immunology*, **2016**, 17, 677-86	19.1	201
65	Role of inflammation in the pathogenesis of atherosclerosis and therapeutic interventions. *Atherosclerosis*, **2018**, 276, 98-108	3.1	172
64	Netrin-1 promotes adipose tissue macrophage retention and insulin resistance in obesity. *Nature Medicine*, **2014**, 20, 377-84	50.5	163
63	Targeting macrophage necroptosis for therapeutic and diagnostic interventions in atherosclerosis. *Science Advances*, **2016**, 2, e1600224	14.3	128
62	Extracellular Vesicles Secreted by Atherogenic Macrophages Transfer MicroRNA to Inhibit Cell Migration. *Arteriosclerosis, Thrombosis, and Vascular Biology*, **2018**, 38, 49-63	9.4	127
61	Extracellular communication via microRNA: lipid particles have a new message. *Journal of Lipid Research*, **2013**, 54, 1174-81	6.3	120

60	Macrophage Mitochondrial Energy Status Regulates Cholesterol Efflux and Is Enhanced by Anti-miR33 in Atherosclerosis. *Circulation Research*, **2015**, 117, 266-78	15.7	120
59	microRNA-33 Regulates Macrophage Autophagy in Atherosclerosis. *Arteriosclerosis, Thrombosis, and Vascular Biology*, **2017**, 37, 1058-1067	9.4	115
58	The role of microRNAs in cholesterol efflux and hepatic lipid metabolism. *Annual Review of Nutrition*, **2011**, 31, 49-63	9.9	113
57	microRNAs and cholesterol metabolism. *Trends in Endocrinology and Metabolism*, **2010**, 21, 699-706	8.8	112
56	MicroRNAs in the Pathobiology and Therapy of Atherosclerosis. *Canadian Journal of Cardiology*, **2017**, 33, 313-324	3.8	103
55	Extracellular release of the atheroprotective heat shock protein 27 is mediated by estrogen and competitively inhibits acLDL binding to scavenger receptor-A. *Circulation Research*, **2008**, 103, 133-41	15.7	102
54	Neuroimmune guidance cue Semaphorin 3E is expressed in atherosclerotic plaques and regulates macrophage retention. *Arteriosclerosis, Thrombosis, and Vascular Biology*, **2013**, 33, 886-93	9.4	91
53	The walking dead: macrophage inflammation and death in atherosclerosis. *Current Opinion in Lipidology*, **2017**, 28, 91-98	4.4	76
52	Hypoxia induces netrin-1 and Unc5b in atherosclerotic plaques: mechanism for macrophage retention and survival. *Arteriosclerosis, Thrombosis, and Vascular Biology*, **2013**, 33, 1180-8	9.4	72
51	Timing underpins the benefits associated with injectable collagen biomaterial therapy for the treatment of myocardial infarction. *Biomaterials*, **2015**, 39, 182-92	15.6	68
50	Modulation of estrogen signaling by the novel interaction of heat shock protein 27, a biomarker for atherosclerosis, and estrogen receptor beta: mechanistic insight into the vascular effects of estrogens. *Arteriosclerosis, Thrombosis, and Vascular Biology*, **2005**, 25, e10-4	9.4	67
49	Paradoxical Suppression of Atherosclerosis in the Absence of microRNA-146a. *Circulation Research*, **2017**, 121, 354-367	15.7	66
48	MicroRNAs regulating lipid metabolism in atherogenesis. *Thrombosis and Haemostasis*, **2012**, 107, 642-7	7	62
47	Heat shock protein 27 protects against atherogenesis via an estrogen-dependent mechanism: role of selective estrogen receptor beta modulation. *Arteriosclerosis, Thrombosis, and Vascular Biology*, **2009**, 29, 1751-6	9.4	59
46	MicroRNA control of high-density lipoprotein metabolism and function. *Circulation Research*, **2014**, 114, 183-92	15.7	56
45	Delivery of MicroRNAs by Chitosan Nanoparticles to Functionally Alter Macrophage Cholesterol Efflux in Vitro and in Vivo. *ACS Nano*, **2019**, 13, 6491-6505	16.7	54
44	Injectable human recombinant collagen matrices limit adverse remodeling and improve cardiac function after myocardial infarction. *Nature Communications*, **2019**, 10, 4866	17.4	53
43	Therapeutic Inhibition of miR-33 Promotes Fatty Acid Oxidation but Does Not Ameliorate Metabolic Dysfunction in Diet-Induced Obesity. *Arteriosclerosis, Thrombosis, and Vascular Biology*, **2015**, 35, 2536-43	9.4	52

42	miRNA Targeting of Oxysterol-Binding Protein-Like 6 Regulates Cholesterol Trafficking and Efflux. *Arteriosclerosis, Thrombosis, and Vascular Biology*, **2016**, 36, 942-951	9.4	49
41	Serum heat shock protein 27 levels represent a potential therapeutic target for atherosclerosis: observations from a human cohort and treatment of female mice. *Journal of the American College of Cardiology*, **2013**, 62, 1446-54	15.1	48
40	Resolvin D1 promotes the targeting and clearance of necroptotic cells. *Cell Death and Differentiation*, **2020**, 27, 525-539	12.7	48
39	IRF2BP2 Reduces Macrophage Inflammation and Susceptibility to Atherosclerosis. *Circulation Research*, **2015**, 117, 671-83	15.7	46
38	MicroRNAs regulate the immunometabolic response to viral infection in the liver. *Nature Chemical Biology*, **2015**, 11, 988-93	11.7	46
37	Inhibition of endothelial progenitor cell glycogen synthase kinase-3beta results in attenuated neointima formation and enhanced re-endothelialization after arterial injury. *Cardiovascular Research*, **2009**, 83, 16-23	9.9	39
36	MicroRNA regulation of vascular smooth muscle function and phenotype: early career committee contribution. *Arteriosclerosis, Thrombosis, and Vascular Biology*, **2015**, 35, 2-6	9.4	38
35	Cell Death in the Vessel Wall: The Good, the Bad, the Ugly. *Arteriosclerosis, Thrombosis, and Vascular Biology*, **2017**, 37, e75-e81	9.4	34
34	The interaction and cellular localization of HSP27 and ERbeta are modulated by 17beta-estradiol and HSP27 phosphorylation. *Molecular and Cellular Endocrinology*, **2007**, 270, 33-42	4.4	34
33	Chronic over-expression of heat shock protein 27 attenuates atherogenesis and enhances plaque remodeling: a combined histological and mechanical assessment of aortic lesions. *PLoS ONE*, **2013**, 8, e55867	3.7	31
32	Discovery of NM23-H2 as an estrogen receptor beta-associated protein: role in estrogen-induced gene transcription and cell migration. *Journal of Steroid Biochemistry and Molecular Biology*, **2008**, 108, 72-81	5.1	30
31	[18F]-Fluorodeoxyglucose PET/CT imaging as a marker of carotid plaque inflammation: Comparison to immunohistology and relationship to acuity of events. *International Journal of Cardiology*, **2018**, 271, 378-386	3.2	30
30	Heat shock protein 27: clue to understanding estrogen-mediated atheroprotection?. *Trends in Cardiovascular Medicine*, **2010**, 20, 54-8	6.9	29
29	Pre-procedural atorvastatin mobilizes endothelial progenitor cells: clues to the salutary effects of statins on healing of stented human arteries. *PLoS ONE*, **2011**, 6, e16413	3.7	28
28	PAR2 (Protease-Activated Receptor 2) Deficiency Attenuates Atherosclerosis in Mice. *Arteriosclerosis, Thrombosis, and Vascular Biology*, **2018**, 38, 1271-1282	9.4	27
27	Nanomedicine Meets microRNA: Current Advances in RNA-Based Nanotherapies for Atherosclerosis. *Arteriosclerosis, Thrombosis, and Vascular Biology*, **2016**, 36, e73-9	9.4	26
26	Metformin Abrogates Age-Associated Ovarian Fibrosis. *Clinical Cancer Research*, **2020**, 26, 632-642	12.9	23
25	Loss of MLKL (Mixed Lineage Kinase Domain-Like Protein) Decreases Necrotic Core but Increases Macrophage Lipid Accumulation in Atherosclerosis. *Arteriosclerosis, Thrombosis, and Vascular Biology*, **2020**, 40, 1155-1167	9.4	20

24	MicroRNAs in cardiovascular health: from order to disorder. *Endocrinology*, **2013**, 154, 4000-9	4.8	20
23	Expression Associates With Inflammation in Early Atherosclerosis in Humans and Can Be Therapeutically Silenced to Reduce NF-B Activation and Atherogenesis in Mice. *Circulation*, **2021**, 143, 163-177	16.7	20
22	Heat shock protein-27 attenuates foam cell formation and atherogenesis by down-regulating scavenger receptor-A expression via NF-B signaling. *Biochimica Et Biophysica Acta - Molecular and Cell Biology of Lipids*, **2013**, 1831, 1721-8	5	19
21	Anti-GRP78 autoantibodies induce endothelial cell activation and accelerate the development of atherosclerotic lesions. *JCI Insight*, **2018**, 3,	9.9	19
20	Macrophage miRNAs in atherosclerosis. *Biochimica Et Biophysica Acta - Molecular and Cell Biology of Lipids*, **2016**, 1861, 2087-2093	5	18
19	Attenuation of atherogenesis via the anti-inflammatory effects of the selective estrogen receptor beta modulator 8EVE2. *Journal of Cardiovascular Pharmacology*, **2011**, 58, 399-405	3.1	17
18	How Biomaterials Can Influence Various Cell Types in the Repair and Regeneration of the Heart after Myocardial Infarction. *Frontiers in Bioengineering and Biotechnology*, **2016**, 4, 62	5.8	17
17	RIPK1 gene variants associate with obesity in humans and can be therapeutically silenced to reduce obesity in mice. *Nature Metabolism*, **2020**, 2, 1113-1125	14.6	16
16	NM23-H2, an estrogen receptor beta-associated protein, shows diminished expression with progression of atherosclerosis. *American Journal of Physiology - Regulatory Integrative and Comparative Physiology*, **2007**, 292, R743-50	3.2	15
15	Cathepsin G deficiency decreases complexity of atherosclerotic lesions in apolipoprotein E-deficient mice. *American Journal of Physiology - Heart and Circulatory Physiology*, **2013**, 305, H1141-8	5.2	13
14	LDL Receptor Pathway Regulation by miR-224 and miR-520d. *Frontiers in Cardiovascular Medicine*, **2020**, 7, 81	5.4	9
13	The plaque "micro" environment: microRNAs control the risk and the development of atherosclerosis. *Current Atherosclerosis Reports*, **2012**, 14, 413-21	6	9
12	Collagen biomaterial stimulates the production of extracellular vesicles containing microRNA-21 and enhances the proangiogenic function of CD34 cells. *FASEB Journal*, **2019**, 33, 4166-4177	0.9	9
11	Unlocking the door to new therapies in cardiovascular disease: microRNAs hold the key. *Current Cardiology Reports*, **2014**, 16, 539	4.2	8
10	Macrophage Responses to Environmental Stimuli During Homeostasis and Disease. *Endocrine Reviews*, **2021**, 42, 407-435	27.2	4
9	Loss of TIMP4 (Tissue Inhibitor of Metalloproteinase 4) Promotes Atherosclerotic Plaque Deposition in the Abdominal Aorta Despite Suppressed Plasma Cholesterol Levels. *Arteriosclerosis, Thrombosis, and Vascular Biology*, **2021**, 41, 1874-1889	9.4	3
8	Autophagy Is Differentially Regulated in Leukocyte and Nonleukocyte Foam Cells During Atherosclerosis.. *Circulation Research*, **2022**, CIRCRESAHA121320047	15.7	2
7	Metabolic dysfunction branches out. *Science Translational Medicine*, **2016**, 8, 338ec76-338ec76	17.5	1

6	Loss of MLKL Decreases Necrotic Core but Increases Macrophage Lipid Accumulation In Atherosclerosis		1
5	LDL cholesterol hitches a ride. *Science Translational Medicine*, **2016**, 8, 368ec196	17.5	1
4	Macrophage Foam Cell Formation: The Pathways to Cholesterol Engorgement229-254		1
3	Virally programmed extracellular vesicles sensitize cancer cells to oncolytic virus and small molecule therapy.. *Nature Communications*, **2022**, 13, 1898	17.4	0
2	The scent of atherosclerosis.. *Science*, **2022**, 375, 145-146	33.3	
1	Observational Cross-Sectional Study of Inflammatory Markers After Transient Ischemic Attacks, Acute Coronary Syndromes, and Vascular Stroke Events. *CJC Open*, **2021**, 3, 675-679	2	