

# Mark D Hulett

## List of Publications by Year in descending order

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106  
papers

6,777  
citations

66343

42  
h-index

64796

79  
g-index

115  
all docs

115  
docs citations

115  
times ranked

8298  
citing authors

#	ARTICLE	IF	CITATIONS
1	Cloning of mammalian heparanase, an important enzyme in tumor invasion and metastasis. <i>Nature Medicine</i> , 1999, 5, 803-809.	30.7	501
2	Comparative proteomics evaluation of plasma exosome isolation techniques and assessment of the stability of exosomes in normal human blood plasma. <i>Proteomics</i> , 2013, 13, 3354-3364.	2.2	501
3	Molecular Basis of Fc Receptor Function. <i>Advances in Immunology</i> , 1994, 57, 1-127.	2.2	452
4	Histidine-rich glycoprotein: A novel adaptor protein in plasma that modulates the immune, vascular and coagulation systems. <i>Immunology and Cell Biology</i> , 2005, 83, 106-118.	2.3	268
5	A novel mechanism of generating extracellular vesicles during apoptosis via a beads-on-a-string membrane structure. <i>Nature Communications</i> , 2015, 6, 7439.	12.8	267
6	Heparanase: a key enzyme involved in cell invasion. <i>Biochimica Et Biophysica Acta: Reviews on Cancer</i> , 2001, 1471, M99-M108.	7.4	264
7	Immunotherapy of Cytotoxic T Cell-resistant Tumors by T Helper 2 Cells. <i>Journal of Experimental Medicine</i> , 2003, 197, 387-393.	8.5	213
8	Endothelial cell apoptosis and the role of endothelial cell-derived extracellular vesicles in the progression of atherosclerosis. <i>Cellular and Molecular Life Sciences</i> , 2019, 76, 1093-1106.	5.4	199
9	Soluble Heparan Sulfate Fragments Generated by Heparanase Trigger the Release of Pro-Inflammatory Cytokines through TLR-4. <i>PLoS ONE</i> , 2014, 9, e109596.	2.5	187
10	Histidine-rich glycoprotein: the Swiss Army knife of mammalian plasma. <i>Blood</i> , 2011, 117, 2093-2101.	1.4	179
11	Crystal structure of the human leukocyte Fc receptor, Fc gammaRIIa. <i>Nature Structural Biology</i> , 1999, 6, 437-442.	9.7	169
12	Phosphoinositide-mediated oligomerization of a defensin induces cell lysis. <i>ELife</i> , 2014, 3, e01808.	6.0	167
13	Convergent evolution of defensin sequence, structure and function. <i>Cellular and Molecular Life Sciences</i> , 2017, 74, 663-682.	5.4	152
14	Identification of Active-Site Residues of the Pro-Metastatic Endoglycosidase Heparanase. <i>Biochemistry</i> , 2000, 39, 15659-15667.	2.5	150
15	The Defensins Consist of Two Independent, Convergent Protein Superfamilies. <i>Molecular Biology and Evolution</i> , 2016, 33, 2345-2356.	8.9	123
16	The MS4A family: counting past 1, 2 and 3. <i>Immunology and Cell Biology</i> , 2016, 94, 11-23.	2.3	105
17	Moving beyond size and phosphatidylserine exposure: evidence for a diversity of apoptotic cell-derived extracellular vesicles <i>in vitro</i> . <i>Journal of Extracellular Vesicles</i> , 2019, 8, 1608786.	12.2	98
18	Monitoring the progression of cell death and the disassembly of dying cells by flow cytometry. <i>Nature Protocols</i> , 2016, 11, 655-663.	12.0	94

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19	Tumor cell membrane-targeting cationic antimicrobial peptides: novel insights into mechanisms of action and therapeutic prospects. <i>Cellular and Molecular Life Sciences</i> , 2017, 74, 3809-3825.	5.4	94
20	NK cell heparanase controls tumor invasion and immune surveillance. <i>Journal of Clinical Investigation</i> , 2017, 127, 2777-2788.	8.2	85
21	The Tomato Defensin TPP3 Binds Phosphatidylinositol (4,5)-Bisphosphate via a Conserved Dimeric Cationic Grip Conformation To Mediate Cell Lysis. <i>Molecular and Cellular Biology</i> , 2015, 35, 1964-1978.	2.3	84
22	Determining the contents and cell origins of apoptotic bodies by flow cytometry. <i>Scientific Reports</i> , 2017, 7, 14444.	3.3	84
23	Heparanase and the hallmarks of cancer. <i>Journal of Translational Medicine</i> , 2020, 18, 453.	4.4	78
24	Early Growth Response Gene 1 (EGR1) Regulates Heparanase Gene Transcription in Tumor Cells. <i>Journal of Biological Chemistry</i> , 2005, 280, 35136-35147.	3.4	72
25	Regulation of Inducible Heparanase Gene Transcription in Activated T Cells by Early Growth Response 1. <i>Journal of Biological Chemistry</i> , 2003, 278, 50377-50385.	3.4	71
26	Dimerization of Plant Defensin NaD1 Enhances Its Antifungal Activity. <i>Journal of Biological Chemistry</i> , 2012, 287, 19961-19972.	3.4	71
27	Isolation of cell type-specific apoptotic bodies by fluorescence-activated cell sorting. <i>Scientific Reports</i> , 2017, 7, 39846.	3.3	68
28	Multiple Regions of Human Fc $\gamma$ RII (CD32) Contribute to the Binding of IgG. <i>Journal of Biological Chemistry</i> , 1995, 270, 21188-21194.	3.4	64
29	Histidine-rich Glycoprotein Binds to Cell-surface Heparan Sulfate via Its N-terminal Domain following Zn <sup>2+</sup> Chelation. <i>Journal of Biological Chemistry</i> , 2004, 279, 30114-30122.	3.4	58
30	The endoglycosidase heparanase enters the nucleus of T lymphocytes and modulates H3 methylation at actively transcribed genes via the interplay with key chromatin modifying enzymes. <i>Transcription</i> , 2012, 3, 130-145.	3.1	58
31	Chimeric Fc receptors identify immunoglobulin-binding regions in human Fc $\gamma$ RII and Fc $\gamma$ RI. <i>European Journal of Immunology</i> , 1993, 23, 640-645.	2.9	57
32	Bystander B cells rapidly acquire antigen receptors from activated B cells by membrane transfer. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2008, 105, 4259-4264.	7.1	54
33	Defining the morphologic features and products of cell disassembly during apoptosis. <i>Apoptosis: an International Journal on Programmed Cell Death</i> , 2017, 22, 475-477.	4.9	54
34	The plant defensin NaD1 introduces membrane disorder through a specific interaction with the lipid, phosphatidylinositol 4,5 bisphosphate. <i>Biochimica Et Biophysica Acta - Biomembranes</i> , 2016, 1858, 1099-1109.	2.6	52
35	Nicotiana alata Defensin Chimeras Reveal Differences in the Mechanism of Fungal and Tumor Cell Killing and an Enhanced Antifungal Variant. <i>Antimicrobial Agents and Chemotherapy</i> , 2016, 60, 6302-6312.	3.2	51
36	X-ray structure of a carpet-like antimicrobial defensin-phospholipid membrane disruption complex. <i>Nature Communications</i> , 2018, 9, 1962.	12.8	50

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37	The second and third extracellular domains of Fc $\gamma$ 3 RI (CD64) confer the unique high affinity binding of IgG2a. <i>Molecular Immunology</i> , 1998, 35, 989-996.	2.2	49
38	ICAM-1-dependent pathways regulate colonic eosinophilic inflammation. <i>Journal of Leukocyte Biology</i> , 2006, 80, 330-341.	3.3	48
39	The relationship between CCR6 and its binding partners: Does the CCR6-CCL20 axis have to be extended?. <i>Cytokine</i> , 2015, 72, 97-101.	3.2	48
40	Binding of phosphatidic acid by Nsd7 mediates the formation of helical defensin-lipid oligomeric assemblies and membrane permeabilization. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2016, 113, 11202-11207.	7.1	48
41	Cell Surface-expressed Cation-independent Mannose 6-Phosphate Receptor (CD222) Binds Enzymatically Active Heparanase Independently of Mannose 6-Phosphate to Promote Extracellular Matrix Degradation. <i>Journal of Biological Chemistry</i> , 2008, 283, 4165-4176.	3.4	46
42	Salt-Tolerant Antifungal and Antibacterial Activities of the Corn Defensin ZmD32. <i>Frontiers in Microbiology</i> , 2019, 10, 795.	3.5	45
43	Human $\beta$ 2-defensin 3 contains an oncolytic motif that binds PI(4,5)P2 to mediate tumour cell permeabilisation. <i>Oncotarget</i> , 2016, 7, 2054-2069.	1.8	44
44	Plasminogen Is Tethered with High Affinity to the Cell Surface by the Plasma Protein, Histidine-rich Glycoprotein. <i>Journal of Biological Chemistry</i> , 2004, 279, 38267-38276.	3.4	43
45	Expression of the heparan sulfate-degrading enzyme heparanase is induced in infiltrating CD4+ T cells in experimental autoimmune encephalomyelitis and regulated at the level of transcription by early growth response gene. <i>Journal of Leukocyte Biology</i> , 2007, 82, 1289-1300.	3.3	42
46	Histidine-rich glycoprotein is a novel plasma pattern recognition molecule that recruits IgG to facilitate necrotic cell clearance via Fc $\gamma$ 3RI on phagocytes. <i>Blood</i> , 2010, 115, 2473-2482.	1.4	41
47	Neurotoxic amyloidogenic peptides in the proteome of SARS-COV2: potential implications for neurological symptoms in COVID-19. <i>Nature Communications</i> , 2022, 13, .	12.8	41
48	Human $\beta$ 2-defensin 2 kills <i>Candida albicans</i> through phosphatidylinositol 4,5-bisphosphate-mediated membrane permeabilization. <i>Science Advances</i> , 2018, 4, eaat0979.	10.3	40
49	ROCK1 but not LIMK1 or PAK2 is a key regulator of apoptotic membrane blebbing and cell disassembly. <i>Cell Death and Differentiation</i> , 2020, 27, 102-116.	11.2	40
50	Analysis of extracellular vesicles generated from monocytes under conditions of lytic cell death. <i>Scientific Reports</i> , 2019, 9, 7538.	3.3	39
51	Mice deficient in heparanase exhibit impaired dendritic cell migration and reduced airway inflammation. <i>European Journal of Immunology</i> , 2014, 44, 1016-1030.	2.9	38
52	TREML4 receptor regulates inflammation and innate immune cell death during polymicrobial sepsis. <i>Nature Immunology</i> , 2020, 21, 1585-1596.	14.5	36
53	Murine histidine-rich glycoprotein: Cloning, characterization and cellular origin. <i>Immunology and Cell Biology</i> , 2000, 78, 280-287.	2.3	34
54	Phosphoinositides: multipurpose cellular lipids with emerging roles in cell death. <i>Cell Death and Differentiation</i> , 2019, 26, 781-793.	11.2	33

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55	Histidine-rich Glycoprotein Specifically Binds to Necrotic Cells via Its Amino-terminal Domain and Facilitates Necrotic Cell Phagocytosis. <i>Journal of Biological Chemistry</i> , 2005, 280, 35733-35741.	3.4	32
56	Gasdermin E Does Not Limit Apoptotic Cell Disassembly by Promoting Early Onset of Secondary Necrosis in Jurkat T Cells and THP-1 Monocytes. <i>Frontiers in Immunology</i> , 2018, 9, 2842.	4.8	32
57	Fine Structure Analysis of Interaction of Fc $\mu$ RI with IgE. <i>Journal of Biological Chemistry</i> , 1999, 274, 13345-13352.	3.4	29
58	The plant defensin NaD1 induces tumor cell death via a non-apoptotic, membranolytic process. <i>Cell Death Discovery</i> , 2017, 3, 16102.	4.7	29
59	Plexin B2 Is a Regulator of Monocyte Apoptotic Cell Disassembly. <i>Cell Reports</i> , 2019, 29, 1821-1831.e3.	6.4	28
60	Cloning and expression of the recombinant mouse natural killer cell granzymeMet-ase-1. <i>Immunogenetics</i> , 1996, 44, 340-350.	2.4	27
61	Leukocyte Heparanase: A Double-Edged Sword in Tumor Progression. <i>Frontiers in Oncology</i> , 2019, 9, 331.	2.8	25
62	Functional Regulation of the Plasma Protein Histidine-Rich Glycoprotein by Zn <sup>2+</sup> in Settings of Tissue Injury. <i>Biomolecules</i> , 2017, 7, 22.	4.0	23
63	The Heparanase Regulatory Network in Health and Disease. <i>International Journal of Molecular Sciences</i> , 2021, 22, 11096.	4.1	22
64	Histidine-rich glycoprotein functions cooperatively with cell surface heparan sulfate on phagocytes to promote necrotic cell uptake. <i>Journal of Leukocyte Biology</i> , 2010, 88, 559-569.	3.3	21
65	Human mast cell line-1 (HMC-1) cells transfected with Fc $\mu$ RI $\pm$ are sensitive to IgE/antigen-mediated stimulation demonstrating selectivity towards cytokine production. <i>International Immunopharmacology</i> , 2011, 11, 1002-1011.	3.8	20
66	Structural and Functional Insight into Canarypox Virus CNP058 Mediated Regulation of Apoptosis. <i>Viruses</i> , 2017, 9, 305.	3.3	20
67	A 4-cyano-3-methylisoquinoline inhibitor of Plasmodium falciparum growth targets the sodium efflux pump PfATP4. <i>Scientific Reports</i> , 2019, 9, 10292.	3.3	20
68	Luminescent iridium( $\kappa$ ) complexes of N-heterocyclic carbene ligands prepared using the $\kappa$ -click reaction $\kappa$ . <i>Dalton Transactions</i> , 2019, 48, 9998-10010.	3.3	20
69	Monocyte apoptotic bodies are vehicles for influenza A virus propagation. <i>Communications Biology</i> , 2020, 3, 223.	4.4	20
70	Regulation of histidine-rich glycoprotein (HRG) function via plasmin-mediated proteolytic cleavage. <i>Biochemical Journal</i> , 2009, 424, 27-37.	3.7	19
71	Fc $\beta$ receptors: Gene structure and receptor function. <i>Immunologic Research</i> , 1992, 11, 217-225.	2.9	18
72	Structural and functional characterization of the membrane $\kappa$ permeabilizing activity of <i>Nicotiana occidentalis</i> defensin NoD173 and protein engineering to enhance oncolysis. <i>FASEB Journal</i> , 2019, 33, 6470-6482.	0.5	18

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73	New method for purifying histidine-rich glycoprotein from human plasma redefines its functional properties. <i>IUBMB Life</i> , 2013, 65, 550-563.	3.4	16
74	Isolation, Tissue Distribution, and Chromosomal Localization of a Novel Testis-Specific Human Four-Transmembrane Gene Related to CD20 and Fc $\mu$ RI- $\beta$ . <i>Biochemical and Biophysical Research Communications</i> , 2001, 280, 374-379.	2.1	15
75	Perceptions in health and medical research careers: the Australian Society for Medical Research Workforce Survey. <i>Medical Journal of Australia</i> , 2008, 188, 520-524.	1.7	15
76	Defining the role of cytoskeletal components in the formation of apoptopodia and apoptotic bodies during apoptosis. <i>Apoptosis: an International Journal on Programmed Cell Death</i> , 2019, 24, 862-877.	4.9	15
77	Towards novel herbicide modes of action by inhibiting lysine biosynthesis in plants. <i>ELife</i> , 2021, 10, .	6.0	15
78	Domain One of the High Affinity IgE Receptor, Fc $\mu$ RI, Regulates Binding to IgE through Its Interface with Domain Two. <i>Journal of Biological Chemistry</i> , 2000, 275, 9664-9672.	3.4	13
79	Structure of the defensin NsD7 in complex with $\text{PIP}_2$ reveals that defensin-lipid oligomer topologies are dependent on lipid type. <i>FEBS Letters</i> , 2017, 591, 2482-2490.	2.8	13
80	Redirected Cytotoxic Effector Function. <i>Journal of Biological Chemistry</i> , 1996, 271, 21214-21220.	3.4	12
81	Mutagenesis Within Human Fc $\mu$ RI $\beta$ Differentially Affects Human and Murine IgE Binding. <i>Journal of Immunology</i> , 2002, 168, 1787-1795.	0.8	12
82	Access to the Parent Tetrakis(pyridine)gold(III) Trication, Facile Formation of Rare Au(III) Terminal Hydroxides, and Preliminary Studies of Biological Properties. <i>Inorganic Chemistry</i> , 2016, 55, 2830-2839.	4.0	12
83	The lure of the lipids: how defensins exploit membrane phospholipids to induce cytolysis in target cells. <i>Cell Death and Disease</i> , 2017, 8, e2712-e2712.	6.3	12
84	Regulation of mouse Heparanase gene expression in T lymphocytes and tumor cells. <i>Immunology and Cell Biology</i> , 2007, 85, 205-214.	2.3	11
85	Histidine-rich glycoprotein binds heparanase and regulates its enzymatic activity and cell surface interactions. <i>International Journal of Biochemistry and Cell Biology</i> , 2010, 42, 1507-1516.	2.8	11
86	Crystallization and preliminary X-ray crystallographic analysis of the plant defensin NaD1. <i>Acta Crystallographica Section F: Structural Biology Communications</i> , 2012, 68, 85-88.	0.7	11
87	Recombinant expression and purification of the tomato defensin TPP3 and its preliminary X-ray crystallographic analysis. <i>Acta Crystallographica Section F: Structural Biology Communications</i> , 2012, 68, 314-316.	0.7	11
88	Importance of phosphoinositide binding by human $\beta$ -defensin 3 for Akt-dependent cytokine induction. <i>Immunology and Cell Biology</i> , 2018, 96, 54-67.	2.3	11
89	Combating Human Pathogens and Cancer by Targeting Phosphoinositides and Their Metabolism. <i>Trends in Pharmacological Sciences</i> , 2019, 40, 866-882.	8.7	10
90	Heparanase: Cloning, Function and Regulation. <i>Advances in Experimental Medicine and Biology</i> , 2020, 1221, 189-229.	1.6	9

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91	Human Î²-Defensin 2 (HBD-2) Displays Oncolytic Activity but Does Not Affect Tumour Cell Migration. <i>Biomolecules</i> , 2022, 12, 264.	4.0	9
92	Characterization of FcR Ig-Binding Sites and Epitope Mapping. <i>ImmunoMethods</i> , 1994, 4, 17-24.	0.8	8
93	Divalent metal binding by histidine-rich glycoprotein differentially regulates higher order oligomerisation and proteolytic processing. <i>FEBS Letters</i> , 2017, 591, 164-176.	2.8	8
94	Cloning and expression of the recombinant mouse natural killer cell granzyme Met-ase-1. <i>Immunogenetics</i> , 1996, 44, 340-350.	2.4	8
95	Use of the 5â€²-flanking region of the mouse perforin gene to express human FcÎ³ receptor I in cytotoxic T lymphocytes. <i>Journal of Leukocyte Biology</i> , 1994, 55, 514-522.	3.3	7
96	Cloning and characterization of a mouse homologue of the human haematopoietic cell-specific four-transmembrane gene HTm4. <i>Immunology and Cell Biology</i> , 2001, 79, 345-349.	2.3	7
97	Defensin-lipid interactions in membrane targeting: mechanisms of action and opportunities for the development of antimicrobial and anticancer therapeutics. <i>Biochemical Society Transactions</i> , 2022, 50, 423-437.	3.4	6
98	Editorial: Advances in the Immunology of Host Defense Peptide: Mechanisms and Applications of Antimicrobial Functions and Beyond. <i>Frontiers in Immunology</i> , 2021, 12, 637641.	4.8	4
99	Heparanase is a regulator of natural killer cell activation and cytotoxicity. <i>Journal of Leukocyte Biology</i> , 2021, , .	3.3	4
100	Cell surface expression of a peptide encoded by the unrearranged TCR-VÎ²8.2 gene. <i>Molecular Immunology</i> , 2006, 43, 1408-1417.	2.2	3
101	The Structural Basis of the Interaction of IgE and FcÎ¼RI. <i>Molecular Biology Intelligence Unit</i> , 1997, , 7-32.	0.2	3
102	Cytotoxic properties of rhenium( <i>tricarboxyl</i> ) tricarbonyl complexes of N-heterocyclic carbene ligands. <i>Dalton Transactions</i> , 2022, 51, 7630-7643.	3.3	3
103	Bystander B cells rapidly acquire antigen receptors from activated B cells by membrane transfer: a novel mechanism for enhancing specific antigen presentation. <i>Nature Precedings</i> , 2007, , .	0.1	1
104	Immunoglobulin Fc receptors. <i>Biomembranes: A Multi-Volume Treatise</i> , 1996, , 269-314.	0.1	0
105	Injury-inducible yin yang-1 inhibits vascular smooth muscle cell growth and intimal thickening by repressing P21WAF1/CIP1 transcription and perturbing cyclin D1-CDK4-P21WAF1/CIP1 assembly. <i>Vascular Pharmacology</i> , 2006, 45, e46-e47.	2.1	0
106	Deubiquitinase enzyme STAMBP plays a broad role in both Toll-like and Nod-like receptor mediated inflammation. <i>European Journal of Inflammation</i> , 2020, 18, 205873922096084.	0.5	0