Jonathan D Powell

List of Publications by Citations

117 papers	10,584 citations	50 h-index	102 g-index
124 ext. papers	12,863 ext. citations	12.6 avg, IF	6.54 L-index

#	Paper	IF	Citations
117	The mTOR kinase differentially regulates effector and regulatory T cell lineage commitment. *Immunity*, **2009**, 30, 832-44	32.3	878
116	Role of LAG-3 in regulatory T cells. *Immunity*, **2004**, 21, 503-13	32.3	842
115	The kinase mTOR regulates the differentiation of helper T cells through the selective activation of signaling by mTORC1 and mTORC2. *Nature Immunology*, **2011**, 12, 295-303	19.1	792
114	Regulation of immune responses by mTOR. *Annual Review of Immunology*, **2012**, 30, 39-68	34.7	551
113	The mammalian target of rapamycin: linking T cell differentiation, function, and metabolism. *Immunity*, **2010**, 33, 301-11	32.3	376
112	A2A receptor signaling promotes peripheral tolerance by inducing T-cell anergy and the generation of adaptive regulatory T cells. *Blood*, **2008**, 111, 251-9	2.2	360
111	Egr-2 and Egr-3 are negative regulators of T cell activation. *Nature Immunology*, **2005**, 6, 472-80	19.1	327
110	Developing a pro-regenerative biomaterial scaffold microenvironment requires T helper 2 cells. *Science*, **2016**, 352, 366-70	33.3	327
109	Allogeneic hematopoietic stem-cell transplantation for sickle cell disease. *New England Journal of Medicine*, **2009**, 361, 2309-17	59.2	318
108	Glutamine blockade induces divergent metabolic programs to overcome tumor immune evasion. *Science*, **2019**, 366, 1013-1021	33.3	297
107	Integrating canonical and metabolic signalling programmes in the regulation of T cell responses. *Nature Reviews Immunology*, **2014**, 14, 435-46	36.5	273
106	mTOR, metabolism, and the regulation of T-cell differentiation and function. *Immunological Reviews*, **2012**, 249, 43-58	11.3	268
105	mTORC1 and mTORC2 selectively regulate CD8+ T cell differentiation. *Journal of Clinical Investigation*, **2015**, 125, 2090-108	15.9	233
104	A role for mammalian target of rapamycin in regulating T cell activation versus anergy. *Journal of Immunology*, **2007**, 178, 2163-70	5.3	210
103	Anergic T cells are metabolically anergic. *Journal of Immunology*, **2009**, 183, 6095-101	5.3	204
102	Estrogen-related receptor-□s a metabolic regulator of effector T-cell activation and differentiation. *Proceedings of the National Academy of Sciences of the United States of America*, **2011**, 108, 18348-53	11.5	171
101	Molecular regulation of interleukin-2 expression by CD28 co-stimulation and anergy. *Immunological Reviews*, **1998**, 165, 287-300	11.3	160

100	The receptor SIGIRR suppresses Th17 cell proliferation via inhibition of the interleukin-1 receptor pathway and mTOR kinase activation. *Immunity*, **2010**, 32, 54-66	32.3	156
99	A2aR antagonists: Next generation checkpoint blockade for cancer immunotherapy. *Computational and Structural Biotechnology Journal*, **2015**, 13, 265-72	6.8	146
98	Metabolism of immune cells in cancer. *Nature Reviews Cancer*, **2020**, 20, 516-531	31.3	144
97	Asymmetric inheritance of mTORC1 kinase activity during division dictates CD8(+) T cell differentiation. *Nature Immunology*, **2016**, 17, 704-11	19.1	140
96	The AGC kinase SGK1 regulates TH1 and TH2 differentiation downstream of the mTORC2 complex. *Nature Immunology*, **2014**, 15, 457-64	19.1	130
95	Single-agent GVHD prophylaxis with posttransplantation cyclophosphamide after myeloablative, HLA-matched BMT for AML, ALL, and MDS. *Blood*, **2014**, 124, 3817-27	2.2	128
94	Preventing Allograft Rejection by Targeting Immune Metabolism. *Cell Reports*, **2015**, 13, 760-770	10.6	122
93	A central role for mTOR kinase in homeostatic proliferation induced CD8+ T cell memory and tumor immunity. *Immunity*, **2011**, 34, 541-53	32.3	122
92	Regulation of T cells by mTOR: the known knowns and the known unknowns. *Trends in Immunology*, **2015**, 36, 13-20	14.4	118
91	Enhancement of tumor immunotherapy by deletion of the A2A adenosine receptor. *Cancer Immunology, Immunotherapy*, **2012**, 61, 917-26	7.4	115
90	The PTEN pathway in Tregs is a critical driver of the suppressive tumor microenvironment. *Science Advances*, **2015**, 1, e1500845	14.3	113
89	Acid Suspends the Circadian Clock in Hypoxia through Inhibition of mTOR. *Cell*, **2018**, 174, 72-87.e32	56.2	104
88	The EGR2 targets LAG-3 and 4-1BB describe and regulate dysfunctional antigen-specific CD8+ T cells in the tumor microenvironment. *Journal of Experimental Medicine*, **2017**, 214, 381-400	16.6	101
87	Targeting metabolism to regulate immune responses in autoimmunity and cancer. *Nature Reviews Drug Discovery*, **2019**, 18, 669-688	64.1	95
86	Threat matrix: low-molecular-weight hyaluronan (HA) as a danger signal. *Immunologic Research*, **2005**, 31, 207-18	4.3	94
85	mTOR: taking cues from the immune microenvironment. *Immunology*, **2009**, 127, 459-65	7.8	86
84	Adoptive transfer of activated marrow-infiltrating lymphocytes induces measurable antitumor immunity in the bone marrow in multiple myeloma. *Science Translational Medicine*, **2015**, 7, 288ra78	17.5	85
83	Opposing regulation of T cell function by Egr-1/NAB2 and Egr-2/Egr-3. *European Journal of Immunology*, **2008**, 38, 528-36	6.1	81

82	Targeting glutamine metabolism enhances tumor-specific immunity by modulating suppressive myeloid cells. *Journal of Clinical Investigation*, **2020**, 130, 3865-3884	15.9	79
81	Inhibition of the adenosine A2a receptor modulates expression of T cell coinhibitory receptors and improves effector function for enhanced checkpoint blockade and ACT in murine cancer models. *Cancer Immunology, Immunotherapy*, **2018**, 67, 1271-1284	7.4	76
80	Identification of DNA methyltransferase 3a as a T cell receptor-induced regulator of Th1 and Th2 differentiation. *Journal of Immunology*, **2009**, 183, 2267-76	5.3	72
79	De novo DNA methylation by DNA methyltransferase 3a controls early effector CD8+ T-cell fate decisions following activation. *Proceedings of the National Academy of Sciences of the United States of America*, **2016**, 113, 10631-6	11.5	71
78	Targeting Metabolism as a Novel Therapeutic Approach to Autoimmunity, Inflammation, and Transplantation. *Journal of Immunology*, **2017**, 198, 999-1005	5.3	63
77	Natural and inducible TH17 cells are regulated differently by Akt and mTOR pathways. *Nature Immunology*, **2013**, 14, 611-8	19.1	63
76	mTOR Complex 1 Signaling Regulates the Generation and Function of Central and Effector Foxp3 Regulatory T Cells. *Journal of Immunology*, **2018**, 201, 481-492	5.3	62
75	PKG1-modified TSC2 regulates mTORC1 activity to counter adverse cardiac stress. *Nature*, **2019**, 566, 264-269	50.4	60
74	Targeting T cell metabolism to regulate T cell activation, differentiation and function in disease. *Current Opinion in Immunology*, **2017**, 46, 82-88	7.8	59
73	Leucine Metabolism in T Cell Activation: mTOR Signaling and Beyond. *Advances in Nutrition*, **2016**, 7, 798S-805S	7.8	59
72	Cyclophosphamide improves engraftment in patients with SCD and severe organ damage who undergo haploidentical PBSCT. *Blood Advances*, **2017**, 1, 652-661	7.8	55
71	Cytosolic branched chain aminotransferase (BCATc) regulates mTORC1 signaling and glycolytic metabolism in CD4+ T cells. *Journal of Biological Chemistry*, **2014**, 289, 18793-804	5.4	54
70	Discovery of 6-Diazo-5-oxo-l-norleucine (DON) Prodrugs with Enhanced CSF Delivery in Monkeys: A Potential Treatment for Glioblastoma. *Journal of Medicinal Chemistry*, **2016**, 59, 8621-33	8.3	53
69	Targeting glutamine metabolism rescues mice from late-stage cerebral malaria. *Proceedings of the National Academy of Sciences of the United States of America*, **2015**, 112, 13075-80	11.5	52
68	Mammalian target of rapamycin integrates diverse inputs to guide the outcome of antigen recognition in T cells. *Journal of Immunology*, **2012**, 188, 4721-9	5.3	51
67	Feeding an army: The metabolism of T cells in activation, anergy, and exhaustion. *Molecular Immunology*, **2015**, 68, 492-6	4.3	50
66	The adenosine a2a receptor inhibits matrix-induced inflammation in a novel fashion. *American Journal of Respiratory Cell and Molecular Biology*, **2009**, 40, 251-9	5.7	44
65	Hyaluronan fragments promote inflammation by down-regulating the anti-inflammatory A2a receptor. *American Journal of Respiratory Cell and Molecular Biology*, **2011**, 45, 675-83	5.7	42

64	The induction and maintenance of T cell anergy. *Clinical Immunology*, **2006**, 120, 239-46	9	41
63	The novel cyclophilin binding compound, sanglifehrin A, disassociates G1 cell cycle arrest from tolerance induction. *Journal of Immunology*, **2004**, 172, 4797-803	5.3	41
62	Metabolic programs define dysfunctional immune responses in severe COVID-19 patients. *Cell Reports*, **2021**, 34, 108863	10.6	40
61	Mammalian target of rapamycin complex 2 regulates invariant NKT cell development and function independent of promyelocytic leukemia zinc-finger. *Journal of Immunology*, **2015**, 194, 223-30	5.3	39
60	NF-kappa B activation mediates the cross-talk between extracellular matrix and interferon-gamma (IFN-gamma) leading to enhanced monokine induced by IFN-gamma (MIG) expression in macrophages. *Journal of Biological Chemistry*, **2002**, 277, 43757-62	5.4	36
59	mTORC2 Signaling Selectively Regulates the Generation and Function of Tissue-Resident Peritoneal Macrophages. *Cell Reports*, **2017**, 20, 2439-2454	10.6	34
58	Cutting Edge: TCR-induced NAB2 enhances T cell function by coactivating IL-2 transcription. *Journal of Immunology*, **2006**, 177, 8301-5	5.3	33
57	mTORC1 Promotes T-bet Phosphorylation To Regulate Th1 Differentiation. *Journal of Immunology*, **2017**, 198, 3939-3948	5.3	28
56	Low-dose radiation plus rapamycin promotes long-term bone marrow chimerism. *Transplantation*, **2005**, 80, 1541-5	1.8	28
55	Enhanced interaction between Hsp90 and raptor regulates mTOR signaling upon T cell activation. *Molecular Immunology*, **2009**, 46, 2694-8	4.3	27
54	Something in the air: hyperoxic conditioning of the tumor microenvironment for enhanced immunotherapy. *Cancer Cell*, **2015**, 27, 435-6	24.3	26
53	Rapamycin inhibits human laryngotracheal stenosis-derived fibroblast proliferation, metabolism, and function in vitro. *Otolaryngology - Head and Neck Surgery*, **2015**, 152, 881-8	5.5	26
52	Cellular size as a means of tracking mTOR activity and cell fate of CD4+ T cells upon antigen recognition. *PLoS ONE*, **2015**, 10, e0121710	3.7	25
51	Adenosine and anergy. *Autoimmunity*, **2007**, 40, 425-32	3	25
50	Dysregulated Macrophages Are Present in Bleomycin-Induced Murine Laryngotracheal Stenosis. *Otolaryngology - Head and Neck Surgery*, **2015**, 153, 244-50	5.5	21
49	Immune dysregulation as a driver of idiopathic pulmonary fibrosis. *Journal of Clinical Investigation*, **2021**, 131,	15.9	21
48	Macrophage A2A adenosinergic receptor modulates oxygen-induced augmentation of murine lung injury. *American Journal of Respiratory Cell and Molecular Biology*, **2013**, 48, 635-46	5.7	20
47	A modified model of T-cell differentiation based on mTOR activity and metabolism. *Cold Spring Harbor Symposia on Quantitative Biology*, **2013**, 78, 125-30	3.9	20

46	Functional characterization of CD4+ T cell receptors crossreactive for SARS-CoV-2 and endemic coronaviruses. *Journal of Clinical Investigation*, **2021**, 131,	15.9	19
45	Dissecting the mechanism of T-cell anergy with immunophilin ligands. *Current Opinion in Investigational Drugs*, **2006**, 7, 1002-7		19
44	Insight into the role of mTOR and metabolism in T cells reveals new potential approaches to preventing graft rejection. *Current Opinion in Organ Transplantation*, **2014**, 19, 363-71	2.5	18
43	Non-parametric, hypothesis-based analysis of microarrays for comparison of several phenotypes. *Bioinformatics*, **2004**, 20, 364-73	7.2	18
42	Distinct requirements for C-C chemokine and IL-2 production by naive, previously activated, and anergic T cells. *Journal of Immunology*, **2000**, 164, 3996-4002	5.3	18
41	Sugar, fat, and protein: new insights into what T cells crave. *Current Opinion in Immunology*, **2015**, 33, 49-54	7.8	17
40	Sensing the immune microenvironment to coordinate T cell metabolism, differentiation & function. *Seminars in Immunology*, **2012**, 24, 414-20	10.7	15
39	Vaccinia vaccine-based immunotherapy arrests and reverses established pulmonary fibrosis. *JCI Insight*, **2016**, 1, e83116	9.9	14
38	An engineered IL-2 partial agonist promotes CD8 T cell stemness. *Nature*, **2021**, 597, 544-548	50.4	14
37	Murine Full-thickness Skin Transplantation. *Journal of Visualized Experiments*, **2017**,	1.6	13
36	Metabolic programs define dysfunctional immune responses in severe COVID-19 patients **2020**,		13
35	A phase II study of temsirolimus and liposomal doxorubicin for patients with recurrent and refractory bone and soft tissue sarcomas. *Clinical Sarcoma Research*, **2018**, 8, 21	2.5	13
34	Identification of the molecular mechanism by which TLR ligation and IFN-gamma synergize to induce MIG. *Clinical and Developmental Immunology*, **2004**, 11, 77-85		12
33	Regulation of CD4+ and CD8+ effector responses by Sprouty-1. *PLoS ONE*, **2012**, 7, e49801	3.7	12
32	Inhibition of the Adenosine Pathway to Potentiate Cancer Immunotherapy: Potential for Combinatorial Approaches. *Annual Review of Medicine*, **2021**, 72, 331-348	17.4	12
31	MRI demonstrates glutamine antagonist-mediated reversal of cerebral malaria pathology in mice. *Proceedings of the National Academy of Sciences of the United States of America*, **2018**, 115, E12024-E12033	11.5	12
30	Sulforaphane exhibits antiviral activity against pandemic SARS-CoV-2 and seasonal HCoV-OC43 coronaviruses in vitro and in mice.. *Communications Biology*, **2022**, 5, 242	6.7	7
29	A phase II randomized trial of RAdium-223 dichloride and SABR Versus SABR for oligomEtastatic prostate caNcerS (RAVENS). *BMC Cancer*, **2020**, 20, 492	4.8	6

28	Egr3 induces a Th17 response by promoting the development of □T cells. *PLoS ONE*, **2014**, 9, e87265	3.7	6
27	Hunger Pains: Stimulating the Appetite of the Immune System for Cancer. *Cancer Cell*, **2016**, 30, 13-15	24.3	6
26	Inhibition of glutamine metabolism accelerates resolution of acute lung injury. *Physiological Reports*, **2019**, 7, e14019	2.6	5
25	Fueling memories. *Immunity*, **2012**, 36, 3-5	32.3	5
24	Genetic and biochemical regulation of CD4 T cell effector differentiation: insights from examination of T cell clonal anergy. *Immunologic Research*, **2010**, 47, 162-71	4.3	5
23	Sulforaphane exhibits in vitro and in vivo antiviral activity against pandemic SARS-CoV-2 and seasonal HCoV-OC43 coronaviruses **2021**,		5
22	Manipulation of Metabolic Pathways and Its Consequences for Anti-Tumor Immunity: A Clinical Perspective. *International Journal of Molecular Sciences*, **2020**, 21,	6.3	4
21	Signatures of GVHD and Relapse after Post-Transplant Cyclophosphamide Revealed by Immune Profiling and Machine Learning. *Blood*, **2021**,	2.2	4
20	Fueling the Revolution: Targeting Metabolism to Enhance Immunotherapy. *Cancer Immunology Research*, **2021**, 9, 255-260	12.5	4
19	Warburg meets epigenetics. *Science*, **2016**, 354, 419-420	33.3	3
18	An exploratory study of metformin with or without rapamycin as maintenance therapy after induction chemotherapy in patients with metastatic pancreatic adenocarcinoma. *Oncotarget*, **2020**, 11, 1929-1941	3.3	3
17	Recombinant BCG overexpressing a STING agonist elicits trained immunity and improved antitumor efficacy in non-muscle invasive bladder cancer		3
16	Rethinking the adenosine-AR checkpoint: implications for enhancing anti-tumor immunotherapy. *Current Opinion in Pharmacology*, **2020**, 53, 77-83	5.1	2
15	mTORC1 Signaling Regulates Proinflammatory Macrophage Function and Metabolism. *Journal of Immunology*, **2021**, 207, 913-922	5.3	2
14	Deletion of mTORC1 Activity in CD4+ T Cells Is Associated with Lung Fibrosis and Increased □T Cells. *PLoS ONE*, **2016**, 11, e0163288	3.7	2
13	Peeking under the Hood of Naive T Cells. *Cell Metabolism*, **2018**, 28, 801-802	24.6	2
12	An Fc-Small Molecule Conjugate for Targeted Inhibition of the Adenosine 2A Receptor. *ChemBioChem*, **2016**, 17, 1951-1960	3.8	1
11	A phase II study of temsirolimus and liposomal doxorubicin for patients with recurrent and refractory bone and soft tissue sarcomas.. *Journal of Clinical Oncology*, **2015**, 33, 10560-10560	2.2	1

10	Targeting Metabolism as a Platform for Inducing Allograft Tolerance in the Absence of Long-Term Immunosuppression. *Frontiers in Immunology*, **2020**, 11, 572	8.4	0
9	Bringing IL-2 down to earth. *Blood*, **2007**, 109, 2671-2672	2.2	
8	A Novel Allogeneic Transplant Conditioning Regimen Designed for Tolerance Induction in Patients with Severe Sickle Cell Disease.. *Blood*, **2005**, 106, 5429-5429	2.2	
7	A Novel Allogeneic Transplant Conditioning Regimen Designed for Tolerance Induction in Patients with Severe Sickle Cell Disease.. *Blood*, **2006**, 108, 2994-2994	2.2	
6	A phase II randomized trial of RAdium-223 dichloride and SABR versus SABR for oligomEtastatic prostate caNcerS (RAVENS).. *Journal of Clinical Oncology*, **2020**, 38, TPS5586-TPS5586	2.2	
5	Leucine metabolism as a novel approach to improve T cell performance in managing cancer. *FASEB Journal*, **2011**, 25, 915.2	0.9	
4	Phase I/II Study of Marrow Infiltrating Lymphocytes (MILs) Generates Measurable Myeloma-Specific Immunity in the Autologous Stem Cell Transplant (SCT) Setting. *Blood*, **2011**, 118, 997-997	2.2	
3	The cytosolic branched-chain aminotransferase (BCATc) regulates T cell activation via mTOR signaling pathway. *FASEB Journal*, **2012**, 26, 127.6	0.9	
2	Akt and mTOR Pathways Differentially Regulate the Development of Natural and Inducible IL-17-Producing CD4+ T Cells. *Blood*, **2012**, 120, 838-838	2.2	
1	Cellular Metabolism Controls Lymphocyte Activation and Differentiation **2016**, 38-43		