Craig H Mermel

List of Publications by Year in Descending Order

56 papers	34,234 citations	40 h-index	60 g-index
60 ext. papers	40,994 ext. citations	19.6 avg, IF	7.91 L-index

#	Paper	IF	Citations
56	Artificial intelligence for diagnosis and Gleason grading of prostate cancer: the PANDA challenge.. *Nature Medicine*, **2022**,	50.5	14
55	Current and future applications of artificial intelligence in pathology: a clinical perspective. *Journal of Clinical Pathology*, **2021**, 74, 409-414	3.9	13
54	Interpretable survival prediction for colorectal cancer using deep learning. *Npj Digital Medicine*, **2021**, 4, 71	15.7	20
53	Predicting prostate cancer specific-mortality with artificial intelligence-based Gleason grading. *Communications Medicine*, **2021**, 1,		8
52	Determining breast cancer biomarker status and associated morphological features using deep learning. *Communications Medicine*, **2021**, 1,		7
51	Closing the translation gap: AI applications in digital pathology. *Biochimica Et Biophysica Acta: Reviews on Cancer*, **2021**, 1875, 188452	11.2	5
50	Comparative analysis of machine learning approaches to classify tumor mutation burden in lung adenocarcinoma using histopathology images. *Scientific Reports*, **2021**, 11, 16605	4.9	1
49	Evaluation of artificial intelligence on a reference standard based on subjective interpretation. *The Lancet Digital Health*, **2021**, 3, e693-e695	14.4	5
48	Deep learning-based survival prediction for multiple cancer types using histopathology images. *PLoS ONE*, **2020**, 15, e0233678	3.7	52
47	Artificial intelligence in digital breast pathology: Techniques and applications. *Breast*, **2020**, 49, 267-273	3.6	41
46	Evaluation of the Use of Combined Artificial Intelligence and Pathologist Assessment to Review and Grade Prostate Biopsies. *JAMA Network Open*, **2020**, 3, e2023267	10.4	16
45	Development and Validation of a Deep Learning Algorithm for Gleason Grading of Prostate Cancer From Biopsy Specimens. *JAMA Oncology*, **2020**, 6, 1372-1380	13.4	44
44	Reply: WThe importance of study design in the application of artificial intelligence methods in medicineW*Npj Digital Medicine*, **2019**, 2, 100	15.7	2
43	Similar image search for histopathology: SMILY. *Npj Digital Medicine*, **2019**, 2, 56	15.7	39
42	Development and validation of a deep learning algorithm for improving Gleason scoring of prostate cancer. *Npj Digital Medicine*, **2019**, 2, 48	15.7	144
41	An augmented reality microscope with real-time artificial intelligence integration for cancer diagnosis. *Nature Medicine*, **2019**, 25, 1453-1457	50.5	95
40	Whole-Slide Image Focus Quality: Automatic Assessment and Impact on AI Cancer Detection. *Journal of Pathology Informatics*, **2019**, 10, 39	4.4	26

39	Clinical Acquired Resistance to RAF Inhibitor Combinations in BRAF-Mutant Colorectal Cancer through MAPK Pathway Alterations. *Cancer Discovery*, **2015**, 5, 358-67	24.4	211
38	Identification of and Molecular Basis for SIRT6 Loss-of-Function Point Mutations in Cancer. *Cell Reports*, **2015**, 13, 479-488	10.6	49
37	RB loss in resistant EGFR mutant lung adenocarcinomas that transform to small-cell lung cancer. *Nature Communications*, **2015**, 6, 6377	17.4	358
36	Integrated genomic analysis illustrates the central role of JAK-STAT pathway activation in myeloproliferative neoplasm pathogenesis. *Blood*, **2014**, 123, e123-33	2.2	264
35	Discovery and saturation analysis of cancer genes across 21 tumour types. *Nature*, **2014**, 505, 495-501	50.4	1990
34	Age-related clonal hematopoiesis associated with adverse outcomes. *New England Journal of Medicine*, **2014**, 371, 2488-98	59.2	2314
33	The 2013 symposium on pathology data integration and clinical decision support and the current state of field. *Journal of Pathology Informatics*, **2014**, 5, 2	4.4	13
32	Clonal Hematopoiesis with Somatic Mutations Is a Common, Age-Related Condition Associated with Adverse Outcomes. *Blood*, **2014**, 124, 840-840	2.2	0
31	Pan-cancer patterns of somatic copy number alteration. *Nature Genetics*, **2013**, 45, 1134-40	36.3	1198
30	Mutational heterogeneity in cancer and the search for new cancer-associated genes. *Nature*, **2013**, 499, 214-218	50.4	3616
29	Systematic interrogation of 3q26 identifies TLOC1 and SKIL as cancer drivers. *Cancer Discovery*, **2013**, 3, 1044-57	24.4	59
28	Prognostically relevant gene signatures of high-grade serous ovarian carcinoma. *Journal of Clinical Investigation*, **2013**, 123, 517-25	15.9	371
27	Integrative analysis reveals an outcome-associated and targetable pattern of p53 and cell cycle deregulation in diffuse large B cell lymphoma. *Cancer Cell*, **2012**, 22, 359-72	24.3	148
26	Recurrent hemizygous deletions in cancers may optimize proliferative potential. *Science*, **2012**, 337, 104-9	33.3	148
25	Detection of preanalytic laboratory testing errors using a statistically guided protocol. *American Journal of Clinical Pathology*, **2012**, 138, 406-13	1.9	19
24	. *IEEE Signal Processing Magazine*, **2012**, 29, 89-97	9.4	1
23	A Structural Basis for p53-Deficiency, Deregulated Cell Cycle and Unfavorable Outcome in Diffuse Large B-Cell Lymphoma. *Blood*, **2012**, 120, 1534-1534	2.2	
22	Integrated genomic analyses of ovarian carcinoma. *Nature*, **2011**, 474, 609-15	50.4	5210

21	GISTIC2.0 facilitates sensitive and confident localization of the targets of focal somatic copy-number alteration in human cancers. *Genome Biology*, **2011**, 12, R41	18.3	1614
20	The histone methyltransferase SETDB1 is recurrently amplified in melanoma and accelerates its onset. *Nature*, **2011**, 471, 513-7	50.4	405
19	Systematic investigation of genetic vulnerabilities across cancer cell lines reveals lineage-specific dependencies in ovarian cancer. *Proceedings of the National Academy of Sciences of the United States of America*, **2011**, 108, 12372-7	11.5	321
18	Inhibitor-sensitive FGFR1 amplification in human non-small cell lung cancer. *PLoS ONE*, **2011**, 6, e20351	3.7	298
17	The landscape of somatic copy-number alteration across human cancers. *Nature*, **2010**, 463, 899-905	50.4	2590
16	Subtype-specific genomic alterations define new targets for soft-tissue sarcoma therapy. *Nature Genetics*, **2010**, 42, 715-21	36.3	521
15	ERG rearrangement is specific to prostate cancer and does not occur in any other common tumor. *Modern Pathology*, **2010**, 23, 1061-7	9.8	97
14	Integrated genome-wide DNA copy number and expression analysis identifies distinct mechanisms of primary chemoresistance in ovarian carcinomas. *Clinical Cancer Research*, **2009**, 15, 1417-27	12.9	217
13	Amplification of chromosomal segment 4q12 in non-small cell lung cancer. *Cancer Biology and Therapy*, **2009**, 8, 2042-50	4.6	65
12	PTEN loss contributes to erlotinib resistance in EGFR-mutant lung cancer by activation of Akt and EGFR. *Cancer Research*, **2009**, 69, 3256-61	10.1	411
11	Systematic RNA interference reveals that oncogenic KRAS-driven cancers require TBK1. *Nature*, **2009**, 462, 108-12	50.4	1614
10	Lin28 promotes transformation and is associated with advanced human malignancies. *Nature Genetics*, **2009**, 41, 843-8	36.3	641
9	SOX2 is an amplified lineage-survival oncogene in lung and esophageal squamous cell carcinomas. *Nature Genetics*, **2009**, 41, 1238-42	36.3	733
8	Predicting drug susceptibility of non-small cell lung cancers based on genetic lesions. *Journal of Clinical Investigation*, **2009**, 119, 1727-40	15.9	205
7	microRNA expression during trophectoderm specification. *PLoS ONE*, **2009**, 4, e6143	3.7	60
6	CDK8 is a colorectal cancer oncogene that regulates beta-catenin activity. *Nature*, **2008**, 455, 547-51	50.4	519
5	Comprehensive genomic characterization defines human glioblastoma genes and core pathways. *Nature*, **2008**, 455, 1061-8	50.4	5669
4	EML4-ALK fusion gene and efficacy of an ALK kinase inhibitor in lung cancer. *Clinical Cancer Research*, **2008**, 14, 4275-83	12.9	774

3	Highly parallel identification of essential genes in cancer cells. *Proceedings of the National Academy of Sciences of the United States of America*, **2008**, 105, 20380-5	11.5	424
2	Src family kinases are important negative regulators of G-CSF-dependent granulopoiesis. *Blood*, **2006**, 108, 2562-8	2.2	44
1	ErbB-3 mediates phosphoinositide 3-kinase activity in gefitinib-sensitive non-small cell lung cancer cell lines. *Proceedings of the National Academy of Sciences of the United States of America*, **2005**, 102, 3788-93	11.5	437