Trevor A Graham

List of Publications by Year
in descending order

120 papers	8,741 citations	37907 47 h-index	34529 92 g-index
218 all docs	218 docs citations	218 times ranked	16005 citing authors

#	Article	IF	Citations
1	Cancer Prevalence across Vertebrates. Cancer Discovery, 2025, 15, 227-244.	26.4	5
2	Stratified Medicine Pediatrics: Cell-Free DNA and Serial Tumor Sequencing Identifies Subtype-Specific Cancer Evolution and Epigenetic States. Cancer Discovery, 2025, 15, 717-732.	26.4	0
3	Phenotypic noise and plasticity in cancer evolution. Trends in Cell Biology, 2024, 34, 451-464.	15.3	6
4	FUME-TCRseq Enables Sensitive and Accurate Sequencing of the T-cell Receptor from Limited Input of Degraded RNA. Cancer Research, 2024, 84, 1560-1569.	0.6	2
5	Homopolymer switches mediate adaptive mutability in mismatch repair-deficient colorectal cancer. Nature Genetics, 2024, 56, 1420-1433.	16.3	1
6	The genomic landscape of 2,023 colorectal cancers. Nature, 2024, 633, 127-136.	40.1	14
7	Immune selection determines tumor antigenicity and influences response to checkpoint inhibitors. Nature Genetics, 2023, 55, 451-460.	16.3	25
8	First passage time analysis of spatial mutation patterns reveals sub-clonal evolutionary dynamics in colorectal cancer. PLoS Computational Biology, 2023, 19, e1010952.	3.3	1
9	Bridging clinic and wildlife care with AI-powered pan-species computational pathology. Nature Communications, 2023, 14, .	14.1	2
10	Virtual alignment of pathology image series for multi-gigapixel whole slide images. Nature Communications, 2023, 14, .	14.1	25
11	Contribution of pks+ E. coli mutations to colorectal carcinogenesis. Nature Communications, 2023, 14, .	14.1	23
12	Multicentre derivation and validation of a colitis-associated colorectal cancer risk prediction web tool. Gut, 2022, 71, 705-715.	14.8	14
13	Fluctuating methylation clocks for cell lineage tracing at high temporal resolution in human tissues. Nature Biotechnology, 2022, 40, 720-730.	18.1	26
14	Immunosuppressive niche engineering at the onset of human colorectal cancer. Nature Communications, 2022, 13, .	14.1	21
15	Lineage tracing in human tissues. Journal of Pathology, 2022, 257, 501-512.	5.2	8
16	The mutational signatures of formalin fixation on the human genome. Nature Communications, 2022, 13, .	14.1	34
17	Phenotypic plasticity and genetic control in colorectal cancer evolution. Nature, 2022, 611, 744-753.	40.1	74
18	The co-evolution of the genome and epigenome in colorectal cancer. Nature, 2022, 611, 733-743.	40.1	54

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19	The role of single-cell sequencing in studying tumour evolution. Faculty Reviews, 2021, 10, .	4.5	1
20	Predicting Colorectal Cancer Occurrence in IBD. Cancers, 2021, 13, 2908.	4.0	28
21	Reconstructing single-cell karyotype alterations in colorectal cancer identifies punctuated and gradual diversification patterns. Nature Genetics, 2021, 53, 1187-1195.	16.3	38
22	LiquidCNA: Tracking subclonal evolution from longitudinal liquid biopsies using somatic copy number alterations. IScience, 2021, 24, 102889.	3.8	6
23	Evolutionary dynamics in Barrett oesophagus: implications for surveillance, risk stratification and therapy. Nature Reviews Gastroenterology and Hepatology, 2021, 19, 95-111.	14.7	7
24	Concurrent in situ analysis of point mutations and immune infiltrate in FFPE cancers. Methods in Enzymology, 2020, , 287-297.	1.0	0
25	Genomic landscape and clonal architecture of mouse oral squamous cell carcinomas dictate tumour ecology. Nature Communications, 2020, 11, .	14.1	38
26	Colorectal cancer residual disease at maximal response to EGFR blockade displays a druggable Paneth cellâ€“like phenotype. Science Translational Medicine, 2020, 12, .	13.1	40
27	Subclonal reconstruction of tumors by using machine learning and population genetics. Nature Genetics, 2020, 52, 898-907.	16.3	63
28	Evolutionary dynamics of neoantigens in growing tumors. Nature Genetics, 2020, 52, 1057-1066.	16.3	61
29	Cancer associated fibroblast FAK regulates malignant cell metabolism. Nature Communications, 2020, 11, .	14.1	110
30	Navigating the path to distant metastasis. Nature Genetics, 2020, 52, 642-643.	16.3	7
31	Measuring single cell divisions in human tissues from multi-region sequencing data. Nature Communications, 2020, 11, .	14.1	39
32	Genetic heterogeneity highlighted by differential FDG-PET response in diffuse large B-cell lymphoma. Haematologica, 2020, 105, 318-321.	4.3	5
33	In Situ Point Mutation Detection in FFPE Colorectal Cancers Using the BaseScope Assay. Methods in Molecular Biology, 2020, , 349-360.	0.0	1
34	Evolutionary history of human colitis-associated colorectal cancer. Gut, 2019, 68, 985-995.	14.8	111
35	Spatially constrained tumour growth affects the patterns of clonal selection and neutral drift in cancer genomic data. PLoS Computational Biology, 2019, 15, e1007243.	3.3	45
36	Measuring Clonal Evolution in Cancer with Genomics. Annual Review of Genomics and Human Genetics, 2019, 20, 309-329.	7.4	49

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37	Resolving genetic heterogeneity in cancer. Nature Reviews Genetics, 2019, 20, 404-416.	19.1	423
38	Crypt fusion as a homeostatic mechanism in the human colon. Gut, 2019, 68, 1986-1993.	14.8	27
39	Multiregion human bladder cancer sequencing reveals tumour evolution, bladder cancer phenotypes and implications for targeted therapy. Journal of Pathology, 2019, 248, 230-242.	5.2	31
40	Cumulative burden of inflammation predicts colorectal neoplasia risk in ulcerative colitis: a large single-centre study. Gut, 2019, 68, 414-422.	14.8	136
41	Author response: Measuring the distribution of fitness effects in somatic evolution by combining clonal dynamics with dN/dS ratios. , 2019, , .		0
42	Evolution of Barrettâ€™s esophagus through space and time at single-crypt and whole-biopsy levels. Nature Communications, 2018, 9, .	14.1	40
43	Somatic POLE exonuclease domain mutations are early events in sporadic endometrial and colorectal carcinogenesis, determining driver mutational landscape, clonal neoantigen burden and immune response. Journal of Pathology, 2018, 245, 283-296.	5.2	70
44	Genomic profiling reveals spatial intra-tumor heterogeneity in follicular lymphoma. Leukemia, 2018, 32, 1261-1265.	8.1	94
45	Insights Into the Pathophysiology of Esophageal Adenocarcinoma. Gastroenterology, 2018, 154, 406-420.	1.0	67
46	Reply to â€˜Revisiting signatures of neutral tumor evolution in the light of complexity of cancer genomic dataâ€™. Nature Genetics, 2018, 50, 1628-1630.	16.3	4
47	From Colitis to Cancer: An Evolutionary Trajectory That Merges Maths and Biology. Frontiers in Immunology, 2018, 9, .	5.0	27
48	Reply to â€˜Currently available bulk sequencing data do not necessarily support a model of neutral tumor evolutionâ€™. Nature Genetics, 2018, 50, 1624-1626.	16.3	9
49	Reply to â€˜Neutral tumor evolution?â€™. Nature Genetics, 2018, 50, 1633-1637.	16.3	17
50	The evolutionary landscape of colorectal tumorigenesis. Nature Ecology and Evolution, 2018, 2, 1661-1672.	7.6	86
51	Detecting repeated cancer evolution from multi-region tumor sequencing data. Nature Methods, 2018, 15, 707-714.	14.5	108
52	Quantification of subclonal selection in cancer from bulk sequencing data. Nature Genetics, 2018, 50, 895-903.	16.3	158
53	The effects of mutational processes and selection on driver mutations across cancer types. Nature Communications, 2018, 9, .	14.1	76
54	Reply: Is the evolution of tumors Darwinian or non-Darwinian?. National Science Review, 2018, 5, 17-19.	10.0	1

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55	Catch my drift? Making sense of genomic intra-tumour heterogeneity. Biochimica Et Biophysica Acta: Reviews on Cancer, 2017, 1867, 95-100.	7.1	24
56	Clonal evolution of colorectal cancer in IBD. Nature Reviews Gastroenterology and Hepatology, 2017, 14, 218-229.	14.7	125
57	Evolution of Premalignant Disease. Cold Spring Harbor Perspectives in Medicine, 2017, 7, a026542.	6.7	23
58	Reply: Uncertainties in tumor allele frequencies limit power to infer evolutionary pressures. Nature Genetics, 2017, 49, 1289-1291.	16.3	5
59	Classifying the evolutionary and ecological features of neoplasms. Nature Reviews Cancer, 2017, 17, 605-619.	24.2	306
60	Robust RNA-based in situ mutation detection delineates colorectal cancer subclonal evolution. Nature Communications, 2017, 8, .	14.1	47
61	Quantification of within-sample genetic heterogeneity from SNP-array data. Scientific Reports, 2017, 7, .	3.7	6
62	Between-region genetic divergence reflects the mode and tempo of tumor evolution. Nature Genetics, 2017, 49, 1015-1024.	16.3	102
63	PIK3CA mutations are common in lobular carcinoma in situ, but are not a biomarker of progression. Breast Cancer Research, 2017, 19, .	5.0	14
64	Measuring cancer evolution from the genome. Journal of Pathology, 2017, 241, 183-191.	5.2	104
65	An evolutionary perspective on field cancerization. Nature Reviews Cancer, 2017, 18, 19-32.	24.2	322
66	New paradigms in clonal evolution: punctuated equilibrium in cancer. Journal of Pathology, 2016, 240, 126-136.	5.2	70
67	A Computational Modeling Approach for Deriving Biomarkers to Predict Cancer Risk in Premalignant Disease. Cancer Prevention Research, 2016, 9, 283-295.	1.1	17
68	Dynamic clonal equilibrium and predetermined cancer risk in Barrettâ€™s oesophagus. Nature Communications, 2016, 7, .	14.1	71
69	Functional versus non-functional intratumor heterogeneity in cancer. Molecular and Cellular Oncology, 2016, 3, e1162897.	2.0	4
70	Differential clonal evolution in oesophageal cancers in response to neo-adjuvant chemotherapy. Nature Communications, 2016, 7, .	14.1	74
71	Identification of neutral tumor evolution across cancer types. Nature Genetics, 2016, 48, 238-244.	16.3	433
72	Evolution of oesophageal adenocarcinoma from metaplastic columnar epithelium without goblet cells in Barrett's oesophagus. Gut, 2016, 65, 907-913.	14.8	37

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73	Quantifying human intestinal stem cell and crypt dynamics: the implications for cancer screening and prevention. Expert Review of Gastroenterology and Hepatology, 2016, 10, 277-279.	2.4	3
74	Derivation of genetic biomarkers for cancer risk stratification in Barrettâ€™s oesophagus: a prospective cohort study. Gut, 2016, 65, 1602-1610.	14.8	39
75	Tumour Cell Heterogeneity. F1000Research, 2016, 5, 238.	0.6	88
76	Krt19+/Lgr5â^' Cells Are Radioresistant Cancer-Initiating Stem Cells in the Colon and Intestine. Cell Stem Cell, 2015, 16, 627-638.	17.2	160
77	The Barrettâ€™s Gland in Phenotype Space. Cellular and Molecular Gastroenterology and Hepatology, 2015, 1, 41-54.	6.1	26
78	A Big Bang model of human colorectal tumor growth. Nature Genetics, 2015, 47, 209-216.	16.3	761
79	Gremlin 1 Identifies a Skeletal Stem Cell with Bone, Cartilage, and Reticular Stromal Potential. Cell, 2015, 160, 269-284.	35.1	522
80	Forty-Year Analysis of Colonoscopic Surveillance Program for Neoplasia in Ulcerative Colitis: An Updated Overview. American Journal of Gastroenterology, 2015, 110, 1022-1034.	0.4	236
81	Characterization of LGR5 stem cells in colorectal adenomas and carcinomas. Scientific Reports, 2015, 5, .	3.7	79
82	Solutions to Peto's paradox revealed by mathematical modelling and cross-species cancer gene analysis. Philosophical Transactions of the Royal Society B: Biological Sciences, 2015, 370, 20140222.	4.1	59
83	Low-Grade Dysplasia in Ulcerative Colitis: Risk Factors for Developing High-Grade Dysplasia or Colorectal Cancer. American Journal of Gastroenterology, 2015, 110, 1461-1471.	0.4	117
84	Pan-cancer analysis of the extent and consequences of intratumor heterogeneity. Nature Medicine, 2015, 22, 105-113.	25.6	572
85	Revealing human intestinal stem cell and crypt dynamics. Molecular and Cellular Oncology, 2014, 1, e970069.	2.0	8
86	Re: Mitochondria and Tumor Progression in Ulcerative Colitis. Journal of the National Cancer Institute, 2014, 106, djt436-djt436.	5.1	0
87	Location, location, location! The reality of life for an intestinal stem cell in the crypt. Journal of Pathology, 2014, 234, 1-4.	5.2	8
88	Lineage tracing reveals multipotent stem cells maintain human adenomas and the pattern of clonal expansion in tumor evolution. Proceedings of the National Academy of Sciences of the United States of America, 2013, 110, .	7.7	81
89	Crypt dysplasia in Barrett's oesophagus shows clonal identity between crypt and surface cells. Journal of Pathology, 2013, 231, 98-104.	5.2	10
90	Modelling the evolution of genetic instability during tumour progression. Evolutionary Applications, 2013, 6, 20-33.	3.3	36

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91	<scp>LRIG1</scp> regulates cadherinâ€dependent contact inhibition directing epithelial homeostasis and preâ€invasive squamous cell carcinoma development. Journal of Pathology, 2013, 229, 608-620.	5.2	31
92	A basal gradient of Wnt and stem-cell number influences regional tumour distribution in human and mouse intestinal tracts. Gut, 2013, 62, 83-93.	14.8	73
93	Preâ€tumour clones, periodic selection and clonal interference in the origin and progression of gastrointestinal cancer: potential for biomarker development. Journal of Pathology, 2013, 229, 502-514.	5.2	16
94	Clonal Selection and Persistence in Dysplastic BarrettÊ¼s Esophagus and Intramucosal Cancers After Failed Radiofrequency Ablation. American Journal of Gastroenterology, 2013, 108, 1584-1592.	0.4	22
95	What Can Be Learnt about Disease Progression in Breast Cancer Dormancy from Relapse Data?. PLoS ONE, 2013, 8, e62320.	2.5	8
96	Barrett's metaplasia glands are clonal, contain multiple stem cells and share a common squamous progenitor. Gut, 2012, 61, 1380-1389.	14.8	69
97	Field Cancerization in the Intestinal Epithelium of Patients With Crohn's Ileocolitis. Gastroenterology, 2012, 142, 855-864.e8.	1.0	105
98	Utilizing DNA Mutations to Trace Epithelial Cell Lineages in Human Tissues. Methods in Molecular Biology, 2012, , 289-301.	0.0	2
99	Resolving the stem-cell debate. Nature, 2012, 488, 462-463.	40.1	66
100	Use of Methylation Patterns to Determine Expansion of Stem Cell Clones in Human Colon Tissue. Gastroenterology, 2011, 140, 1241-1250.e9.	1.0	46
101	The Clonal Origins of Dysplasia From Intestinal Metaplasia in the Human Stomach. Gastroenterology, 2011, 140, 1251-1260.e6.	1.0	79
102	Stem cells and their implications for colorectal cancer. Nature Reviews Gastroenterology and Hepatology, 2011, 8, 90-100.	14.7	121
103	Field Cancerization in the GI Tract. Future Oncology, 2011, 7, 981-993.	2.4	29
104	The human urothelium consists of multiple clonal units, each maintained by a stem cell. Journal of Pathology, 2011, 225, 163-171.	5.2	58
105	Clonal architecture of human prostatic epithelium in benign and malignant conditions. Journal of Pathology, 2011, 225, 172-180.	5.2	50
106	Stem Cells and Inflammation in the Intestine. Recent Results in Cancer Research, 2011, , 51-63.	0.0	7
107	A breast cancer meta-analysis of two expression measures of chromosomal instability reveals a relationship with younger age at diagnosis and high risk histopathological variables. Oncotarget, 2011, 2, 529-537.	1.7	8
108	Genetic diversity during the development of Barrett's oesophagus-associated adenocarcinoma: how, when and why?. Biochemical Society Transactions, 2010, 38, 374-379.	4.2	10

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109	The histogenesis of regenerative nodules in human liver cirrhosis. Hepatology, 2010, 51, 1017-1026.	11.6	86
110	Spindles losing their bearings: Does disruption of orientation in stem cells predict the onset of cancer?. BioEssays, 2010, 32, 468-472.	2.3	7
111	Field defects in DNA repair: is loss of MGMT an initial event in colorectal carcinogenesis?. Gut, 2010, 59, 1452-1453.	14.8	1
112	Authors' response. Gut, 2010, 59, 1158-1158.	14.8	1
113	Long-term proton pump induced hypergastrinaemia does induce lineage-specific restitution but not clonal expansion in benign Barrett's oesophagus in vivo. Gut, 2010, 59, 156-163.	14.8	23
114	Breast Cancer Dormancy Can Be Maintained by Small Numbers of Micrometastases. Cancer Research, 2010, 70, 4310-4317.	0.6	37
115	Clonality Assessment and Clonal Ordering of Individual Neoplastic Crypts Shows Polyclonality of Colorectal Adenomas. Gastroenterology, 2010, 138, 1441-1454.e7.	1.0	111
116	Stem cells and solid cancers. Virchows Archiv Fur Pathologische Anatomie Und Physiologie Und Fur Klinische Medizin, 2009, 455, 1-13.	2.7	23
117	Clonality, Founder Mutations, and Field Cancerization in Human Ulcerative Colitisâ€“Associated Neoplasia. Gastroenterology, 2009, 136, 542-550.e6.	1.0	157
118	Investigating The Fixation and Spread of Mutations in The Gastrointestinal Epithelium. Future Oncology, 2008, 4, 825-839.	2.4	4
119	Stochastic homeostasis in human airway epithelium is achieved by neutral competition of basal cell progenitors. ELife, 0, 2, .	1.6	97
120	Measuring the distribution of fitness effects in somatic evolution by combining clonal dynamics with dN/dS ratios. ELife, 0, 9, .	1.6	25