Atul Butte

List of Publications by Year in Descending Order

118 papers	11,203 citations	40 h-index	105 g-index
142 ext. papers	15,873 ext. citations	11.5 avg, IF	6.66 L-index

#	Paper	IF	Citations
118	Open challenges in developing digital therapeutics in the United States **2022**, 1, e0000008		2
117	Systematic identification of ACE2 expression modulators reveals cardiomyopathy as a risk factor for mortality in COVID-19 patients.. *Genome Biology*, **2022**, 23, 15	18.3	0
116	Postoperative delirium prediction using machine learning models and preoperative electronic health record data.. *BMC Anesthesiology*, **2022**, 22, 8	2.4	1
115	Deep learning from multiple experts improves identification of amyloid neuropathologies.. *Acta Neuropathologica Communications*, **2022**, 10, 66	7.3	1
114	Application of Machine Learning for Cytometry Data.. *Frontiers in Immunology*, **2021**, 12, 787574	8.4	4
113	Embedding electronic health records onto a knowledge network recognizes prodromal features of multiple sclerosis and predicts diagnosis.. *Journal of the American Medical Informatics Association: JAMIA*, **2021**,	8.6	4
112	Heterogeneity of Diabetes: Cells, Phenotypes, and Precision Medicine: Proceedings of an International Symposium of the Canadian Institutes of Health Research Institute of Nutrition, Metabolism and Diabetes and the U.S. National Institutes of Health National Institute of Diabetes and Digestive and Kidney Diseases. *Diabetes Care*, **2021**,	14.6	1
111	Opal: an implementation science tool for machine learning clinical decision support in anesthesia. *Journal of Clinical Monitoring and Computing*, **2021**, 1	2	0
110	Use of electronic health records to support a public health response to the COVID-19 pandemic in the United States: a perspective from 15 academic medical centers. *Journal of the American Medical Informatics Association: JAMIA*, **2021**, 28, 393-401	8.6	24
109	Rethinking PICO in the Machine Learning Era: ML-PICO. *Applied Clinical Informatics*, **2021**, 12, 407-416	3.1	3
108	Opportunities and Challenges in Democratizing Immunology Datasets. *Frontiers in Immunology*, **2021**, 12, 647536	8.4	0
107	Utility of routinely collected electronic health records data to support effectiveness evaluations in inflammatory bowel disease: a pilot study of tofacitinib. *BMJ Health and Care Informatics*, **2021**, 28,	2.6	1
106	Androgen-deprivation therapy and SARS-CoV-2 in men with prostate cancer: findings from the University of California Health System registry. *Annals of Oncology*, **2021**, 32, 678-679	10.3	5
105	Big Data in Nephrology. *Nature Reviews Nephrology*, **2021**, 17, 676-687	14.9	0
104	Impact of Different Approaches to Preparing Notes for Analysis With Natural Language Processing on the Performance of Prediction Models in Intensive Care **2021**, 3, e0450		1
103	Five-year pediatric use of a digital wearable fitness device: lessons from a pilot case study. *JAMIA Open*, **2021**, 4, ooab054	2.9	1
102	Identification of antiviral antihistamines for COVID-19 repurposing. *Biochemical and Biophysical Research Communications*, **2021**, 538, 173-179	3.4	31

101	Trials and Tribulations-11 Reasons Why We Need to Promote Clinical Trials Data Sharing. *JAMA Network Open*, **2021**, 4, e2035043	10.4	4
100	Knowledge Network Embedding of Transcriptomic Data from Spaceflown Mice Uncovers Signs and Symptoms Associated with Terrestrial Diseases. *Life*, **2021**, 11,	3	4
99	Quantifying Variation in Treatment Utilization for Type 2 Diabetes Across Five Major University of California Health Systems. *Diabetes Care*, **2021**, 44, 908-914	14.6	2
98	Age- and Sex-Associated Variations in the Sensitivity of Serological Tests Among Individuals Infected With SARS-CoV-2. *JAMA Network Open*, **2021**, 4, e210337	10.4	5
97	Predicting Inpatient Medication Orders From Electronic Health Record Data. *Clinical Pharmacology and Therapeutics*, **2020**, 108, 145-154	6.1	10
96	Opportunities and challenges in using real-world data for health care. *Journal of Clinical Investigation*, **2020**, 130, 565-574	15.9	24
95	Human splice factors contribute to latent HIV infection in primary cell models and blood CD4+ T cells from ART-treated individuals. *PLoS Pathogens*, **2020**, 16, e1009060	7.6	8
94	Explanatory Model of Dry Eye Disease Using Health and Nutrition Examinations: Machine Learning and Network-Based Factor Analysis From a National Survey. *JMIR Medical Informatics*, **2020**, 8, e16153	3.6	3
93	CovidCounties - an interactive, real-time tracker of the COVID-19 pandemic at the level of US counties **2020**,		1
92	Corticosteroid use is not associated with improved outcomes in acute exacerbation of IPF. *Respirology*, **2020**, 25, 629-635	3.6	24
91	Protected Health Information filter (Philter): accurately and securely de-identifying free-text clinical notes. *Npj Digital Medicine*, **2020**, 3, 57	15.7	10
90	CovidCounties is an interactive real time tracker of the COVID19 pandemic at the level of US counties. *Scientific Data*, **2020**, 7, 405	8.2	7
89	A robust and interpretable end-to-end deep learning model for cytometry data. *Proceedings of the National Academy of Sciences of the United States of America*, **2020**, 117, 21373-21380	11.5	14
88	Accuracy of medical billing data against the electronic health record in the measurement of colorectal cancer screening rates. *BMJ Open Quality*, **2020**, 9,	1.9	2
87	Minimum information about clinical artificial intelligence modeling: the MI-CLAIM checklist. *Nature Medicine*, **2020**, 26, 1320-1324	50.5	87
86	Characteristics and challenges of the clinical pipeline of digital therapeutics. *Npj Digital Medicine*, **2020**, 3, 159	15.7	20
85	Time for NIH to lead on data sharing. *Science*, **2020**, 367, 1308-1309	33.3	18
84	Meta-Analysis of Vaginal Microbiome Data Provides New Insights Into Preterm Birth. *Frontiers in Microbiology*, **2020**, 11, 476	5.7	18

83	A longitudinal big data approach for precision health. *Nature Medicine*, **2019**, 25, 792-804	50.5	183
82	ROMOP: a light-weight R package for interfacing with OMOP-formatted electronic health record data. *JAMIA Open*, **2019**, 2, 10-14	2.9	7
81	Assessment of Postdonation Outcomes in US Living Kidney Donors Using Publicly Available Data Sets. *JAMA Network Open*, **2019**, 2, e191851	10.4	6
80	A pilot study showing a stronger H1N1 influenza vaccination response during pregnancy in women who subsequently deliver preterm. *Journal of Reproductive Immunology*, **2019**, 132, 16-20	4.2	1
79	Assessment of a Deep Learning Model Based on Electronic Health Record Data to Forecast Clinical Outcomes in Patients With Rheumatoid Arthritis. *JAMA Network Open*, **2019**, 2, e190606	10.4	67
78	Prototype of running clinical trials in an untrustworthy environment using blockchain. *Nature Communications*, **2019**, 10, 917	17.4	65
77	Comprehensive transcriptomic analysis of cell lines as models of primary tumors across 22 tumor types. *Nature Communications*, **2019**, 10, 3574	17.4	58
76	Integrating biomedical research and electronic health records to create knowledge-based biologically meaningful machine-readable embeddings. *Nature Communications*, **2019**, 10, 3045	17.4	20
75	Tracing diagnosis trajectories over millions of patients reveal an unexpected risk in schizophrenia. *Scientific Data*, **2019**, 6, 201	8.2	5
74	Heterogeneity in HIV and cellular transcription profiles in cell line models of latent and productive infection: implications for HIV latency. *Retrovirology*, **2019**, 16, 32	3.6	14
73	Robust prediction of clinical outcomes using cytometry data. *Bioinformatics*, **2019**, 35, 1197-1203	7.2	10
72	Closing the Evidence Gap in Interstitial Lung Disease. The Promise of Real-World Data. *American Journal of Respiratory and Critical Care Medicine*, **2019**, 199, 1061-1065	10.2	6
71	A call for deep-learning healthcare. *Nature Medicine*, **2019**, 25, 14-15	50.5	99
70	Reference-based analysis of lung single-cell sequencing reveals a transitional profibrotic macrophage. *Nature Immunology*, **2019**, 20, 163-172	19.1	752
69	ImmPort, toward repurposing of open access immunological assay data for translational and clinical research. *Scientific Data*, **2018**, 5, 180015	8.2	233
68	A genome-wide association study identifies only two ancestry specific variants associated with spontaneous preterm birth. *Scientific Reports*, **2018**, 8, 226	4.9	21
67	The Atacama skeleton. *Genome Research*, **2018**, 28, 607-608	9.7	5
66	Whole-genome sequencing of Atacama skeleton shows novel mutations linked with dysplasia. *Genome Research*, **2018**, 28, 423-431	9.7	14

65	Open data informatics and data repurposing for IBD. *Nature Reviews Gastroenterology and Hepatology*, **2018**, 15, 715-716	24.2	4
64	MetaCyto: A Tool for Automated Meta-analysis of Mass and Flow Cytometry Data. *Cell Reports*, **2018**, 24, 1377-1388	10.6	27
63	Scalable and accurate deep learning with electronic health records. *Npj Digital Medicine*, **2018**, 1, 18	15.7	853
62	Enabling precision medicine in neonatology, an integrated repository for preterm birth research. *Scientific Data*, **2018**, 5, 180219	8.2	6
61	The 10,000 Immunomes Project: Building a Resource for Human Immunology. *Cell Reports*, **2018**, 25, 513-522.e3	10.6	22
60	Comparing Ethnicity-Specific Reference Intervals for Clinical Laboratory Tests from EHR Data. *journal of applied laboratory medicine, The*, **2018**, 3, 366-377	2	14
59	RImmPort: an R/Bioconductor package that enables ready-for-analysis immunology research data. *Bioinformatics*, **2017**, 33, 1101-1103	7.2	3
58	Evidence for benefit of statins to modify cognitive decline and risk in Alzheimer's disease. *Alzheimer's Research and Therapy*, **2017**, 9, 10	9	104
57	PDX-MI: Minimal Information for Patient-Derived Tumor Xenograft Models. *Cancer Research*, **2017**, 77, e62-e66	10.1	65
56	Comprehensive analysis of normal adjacent to tumor transcriptomes. *Nature Communications*, **2017**, 8, 1077	17.4	216
55	xCell: digitally portraying the tissue cellular heterogeneity landscape. *Genome Biology*, **2017**, 18, 220	18.3	1050
54	Combined inhibition of atypical PKC and histone deacetylase 1 is cooperative in basal cell carcinoma treatment. *JCI Insight*, **2017**, 2,	9.9	32
53	Precision annotation of digital samples in NCBI's gene expression omnibus. *Scientific Data*, **2017**, 4, 170125	8.2	19
52	Big data opens a window onto wellness. *Nature Biotechnology*, **2017**, 35, 720-721	44.5	10
51	Reversal of cancer gene expression correlates with drug efficacy and reveals therapeutic targets. *Nature Communications*, **2017**, 8, 16022	17.4	85
50	Risky Business: Meeting the Structural Needs of Transdisciplinary Science. *Journal of Pediatrics*, **2017**, 191, 255-258	3.6	10
49	In silico and in vitro drug screening identifies new therapeutic approaches for Ewing sarcoma. *Oncotarget*, **2017**, 8, 4079-4095	3.3	26
48	A patient-level data meta-analysis of standard-of-care treatments from eight prostate cancer clinical trials. *Scientific Data*, **2016**, 3, 160027	8.2	12

47	It takes a genome to understand a village: Population scale precision medicine. *Proceedings of the National Academy of Sciences of the United States of America*, **2016**, 113, 12344-12346	11.5	3
46	Constraints on Biological Mechanism from Disease Comorbidity Using Electronic Medical Records and Database of Genetic Variants. *PLoS Computational Biology*, **2016**, 12, e1004885	5	21
45	Widespread parainflammation in human cancer. *Genome Biology*, **2016**, 17, 145	18.3	45
44	Integrating Clinical Phenotype and Gene Expression Data to Prioritize Novel Drug Uses. *CPT: Pharmacometrics and Systems Pharmacology*, **2016**, 5, 599-607	4.5	3
43	Cross-tissue Analysis of Gene and Protein Expression in Normal and Cancer Tissues. *Scientific Reports*, **2016**, 6, 24799	4.9	96
42	ZeitZeiger: supervised learning for high-dimensional data from an oscillatory system. *Nucleic Acids Research*, **2016**, 44, e80	20.1	47
41	Differential Phasing between Circadian Clocks in the Brain and Peripheral Organs in Humans. *Journal of Biological Rhythms*, **2016**, 31, 588-597	3.2	26
40	Leveraging big data to transform target selection and drug discovery. *Clinical Pharmacology and Therapeutics*, **2016**, 99, 285-97	6.1	105
39	Robust meta-analysis of gene expression using the elastic net. *Nucleic Acids Research*, **2015**, 43, e79	20.1	76
38	Opening clinical trial data: are the voluntary data-sharing portals enough?. *BMC Medicine*, **2015**, 13, 280	11.4	33
37	Relating hepatocellular carcinoma tumor samples and cell lines using gene expression data in translational research. *BMC Medical Genomics*, **2015**, 8 Suppl 2, S5	3.7	44
36	Relating Chemical Structure to Cellular Response: An Integrative Analysis of Gene Expression, Bioactivity, and Structural Data Across 11,000 Compounds. *CPT: Pharmacometrics and Systems Pharmacology*, **2015**, 4, 576-84	4.5	37
35	Reanalysis of the Rituximab in ANCA-Associated Vasculitis trial identifies granulocyte subsets as a novel early marker of successful treatment. *Arthritis Research and Therapy*, **2015**, 17, 262	5.7	17
34	Systematic pan-cancer analysis of tumour purity. *Nature Communications*, **2015**, 6, 8971	17.4	555
33	Variation in the human immune system is largely driven by non-heritable influences. *Cell*, **2015**, 160, 37-47	56.2	586
32	Mutations in NGLY1 cause an inherited disorder of the endoplasmic reticulum-associated degradation pathway. *Genetics in Medicine*, **2014**, 16, 751-8	8.1	138
31	ImmPort: disseminating data to the public for the future of immunology. *Immunologic Research*, **2014**, 58, 234-9	4.3	392
30	A meta-analysis of lung cancer gene expression identifies PTK7 as a survival gene in lung adenocarcinoma. *Cancer Research*, **2014**, 74, 2892-902	10.1	108

29	A drug repositioning approach identifies tricyclic antidepressants as inhibitors of small cell lung cancer and other neuroendocrine tumors. *Cancer Discovery*, **2013**, 3, 1364-77	24.4	272
28	Integrating multiple ℞omics℞analyses identifies serological protein biomarkers for preeclampsia. *BMC Medicine*, **2013**, 11, 236	11.4	28
27	Making it personal: translational bioinformatics. *Journal of the American Medical Informatics Association: JAMIA*, **2013**, 20, 595-6	8.6	8
26	Peptidomic Identification of Serum Peptides Diagnosing Preeclampsia. *PLoS ONE*, **2013**, 8, e65571	3.7	28
25	Personal omics profiling reveals dynamic molecular and medical phenotypes. *Cell*, **2012**, 148, 1293-307	56.2	921
24	Cross-species functional analysis of cancer-associated fibroblasts identifies a critical role for CLCF1 and IL-6 in non-small cell lung cancer in vivo. *Cancer Research*, **2012**, 72, 5744-56	10.1	75
23	A nutrient-wide association study on blood pressure. *Circulation*, **2012**, 126, 2456-64	16.7	104
22	Discovery and preclinical validation of drug indications using compendia of public gene expression data. *Science Translational Medicine*, **2011**, 3, 96ra77	17.5	542
21	Comparison of automated and human assignment of MeSH terms on publicly-available molecular datasets. *Journal of Biomedical Informatics*, **2011**, 44 Suppl 1, S39-S43	10.2	9
20	Computational prediction and experimental validation associating FABP-1 and pancreatic adenocarcinoma with diabetes. *BMC Gastroenterology*, **2011**, 11, 5	3	12
19	Protein microarrays discover angiotensinogen and PRKRIP1 as novel targets for autoantibodies in chronic renal disease. *Molecular and Cellular Proteomics*, **2011**, 10, M110.000497	7.6	24
18	ProfileChaser: searching microarray repositories based on genome-wide patterns of differential expression. *Bioinformatics*, **2011**, 27, 3317-8	7.2	40
17	Computational repositioning of the anticonvulsant topiramate for inflammatory bowel disease. *Science Translational Medicine*, **2011**, 3, 96ra76	17.5	430
16	Differentially expressed RNA from public microarray data identifies serum protein biomarkers for cross-organ transplant rejection and other conditions. *PLoS Computational Biology*, **2010**, 6, e1000940	5	58
15	Clinical assessment incorporating a personal genome. *Lancet, The*, **2010**, 375, 1525-35	40	565
14	Drug discovery in a multidimensional world: systems, patterns, and networks. *Journal of Cardiovascular Translational Research*, **2010**, 3, 438-47	3.3	50
13	An Environment-Wide Association Study (EWAS) on type 2 diabetes mellitus. *PLoS ONE*, **2010**, 5, e10746	3.7	372
12	Synergy Between Kit Ligand (KL) and IL-4 In Mast Cells Is Mediated by Cross-Receptor Interactions In Lipid Rafts.. *Blood*, **2010**, 116, 1564-1564	2.2	

11	Disease signatures are robust across tissues and experiments. *Molecular Systems Biology*, **2009**, 5, 307	12.2	90
10	Autoimmune disease classification by inverse association with SNP alleles. *PLoS Genetics*, **2009**, 5, e1000792		129
9	Novel integration of hospital electronic medical records and gene expression measurements to identify genetic markers of maturation. *Pacific Symposium on Biocomputing Pacific Symposium on Biocomputing*, **2008**, 243-54	1.3	15
8	Systematic survey reveals general applicability of "guilt-by-association" within gene coexpression networks. *BMC Bioinformatics*, **2005**, 6, 227	3.6	294
7	Quantifying the relationship between co-expression, co-regulation and gene function. *BMC Bioinformatics*, **2004**, 5, 18	3.6	231
6	Accuracy of Medical Billing Data Against the Electronic Health Record in the Measurement of Colorectal Cancer Screening Rates		1
5	A Comparison of the Randomized Clinical Trial Efficacy and Real-World Effectiveness of Tofacitinib for the Treatment of Inflammatory Bowel Disease: A Cohort Study		1
4	xCell: Digitally portraying the tissue cellular heterogeneity landscape		10
3	Meta-analysis of Cytometry Data Reveals Racial Differences in Immune Cells		3
2	The 10,000 Immunomes Project: A resource for human immunology		1
1	Tumor cell-adipocyte gap junctions activate lipolysis and are essential for breast tumorigenesis		1