

# Diane L Barber

## List of Publications by Year in descending order

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41  
papers

5,856  
citations

236925

25  
h-index

276875

41  
g-index

49  
all docs

49  
docs citations

49  
times ranked

9514  
citing authors

#	ARTICLE	IF	CITATIONS
1	Dysregulated pH: a perfect storm for cancer progression. <i>Nature Reviews Cancer</i> , 2011, 11, 671-677.	28.4	1,734
2	Dissecting the Tumor Myeloid Compartment Reveals Rare Activating Antigen-Presenting Cells Critical for T Cell Immunity. <i>Cancer Cell</i> , 2014, 26, 638-652.	16.8	911
3	Cell migration requires both ion translocation and cytoskeletal anchoring by the Na-H exchanger NHE1. <i>Journal of Cell Biology</i> , 2002, 159, 1087-1096.	5.2	378
4	Direct Binding of the Na <sup>+</sup> /H <sup>+</sup> Exchanger NHE1 to ERM Proteins Regulates the Cortical Cytoskeleton and Cell Shape Independently of H <sup>+</sup> Translocation. <i>Molecular Cell</i> , 2000, 6, 1425-1436.	9.7	376
5	Cancer cell behaviors mediated by dysregulated pH dynamics at a glance. <i>Journal of Cell Science</i> , 2017, 130, 663-669.	2.0	248
6	Na-H Exchange-dependent Increase in Intracellular pH Times G2/M Entry and Transition. <i>Journal of Biological Chemistry</i> , 2003, 278, 44645-44649.	3.4	227
7	Dynamic actin remodeling during epithelial $\rightarrow$ mesenchymal transition depends on increased moesin expression. <i>Molecular Biology of the Cell</i> , 2011, 22, 4750-4764.	2.1	197
8	Cofilin is a pH sensor for actin free barbed end formation: role of phosphoinositide binding. <i>Journal of Cell Biology</i> , 2008, 183, 865-879.	5.2	169
9	Na <sup>+</sup> /H <sup>+</sup> exchanger NHE1 as plasma membrane scaffold in the assembly of signaling complexes. <i>American Journal of Physiology - Cell Physiology</i> , 2004, 287, C844-C850.	4.6	155
10	Considering Protonation as a Posttranslational Modification Regulating Protein Structure and Function. <i>Annual Review of Biophysics</i> , 2013, 42, 289-314.	10.0	133
11	Structures of human phosphofructokinase-1 and atomic basis of cancer-associated mutations. <i>Nature</i> , 2015, 523, 111-114.	27.8	110
12	Positive feedback between Cdc42 activity and H <sup>+</sup> efflux by the Na-H exchanger NHE1 for polarity of migrating cells. <i>Journal of Cell Biology</i> , 2007, 179, 403-410.	5.2	109
13	Cell fate decisions: emerging roles for metabolic signals and cell morphology. <i>EMBO Reports</i> , 2017, 18, 2105-2118.	4.5	91
14	The Sodium-Hydrogen Exchanger NHE1 Is an Akt Substrate Necessary for Actin Filament Reorganization by Growth Factors. <i>Journal of Biological Chemistry</i> , 2009, 284, 26666-26675.	3.4	90
15	The Nck-interacting Kinase (NIK) Phosphorylates the Na <sup>+</sup> -H <sup>+</sup> Exchanger NHE1 and Regulates NHE1 Activation by Platelet-derived Growth Factor. <i>Journal of Biological Chemistry</i> , 2001, 276, 31349-31356.	3.4	88
16	pH sensing by FAK-His58 regulates focal adhesion remodeling. <i>Journal of Cell Biology</i> , 2013, 202, 849-859.	5.2	79
17	The glycolytic enzyme phosphofructokinase-1 assembles into filaments. <i>Journal of Cell Biology</i> , 2017, 216, 2305-2313.	5.2	79
18	Expression profile of genes regulated by activity of the Na-H exchanger NHE1. <i>BMC Genomics</i> , 2004, 5, 46.	2.8	78

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19	Increased intracellular pH is necessary for adult epithelial and embryonic stem cell differentiation. <i>Journal of Cell Biology</i> , 2016, 215, 345-355.	5.2	70
20	Increased H <sup>+</sup> efflux is sufficient to induce dysplasia and necessary for viability with oncogene expression. <i>ELife</i> , 2015, 4, .	6.0	66
21	Cancer-associated arginine-to-histidine mutations confer a gain in pH sensing to mutant proteins. <i>Science Signaling</i> , 2017, 10, .	3.6	54
22	Ratiometric Imaging of pH Probes. <i>Methods in Cell Biology</i> , 2014, 123, 429-448.	1.1	49
23	The Nck-interacting kinase NIK increases Arp2/3 complex activity by phosphorylating the Arp2 subunit. <i>Journal of Cell Biology</i> , 2015, 208, 161-170.	5.2	37
24	pHLARE: a new biosensor reveals decreased lysosome pH in cancer cells. <i>Molecular Biology of the Cell</i> , 2021, 32, 131-142.	2.1	35
25	Î <sup>2</sup> -Catenin is a pH sensor with decreased stability at higher intracellular pH. <i>Journal of Cell Biology</i> , 2018, 217, 3965-3976.	5.2	32
26	A Histidine pH sensor regulates activation of the Ras-specific guanine nucleotide exchange factor RasGRP1. <i>ELife</i> , 2017, 6, .	6.0	32
27	Formin-dependent TGF-Î <sup>2</sup> signaling for epithelial to mesenchymal transition. <i>Molecular Biology of the Cell</i> , 2018, 29, 1465-1475.	2.1	29
28	Intracellular pH Regulates Cancer and Stem Cell Behaviors: A Protein Dynamics Perspective. <i>Frontiers in Oncology</i> , 2020, 10, 1401.	2.8	27
29	Prominent features of the amino acid mutation landscape in cancer. <i>PLoS ONE</i> , 2017, 12, e0183273.	2.5	26
30	A Histidine Cluster in the Cytoplasmic Domain of the Na-H Exchanger NHE1 Confers pH-sensitive Phospholipid Binding and Regulates Transporter Activity. <i>Journal of Biological Chemistry</i> , 2016, 291, 24096-24104.	3.4	25
31	Mislocalized Scaffolding by the Na-H Exchanger NHE1 Dominantly Inhibits Fibronectin Production and TGF-Î <sup>2</sup> Activation. <i>Molecular Biology of the Cell</i> , 2009, 20, 2327-2336.	2.1	23
32	Intracellular pH dynamics and charge-changing somatic mutations in cancer. <i>Cancer and Metastasis Reviews</i> , 2019, 38, 17-24.	5.9	19
33	Expression of Actin-interacting Protein 1 Suppresses Impaired Chemotaxis of Dictyostelium Cells Lacking the Na <sup>+</sup> -H <sup>+</sup> Exchanger NHE1. <i>Molecular Biology of the Cell</i> , 2010, 21, 3162-3170.	2.1	18
34	Hypoxia increases extracellular fibronectin abundance but not assembly during epithelial cell transdifferentiation. <i>Journal of Cell Science</i> , 2015, 128, 1083-9.	2.0	16
35	Tau repeat regions contain conserved histidine residues that modulate microtubule-binding in response to changes in pH. <i>Journal of Biological Chemistry</i> , 2019, 294, 8779-8790.	3.4	12
36	Drosophila anion exchanger 2 is required for proper ovary development and oogenesis. <i>Developmental Biology</i> , 2019, 452, 127-133.	2.0	10

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37	An acidic residue buried in the dimer interface of isocitrate dehydrogenase 1 (IDH1) helps regulate catalysis and pH sensitivity. <i>Biochemical Journal</i> , 2020, 477, 2999-3018.	3.7	8
38	Ethyl isopropyl amiloride decreases oxidative phosphorylation and increases mitochondrial fusion in clonal untransformed and cancer cells. <i>American Journal of Physiology - Cell Physiology</i> , 2021, 321, C147-C157.	4.6	4
39	Arp2/3 complex activity is necessary for mouse ESC differentiation, times formative pluripotency, and enables lineage specification. <i>Stem Cell Reports</i> , 2022, 17, 1318-1333.	4.8	4
40	Low pH Facilitates Heterodimerization of Mutant Isocitrate Dehydrogenase IDH1-R132H and Promotes Production of 2-Hydroxyglutarate. <i>Biochemistry</i> , 2021, 60, 1983-1994.	2.5	2
41	Editorial overview: Cell dynamics: Integrating cell dynamics across scales. <i>Current Opinion in Cell Biology</i> , 2020, 66, 130-132.	5.4	1