Matthew R Redinbo

List of Publications by Year in Descending Order

115 papers	8,714 citations	50 h-index	92 g-index
121 ext. papers	10,081 ext. citations	10.6 avg, IF	6 L-index

#	Paper	IF	Citations
115	Microbial enzymes induce colitis by reactivating triclosan in the mouse gastrointestinal tract.. *Nature Communications*, **2022**, 13, 136	17.4	3
114	Reporting guidelines for human microbiome research: the STORMS checklist. *Nature Medicine*, **2021** , 27, 1885-1892	50.5	19
113	Plant "helper" immune receptors are Ca-permeable nonselective cation channels. *Science*, **2021**, 373, 420-425	33.3	41
112	Quantitative Investigation of Irinotecan Metabolism, Transport, and Gut Microbiome Activation. *Drug Metabolism and Disposition*, **2021**, 49, 683-693	4	8
111	Garcinoic Acid Is a Natural and Selective Agonist of Pregnane X Receptor. *Journal of Medicinal Chemistry*, **2020**, 63, 3701-3712	8.3	18
110	Targeted inhibition of gut bacterial β-glucuronidase activity enhances anticancer drug efficacy. *Proceedings of the National Academy of Sciences of the United States of America*, **2020**, 117, 7374-7381	11.5	54
109	The Gut Microbiota Impact Cancer Etiology through "Phase IV Metabolism" of Xenobiotics and Endobiotics. *Cancer Prevention Research*, **2020**, 13, 635-642	3.2	2
108	Targeting the pregnane X receptor using microbial metabolite mimicry. *EMBO Molecular Medicine*, **2020**, 12, e11621	12	26
107	Discovering the Microbial Enzymes Driving Drug Toxicity with Activity-Based Protein Profiling. *ACS Chemical Biology*, **2020**, 15, 217-225	4.9	24
106	Structural Insights into Endobiotic Reactivation by Human Gut Microbiome-Encoded Sulfatases. *Biochemistry*, **2020**, 59, 3939-3950	3.2	6
105	The Microbiome Revolution Turns to Cholesterol. *Cell Host and Microbe*, **2020**, 28, 154-156	23.4	1
104	Gut-Derived Protein-Bound Uremic Toxins. *Toxins*, **2020**, 12,	4.9	21
103	A Rare Mutation in SPLUNC1 Affects Bacterial Adherence and Invasion in Meningococcal Disease. *Clinical Infectious Diseases*, **2020**, 70, 2045-2053	11.6	4
102	Gut microbial β-glucuronidases reactivate estrogens as components of the estrobolome that reactivate estrogens. *Journal of Biological Chemistry*, **2019**, 294, 18586-18599	5.4	53
101	Structure, function, and inhibition of drug reactivating human gut microbial β-glucuronidases. *Scientific Reports*, **2019**, 9, 825	4.9	32
100	Discovery and Characterization of FMN-Binding β-Glucuronidases in the Human Gut Microbiome. *Journal of Molecular Biology*, **2019**, 431, 970-980	6.5	10
99	Enterococcus faecalis Gluconate Phosphotransferase System Accelerates Experimental Colitis and Bacterial Killing by Macrophages. *Infection and Immunity*, **2019**, 87,	3.7	9

98	Selecting a Single Stereocenter: The Molecular Nuances That Differentiate Hexuronidases in the Human Gut Microbiome. *Biochemistry*, **2019**, 58, 1311-1317	3.2	4
97	Epithelial delamination is protective during pharmaceutical-induced enteropathy. *Proceedings of the National Academy of Sciences of the United States of America*, **2019**, 116, 16961-16970	11.5	5
96	Targeting Regorafenib-Induced Toxicity through Inhibition of Gut Microbial Glucuronidases. *ACS Chemical Biology*, **2019**, 14, 2737-2744	4.9	19
95	Mouse Gut Microbiome-Encoded Glucuronidases Identified Using Metagenome Analysis Guided by Protein Structure. *MSystems*, **2019**, 4,	7.6	15
94	Identification of Specific and Nonspecific Inhibitors of Bacillus anthracis Type III Pantothenate Kinase (PanK). *ChemMedChem*, **2019**, 14, 78-82	3.7	2
93	Microbial Glucuronidase Inhibition Reduces Severity of Diclofenac-Induced Anastomotic Leak in Rats. *Surgical Infections*, **2018**, 19, 417-423	2	10
92	Structural basis for the regulation of glucuronidase expression by human gut Enterobacteriaceae. *Proceedings of the National Academy of Sciences of the United States of America*, **2018**, 115, E152-E161	11.5	28
91	SPLUNC1 is an allosteric modulator of the epithelial sodium channel. *FASEB Journal*, **2018**, 32, 2478-2491	6.9	21
90	Microbial Unmasking of Plant Glycosides. *MBio*, **2018**, 9,	7.8	4
89	Gut Microbial Glucuronidase Inhibition via Catalytic Cycle Interception. *ACS Central Science*, **2018**, 4, 868-879	16.8	30
88	Nonsteroidal Anti-Inflammatory Drug-Induced Leaky Gut Modeled Using Polarized Monolayers of Primary Human Intestinal Epithelial Cells. *ACS Infectious Diseases*, **2018**, 4, 46-52	5.5	29
87	Three structurally and functionally distinct glucuronidases from the human gut microbe. *Journal of Biological Chemistry*, **2018**, 293, 18559-18573	5.4	24
86	Enhanced biofilm prevention activity of a SPLUNC1-derived antimicrobial peptide against Staphylococcus aureus. *PLoS ONE*, **2018**, 13, e0203621	3.7	5
85	Active site flexibility revealed in crystal structures of Parabacteroides merdae glucuronidase from the human gut microbiome. *Protein Science*, **2018**, 27, 2010-2022	6.3	8
84	Crystal structure of the mouse innate immunity factor bacterial permeability-increasing family member A1. *Acta Crystallographica Section F, Structural Biology Communications*, **2018**, 74, 268-276	1.1	2
83	Microbial Molecules from the Multitudes within Us. *Cell Metabolism*, **2017**, 25, 230-232	24.6	0
82	Identification of BPIFA1/SPLUNC1 as an epithelium-derived smooth muscle relaxing factor. *Nature Communications*, **2017**, 8, 14118	17.4	26
81	The role of the microbiome in cancer development and therapy. *Ca-A Cancer Journal for Clinicians*, **2017**, 67, 326-344	220.7	277

80	An Atlas of β-Glucuronidases in the Human Intestinal Microbiome. *Structure*, **2017**, 25, 967-977.e5	5.2	87
79	Glucuronides in the gut: Sugar-driven symbioses between microbe and host. *Journal of Biological Chemistry*, **2017**, 292, 8569-8576	5.4	90
78	Regulation of drug metabolism and toxicity by multiple factors of genetics, epigenetics, lncRNAs, gut microbiota, and diseases: a meeting report of the 21 International Symposium on Microsomes and Drug Oxidations (MDO). *Acta Pharmaceutica Sinica B*, **2017**, 7, 241-248	15.5	17
77	Structural Features Essential to the Antimicrobial Functions of Human SPLUNC1. *Biochemistry*, **2016**, 55, 2979-91	3.2	30
76	Acetylation of lysine 109 modulates pregnane X receptor DNA binding and transcriptional activity. *Biochimica Et Biophysica Acta - Gene Regulatory Mechanisms*, **2016**, 1859, 1155-1169	6	8
75	Processing of Nonconjugative Resistance Plasmids by Conjugation Nicking Enzyme of Staphylococci. *Journal of Bacteriology*, **2016**, 198, 888-97	3.5	15
74	Post-translational Claisen Condensation and Decarboxylation en Route to the Bicyclic Core of Pantocin A. *Journal of the American Chemical Society*, **2016**, 138, 5487-90	16.4	15
73	Short Palate, Lung, and Nasal Epithelial Clone 1 Has Antimicrobial and Antibiofilm Activities against the Burkholderia cepacia Complex. *Antimicrobial Agents and Chemotherapy*, **2016**, 60, 6003-12	5.9	17
72	Structure and Inhibition of Microbiome β-Glucuronidases Essential to the Alleviation of Cancer Drug Toxicity. *Chemistry and Biology*, **2015**, 22, 1238-49		141
71	Pharmaceutical Control of the Microbiome. *FASEB Journal*, **2015**, 29, 575.13	0.9	
70	Pharmaceutical Control of the Microbiome. *FASEB Journal*, **2015**, 29, 494.2	0.9	
69	Mammalian short palate lung and nasal epithelial clone 1 (SPLUNC1) in pH-dependent airway hydration. *International Journal of Biochemistry and Cell Biology*, **2014**, 52, 130-5	5.6	28
68	The microbiota, chemical symbiosis, and human disease. *Journal of Molecular Biology*, **2014**, 426, 3877-91	6.5	37
67	Symbiotic bacterial metabolites regulate gastrointestinal barrier function via the xenobiotic sensor PXR and Toll-like receptor 4. *Immunity*, **2014**, 41, 296-310	32.3	470
66	Understanding and modulating mammalian-microbial communication for improved human health. *Annual Review of Pharmacology and Toxicology*, **2014**, 54, 559-80	17.9	28
65	Bacterial β-glucuronidase inhibition protects mice against enteropathy induced by indomethacin, ketoprofen or diclofenac: mode of action and pharmacokinetics. *Xenobiotica*, **2014**, 44, 28-35	2	108
64	Xenobiotic-sensing nuclear receptors involved in drug metabolism: a structural perspective. *Drug Metabolism Reviews*, **2013**, 45, 79-100	7	50
63	Multiple NSAID-induced hits injure the small intestine: underlying mechanisms and novel strategies. *Toxicological Sciences*, **2013**, 131, 654-67	4.4	93

62	PXR antagonists and implication in drug metabolism. *Drug Metabolism Reviews*, **2013**, 45, 60-72	7	69
61	Molecular basis of antibiotic multiresistance transfer in Staphylococcus aureus. *Proceedings of the National Academy of Sciences of the United States of America*, **2013**, 110, 2804-9	11.5	39
60	Structural and functional analysis of the human nuclear xenobiotic receptor PXR in complex with RXR *Journal of Molecular Biology*, **2013**, 425, 2561-77	6.5	40
59	The human microbiome is a source of therapeutic drug targets. *Current Opinion in Chemical Biology*, **2013**, 17, 379-84	9.7	50
58	Molecular basis for pH-dependent mucosal dehydration in cystic fibrosis airways. *Proceedings of the National Academy of Sciences of the United States of America*, **2013**, 110, 15973-8	11.5	139
57	Identification of the SPLUNC1 ENaC-inhibitory domain yields novel strategies to treat sodium hyperabsorption in cystic fibrosis airway epithelial cultures. *American Journal of Physiology - Lung Cellular and Molecular Physiology*, **2013**, 305, L990-L1001	5.8	61
56	Molecular insights into microbial -glucuronidase inhibition to abrogate CPT-11 toxicity. *Molecular Pharmacology*, **2013**, 84, 208-17	4.3	84
55	Rifampicin-independent interactions between the pregnane X receptor ligand binding domain and peptide fragments of coactivator and corepressor proteins. *Biochemistry*, **2012**, 51, 19-31	3.2	18
54	Pharmacologic targeting of bacterial -glucuronidase alleviates nonsteroidal anti-inflammatory drug-induced enteropathy in mice. *Journal of Pharmacology and Experimental Therapeutics*, **2012**, 341, 447-54	4.7	133
53	Crystal structure of the plant epigenetic protein arginine methyltransferase 10. *Journal of Molecular Biology*, **2011**, 414, 106-22	6.5	25
52	Pseudomonas aeruginosa PilY1 binds integrin in an RGD- and calcium-dependent manner. *PLoS ONE* , **2011**, 6, e29629	3.7	48
51	Tyrosine partners coordinate DNA nicking by the Salmonella typhimurium plasmid pCU1 relaxase enzyme. *FEBS Letters*, **2011**, 585, 1216-22	3.8	7
50	Activation of the human nuclear xenobiotic receptor PXR by the reverse transcriptase-targeted anti-HIV drug PNU-142721. *Protein Science*, **2011**, 20, 1713-9	6.3	21
49	Immobilization of active human carboxylesterase 1 in biomimetic silica nanoparticles. *Biotechnology Progress*, **2011**, 27, 863-9	2.8	10
48	Functional characterization of the multidomain F plasmid TraI relaxase-helicase. *Journal of Biological Chemistry*, **2011**, 286, 12670-82	5.4	13
47	Nerve agent hydrolysis activity designed into a human drug metabolism enzyme. *PLoS ONE*, **2011**, 6, e17441	3.7	18
46	A High Throughput Assay for Discovery of Bacterial -Glucuronidase Inhibitors. *Current Chemical Genomics*, **2011**, 5, 13-20		15
45	A structural examination of agrochemical processing by human carboxylesterase 1. *Journal of Pesticide Sciences*, **2010**, 35, 250-256	2.7	

44	The mechanism and control of DNA transfer by the conjugative relaxase of resistance plasmid pCU1. *Nucleic Acids Research*, **2010**, 38, 5929-43	20.1	21
43	Human carboxylesterase 1 stereoselectively binds the nerve agent cyclosarin and spontaneously hydrolyzes the nerve agent sarin. *Molecular Pharmacology*, **2010**, 77, 508-16	4.3	43
42	Alleviating cancer drug toxicity by inhibiting a bacterial enzyme. *Science*, **2010**, 330, 831-5	33.3	583
41	The crystal structure of human UDP-glucuronosyltransferase 2B7 C-terminal end is the first mammalian UGT target to be revealed: the significance for human UGTs from both the 1A and 2B families. *Drug Metabolism Reviews*, **2010**, 42, 133-44	7	60
40	Recommended nomenclature for five mammalian carboxylesterase gene families: human, mouse, and rat genes and proteins. *Mammalian Genome*, **2010**, 21, 427-41	3.2	123
39	Challenges predicting ligand-receptor interactions of promiscuous proteins: the nuclear receptor PXR. *PLoS Computational Biology*, **2009**, 5, e1000594	5	94
38	Elucidating the SJekyll and HydeSnature of PXR: the case for discovering antagonists or allosteric antagonists. *Pharmaceutical Research*, **2009**, 26, 1807-15	4.5	52
37	Structural basis of human pregnane X receptor activation by the hops constituent colupulone. *Molecular Pharmacology*, **2008**, 74, 1512-20	4.3	54
36	The phytoestrogen coumestrol is a naturally occurring antagonist of the human pregnane X receptor. *Molecular Endocrinology*, **2008**, 22, 838-57		95
35	Active nuclear receptors exhibit highly correlated AF-2 domain motions. *PLoS Computational Biology*, **2008**, 4, e1000111	5	36
34	Crystal structures of human carboxylesterase 1 in covalent complexes with the chemical warfare agents soman and tabun. *Biochemistry*, **2007**, 46, 5063-71	3.2	54
33	Crystal structure of the pregnane X receptor-estradiol complex provides insights into endobiotic recognition. *Molecular Endocrinology*, **2007**, 21, 1028-38		81
32	Crystal structure of the PXR-T1317 complex provides a scaffold to examine the potential for receptor antagonism. *Bioorganic and Medicinal Chemistry*, **2007**, 15, 2156-66	3.4	104
31	Disrupting antibiotic resistance propagation by inhibiting the conjugative DNA relaxase. *Proceedings of the National Academy of Sciences of the United States of America*, **2007**, 104, 12282-7	11.5	70
30	Analysis of mammalian carboxylesterase inhibition by trifluoromethylketone-containing compounds. *Molecular Pharmacology*, **2007**, 71, 713-23	4.3	37
29	Activated pregnenolone X-receptor is a target for ketoconazole and its analogs. *Clinical Cancer Research*, **2007**, 13, 2488-95	12.9	88
28	Crystal structure of the cofactor-binding domain of the human phase II drug-metabolism enzyme UDP-glucuronosyltransferase 2B7. *Journal of Molecular Biology*, **2007**, 369, 498-511	6.5	146
27	Human PXR forms a tryptophan zipper-mediated homodimer. *Biochemistry*, **2006**, 45, 8579-89	3.2	46

26	Multisite promiscuity in the processing of endogenous substrates by human carboxylesterase 1. *Journal of Molecular Biology*, **2006**, 363, 201-14	6.5	114
25	Structural insights into drug processing by human carboxylesterase 1: tamoxifen, mevastatin, and inhibition by benzil. *Journal of Molecular Biology*, **2005**, 352, 165-77	6.5	109
24	Modulation of human nuclear receptor LRH-1 activity by phospholipids and SHP. *Nature Structural and Molecular Biology*, **2005**, 12, 357-63	17.6	170
23	Mammalian carboxylesterases: from drug targets to protein therapeutics. *Drug Discovery Today*, **2005**, 10, 313-25	8.8	171
22	Orphan nuclear receptors adopted by crystallography. *Current Opinion in Structural Biology*, **2005**, 15, 708-15	8.1	60
21	Structure and function of the human nuclear xenobiotic receptor PXR. *Current Drug Metabolism*, **2005**, 6, 357-67	3.5	76
20	Structural disorder in the complex of human pregnane X receptor and the macrolide antibiotic rifampicin. *Molecular Endocrinology*, **2005**, 19, 1125-34		168
19	The nuclear xenobiotic receptor pregnane X receptor: recent insights and new challenges. *Molecular Endocrinology*, **2005**, 19, 2891-900		115
18	Promiscuity: what protects us, perplexes us. *Drug Discovery Today*, **2004**, 9, 431-2	8.8	18
17	Molecular modeling of CPT-11 metabolism by carboxylesterases (CEs): use of pnb CE as a model. *Biochemistry*, **2004**, 43, 1874-82	3.2	15
16	Mechanisms of camptothecin resistance by human topoisomerase I mutations. *Journal of Molecular Biology*, **2004**, 339, 773-84	6.5	121
15	Structural impact of the leukemia drug 1-beta-D-arabinofuranosylcytosine (Ara-C) on the covalent human topoisomerase I-DNA complex. *Journal of Biological Chemistry*, **2003**, 278, 12461-6	5.4	39
14	Crystal structure of human carboxylesterase 1 complexed with the Alzheimer's drug tacrine: from binding promiscuity to selective inhibition. *Chemistry and Biology*, **2003**, 10, 341-9		138
13	Structural basis of heroin and cocaine metabolism by a promiscuous human drug-processing enzyme. *Nature Structural and Molecular Biology*, **2003**, 10, 349-56	17.6	170
12	Coactivator binding promotes the specific interaction between ligand and the pregnane X receptor. *Journal of Molecular Biology*, **2003**, 331, 815-28	6.5	191
11	2.1 A crystal structure of human PXR in complex with the St. John's wort compound hyperforin. *Biochemistry*, **2003**, 42, 1430-8	3.2	280
10	Structural insights into CPT-11 activation by mammalian carboxylesterases. *Nature Structural Biology*, **2002**, 9, 337-42		130
9	8-Oxoguanine rearranges the active site of human topoisomerase I. *Proceedings of the National Academy of Sciences of the United States of America*, **2002**, 99, 12102-7	11.5	67

8	Regulation of cyp3a gene transcription by the pregnane x receptor. *Annual Review of Pharmacology and Toxicology*, **2002**, 42, 1-23	17.9	301
7	Structural insights into the promiscuity and function of the human pregnane X receptor. *Current Opinion in Drug Discovery & Development*, **2002**, 5, 150-8		37
6	The human nuclear xenobiotic receptor PXR: structural determinants of directed promiscuity. *Science*, **2001**, 292, 2329-33	33.3	675
5	New potential targets for antifungal development. *Expert Opinion on Therapeutic Targets*, **2000**, 4, 265-296		15
4	Novel insights into catalytic mechanism from a crystal structure of human topoisomerase I in complex with DNA. *Biochemistry*, **2000**, 39, 6832-40	3.2	134
3	Structural insights into the function of type IB topoisomerases. *Current Opinion in Structural Biology* , **1999**, 9, 29-36	8.1	62
2	Structural flexibility in human topoisomerase I revealed in multiple non-isomorphous crystal structures. *Journal of Molecular Biology*, **1999**, 292, 685-96	6.5	80
1	A model for the mechanism of human topoisomerase I. *Science*, **1998**, 279, 1534-41	33.3	598