Roman A Melnyk

List of Publications by Year in Descending Order

38 papers	1,433 citations	18 h-index	37 g-index
46 ext. papers	1,706 ext. citations	10.7 avg, IF	4.42 L-index

#	Paper	IF	Citations
38	Structures of distant diphtheria toxin homologs reveal functional determinants of an evolutionarily conserved toxin scaffold.. *Communications Biology*, **2022**, 5, 375	6.7	0
37	Large Clostridial Toxins: Mechanisms and Roles in Disease. *Microbiology and Molecular Biology Reviews*, **2021**, 85, e0006421	13.2	9
36	Translocation expands the scope of the large clostridial toxin family. *Trends in Biochemical Sciences*, **2021**, 46, 953-959	10.3	
35	Attenuated diphtheria toxin mediates siRNA delivery. *Science Advances*, **2020**, 6,	14.3	9
34	Intestinal bile acids directly modulate the structure and function of TcdB toxin. *Proceedings of the National Academy of Sciences of the United States of America*, **2020**, 117, 6792-6800	11.5	18
33	Recognition of Semaphorin Proteins by P.□sordellii Lethal Toxin Reveals Principles of Receptor Specificity in Clostridial Toxins. *Cell*, **2020**, 182, 345-356.e16	56.2	10
32	An engineered chimeric toxin that cleaves activated mutant and wild-type RAS inhibits tumor growth. *Proceedings of the National Academy of Sciences of the United States of America*, **2020**, 117, 16938-16948	11.5	8
31	bioPROTACs as versatile modulators of intracellular therapeutic targets including proliferating cell nuclear antigen (PCNA). *Proceedings of the National Academy of Sciences of the United States of America*, **2020**, 117, 5791-5800	11.5	26
30	Exploiting the diphtheria toxin internalization receptor enhances delivery of proteins to lysosomes for enzyme replacement therapy. *Science Advances*, **2020**, 6,	14.3	3
29	The C. difficile toxin B membrane translocation machinery is an evolutionarily conserved protein delivery apparatus. *Nature Communications*, **2020**, 11, 432	17.4	9
28	Drug Screen Identifies Leflunomide for Treatment of Inflammatory Bowel Disease Caused by TTC7A Deficiency. *Gastroenterology*, **2020**, 158, 1000-1015	13.3	16
27	The glucosyltransferase activity of C. difficile Toxin B is required for disease pathogenesis. *PLoS Pathogens*, **2020**, 16, e1008852	7.6	6
26	Dismantling a Toxin to Disarm a Superbug. *Trends in Pharmacological Sciences*, **2019**, 40, 155-156	13.2	
25	Identification of a diphtheria toxin-like gene family beyond the Corynebacterium genus. *FEBS Letters*, **2018**, 592, 2693-2705	3.8	10
24	Direct Detection of Membrane-Inserting Fragments Defines the Translocation Pores of a Family of Pathogenic Toxins. *Journal of Molecular Biology*, **2018**, 430, 3190-3199	6.5	4
23	A neutralizing antibody that blocks delivery of the enzymatic cargo of toxin TcdB into host cells. *Journal of Biological Chemistry*, **2018**, 293, 941-952	5.4	11
22	Host-targeted niclosamide inhibits C. difficile virulence and prevents disease in mice without disrupting the gut microbiota. *Nature Communications*, **2018**, 9, 5233	17.4	26

21	Intracellular Delivery of Human Purine Nucleoside Phosphorylase by Engineered Diphtheria Toxin Rescues Function in Target Cells. *Molecular Pharmaceutics*, **2018**, 15, 5217-5226	5.6	8
20	Repurposing bacterial toxins for intracellular delivery of therapeutic proteins. *Biochemical Pharmacology*, **2017**, 142, 13-20	6	30
19	Clostridium difficile toxins A and B: Receptors, pores, and translocation into cells. *Critical Reviews in Biochemistry and Molecular Biology*, **2017**, 52, 461-473	8.7	24
18	Functional defects in TcdB toxin uptake identify CSPG4 receptor-binding determinants. *Journal of Biological Chemistry*, **2017**, 292, 17290-17301	5.4	36
17	Exopolysaccharide biosynthetic glycoside hydrolases can be utilized to disrupt and prevent Pseudomonas aeruginosa biofilms. *Science Advances*, **2016**, 2, e1501632	14.3	119
16	Crystal structure of Clostridium difficile toxin A. *Nature Microbiology*, **2016**, 1, 15002	26.6	62
15	Defective mutations within the translocation domain of Clostridium difficile toxin B impair disease pathogenesis. *Pathogens and Disease*, **2016**, 74, ftv098	4.2	4
14	Comment on "A small-molecule antivirulence agent for treating Clostridium difficile infection". *Science Translational Medicine*, **2016**, 8, 370tc2	17.5	13
13	Efficient Delivery of Structurally Diverse Protein Cargo into Mammalian Cells by a Bacterial Toxin. *Molecular Pharmaceutics*, **2015**, 12, 2962-71	5.6	27
12	Small Molecules Take A Big Step Against Clostridium difficile. *Trends in Microbiology*, **2015**, 23, 746-748	12.4	5
11	Small molecule inhibitors of Clostridium difficile toxin B-induced cellular damage. *Chemistry and Biology*, **2015**, 22, 175-85		54
10	Translocation domain mutations affecting cellular toxicity identify the Clostridium difficile toxin B pore. *Proceedings of the National Academy of Sciences of the United States of America*, **2014**, 111, 3721-6	11.5	46
9	A loop network within the anthrax toxin pore positions the phenylalanine clamp in an active conformation. *Proceedings of the National Academy of Sciences of the United States of America*, **2006** , 103, 9802-7	11.5	49
8	Structural determinants for the binding of anthrax lethal factor to oligomeric protective antigen. *Journal of Biological Chemistry*, **2006**, 281, 1630-5	5.4	35
7	A phenylalanine clamp catalyzes protein translocation through the anthrax toxin pore. *Science*, **2005**, 309, 777-81	33.3	242
6	Structure of heptameric protective antigen bound to an anthrax toxin receptor: a role for receptor in pH-dependent pore formation. *Proceedings of the National Academy of Sciences of the United States of America*, **2004**, 101, 13147-51	11.5	184
5	The affinity of GXXXG motifs in transmembrane helix-helix interactions is modulated by long-range communication. *Journal of Biological Chemistry*, **2004**, 279, 16591-7	5.4	97
4	Polar residue tagging of transmembrane peptides. *Biopolymers*, **2003**, 71, 675-85	2.2	80

3	Transmembrane domain mediated self-assembly of major coat protein subunits from Ff bacteriophage. *Journal of Molecular Biology*, **2002**, 315, 63-72	6.5	62
2	Retention of native-like oligomerization states in transmembrane segment peptides: application to the Escherichia coli aspartate receptor. *Biochemistry*, **2001**, 40, 11106-13	3.2	87
1	Inhibition of tumor growth by a novel engineered chimeric toxin that cleaves activated mutant and wild-type RAS		1