Wesley C Van Voorhis

List of Publications by Citations

113 papers	3,683 citations	34 h-index	57 g-index
123 ext. papers	4,671 ext. citations	7.3 avg, IF	5.21 L-index

#	Paper	IF	Citations
113	Malaria medicines: a glass half full?. *Nature Reviews Drug Discovery*, **2015**, 14, 424-42	64.1	303
112	Malaria. *Nature Reviews Disease Primers*, **2017**, 3, 17050	51.1	250
111	SARS-CoV-2 immune evasion by the B.1.427/B.1.429 variant of concern. *Science*, **2021**, 373, 648-654	33.3	197
110	Open Source Drug Discovery with the Malaria Box Compound Collection for Neglected Diseases and Beyond. *PLoS Pathogens*, **2016**, 12, e1005763	7.6	167
109	Toxoplasma gondii calcium-dependent protein kinase 1 is a target for selective kinase inhibitors. *Nature Structural and Molecular Biology*, **2010**, 17, 602-7	17.6	144
108	Discovery of Potent and Selective Inhibitors of Calcium-Dependent Protein Kinase 1 (CDPK1) from C. parvum and T. gondii. *ACS Medicinal Chemistry Letters*, **2010**, 1, 331-335	4.3	110
107	Combining functional and structural genomics to sample the essential Burkholderia structome. *PLoS ONE*, **2013**, 8, e53851	3.7	93
106	Development of Toxoplasma gondii calcium-dependent protein kinase 1 (TgCDPK1) inhibitors with potent anti-toxoplasma activity. *Journal of Medicinal Chemistry*, **2012**, 55, 2416-26	8.3	88
105	Increasing the structural coverage of tuberculosis drug targets. *Tuberculosis*, **2015**, 95, 142-8	2.6	80
104	The tprK gene is heterogeneous among Treponema pallidum strains and has multiple alleles. *Infection and Immunity*, **2000**, 68, 824-31	3.7	75
103	Trypanosoma cruzi inactivation in human platelet concentrates and plasma by a psoralen (amotosalen HCl) and long-wavelength UV. *Antimicrobial Agents and Chemotherapy*, **2003**, 47, 475-9	5.9	71
102	Development of an Orally Available and Central Nervous System (CNS) Penetrant Toxoplasma gondii Calcium-Dependent Protein Kinase 1 (TgCDPK1) Inhibitor with Minimal Human Ether-a-go-go-Related Gene (hERG) Activity for the Treatment of Toxoplasmosis. *Journal of Medicinal Chemistry*, **2016**, 59, 6531-46	8.3	68
101	Immobilized metal-affinity chromatography protein-recovery screening is predictive of crystallographic structure success. *Acta Crystallographica Section F: Structural Biology Communications*, **2011**, 67, 998-1005		66
100	Molecular basis of immune evasion by the Delta and Kappa SARS-CoV-2 variants. *Science*, **2021**, eabl8506	33.3	65
99	High-throughput protein production and purification at the Seattle Structural Genomics Center for Infectious Disease. *Acta Crystallographica Section F: Structural Biology Communications*, **2011**, 67, 1010-4		62
98	Stabilizing additives added during cell lysis aid in the solubilization of recombinant proteins. *PLoS ONE*, **2012**, 7, e52482	3.7	57
97	Bumped kinase inhibitor 1294 treats established Toxoplasma gondii infection. *Antimicrobial Agents and Chemotherapy*, **2014**, 58, 3547-9	5.9	56

96	LYT1 protein is required for efficient in vitro infection by Trypanosoma cruzi. *Infection and Immunity* , **2001**, 69, 3916-23	3.7	50
95	Neospora caninum calcium-dependent protein kinase 1 is an effective drug target for neosporosis therapy. *PLoS ONE*, **2014**, 9, e92929	3.7	48
94	In Vitro and In Vivo Effects of the Bumped Kinase Inhibitor 1294 in the Related Cyst-Forming Apicomplexans Toxoplasma gondii and Neospora caninum. *Antimicrobial Agents and Chemotherapy*, **2015**, 59, 6361-74	5.9	47
93	Structural genomics of infectious disease drug targets: the SSGCID. *Acta Crystallographica Section F: Structural Biology Communications*, **2011**, 67, 979-84		47
92	Leishmania inactivation in human pheresis platelets by a psoralen (amotosalen HCl) and long-wavelength ultraviolet irradiation. *Transfusion*, **2005**, 45, 1459-63	2.9	46
91	Subfamily I Treponema pallidum repeat protein family: sequence variation and immunity. *Microbes and Infection*, **2004**, 6, 725-37	9.3	45
90	Multiple alleles of Treponema pallidum repeat gene D in Treponema pallidum isolates. *Journal of Bacteriology*, **2000**, 182, 2332-5	3.5	45
89	Development of potent and selective Plasmodium falciparum calcium-dependent protein kinase 4 (PfCDPK4) inhibitors that block the transmission of malaria to mosquitoes. *European Journal of Medicinal Chemistry*, **2014**, 74, 562-73	6.8	44
88	Novel Bumped Kinase Inhibitors Are Safe and Effective Therapeutics in the Calf Clinical Model for Cryptosporidiosis. *Journal of Infectious Diseases*, **2016**, 214, 1856-1864	7	43
87	Bumped-Kinase Inhibitors for Cryptosporidiosis Therapy. *Journal of Infectious Diseases*, **2017**, 215, 1275-1284	7	42
86	Potent and selective inhibitors of CDPK1 from and based on a 5-aminopyrazole-4-carboxamide scaffold. *ACS Medicinal Chemistry Letters*, **2014**, 5, 40-44	4.3	42
85	The gatekeeper residue and beyond: homologous calcium-dependent protein kinases as drug development targets for veterinarian Apicomplexa parasites. *Parasitology*, **2014**, 141, 1499-1509	2.7	40
84	Extended-spectrum antiprotozoal bumped kinase inhibitors: A review. *Experimental Parasitology*, **2017**, 180, 71-83	2.1	39
83	Virulence in Trypanosoma cruzi infection correlates with the expression of a distinct family of sialidase superfamily genes. *Molecular and Biochemical Parasitology*, **1999**, 98, 105-16	1.9	39
82	T-Cell responses to Treponema pallidum subsp. pallidum antigens during the course of experimental syphilis infection. *Infection and Immunity*, **1999**, 67, 4757-63	3.7	39
81	Benzoylbenzimidazole-based selective inhibitors targeting Cryptosporidium parvum and Toxoplasma gondii calcium-dependent protein kinase-1. *Bioorganic and Medicinal Chemistry Letters*, **2012**, 22, 5264-7	2.9	38
80	Function and protective capacity of Treponema pallidum subsp. pallidum glycerophosphodiester phosphodiesterase. *Infection and Immunity*, **1998**, 66, 5763-70	3.7	36
79	Necessity of Bumped Kinase Inhibitor Gastrointestinal Exposure in Treating Cryptosporidium Infection. *Journal of Infectious Diseases*, **2017**, 216, 55-63	7	34

78	Biochemical Screening of Five Protein Kinases from Plasmodium falciparum against 14,000 Cell-Active Compounds. *PLoS ONE*, **2016**, 11, e0149996	3.7	34
77	Elicitation of broadly protective sarbecovirus immunity by receptor-binding domain nanoparticle vaccines. *Cell*, **2021**, 184, 5432-5447.e16	56.2	34
76	Efficacy, pharmacokinetics, and metabolism of tetrahydroquinoline inhibitors of Plasmodium falciparum protein farnesyltransferase. *Antimicrobial Agents and Chemotherapy*, **2007**, 51, 3659-71	5.9	33
75	A Proposed Target Product Profile and Developmental Cascade for New Cryptosporidiosis Treatments. *PLoS Neglected Tropical Diseases*, **2015**, 9, e0003987	4.8	32
74	Structure determination of glycogen synthase kinase-3 from Leishmania major and comparative inhibitor structure-activity relationships with Trypanosoma brucei GSK-3. *Molecular and Biochemical Parasitology*, **2011**, 176, 98-108	1.9	32
73	Molecular basis of immune evasion by the delta and kappa SARS-CoV-2 variants **2021**,		31
72	Trypanosoma cruzi-infected macrophages are defective in major histocompatibility complex class II antigen presentation. *European Journal of Immunology*, **1997**, 27, 3085-94	6.1	30
71	The role of medical structural genomics in discovering new drugs for infectious diseases. *PLoS Computational Biology*, **2009**, 5, e1000530	5	29
70	Serodiagnosis of syphilis: antibodies to recombinant Tp0453, Tp92, and Gpd proteins are sensitive and specific indicators of infection by Treponema pallidum. *Journal of Clinical Microbiology*, **2003**, 41, 3668-74	9.7	29
69	Sequence conservation of glycerophosphodiester phosphodiesterase among Treponema pallidum strains. *Infection and Immunity*, **1999**, 67, 3168-70	3.7	29
68	Biochemical and Structural Characterization of Selective Allosteric Inhibitors of the Plasmodium falciparum Drug Target, Prolyl-tRNA-synthetase. *ACS Infectious Diseases*, **2017**, 3, 34-44	5.5	28
67	SAR Studies of 5-Aminopyrazole-4-carboxamide Analogues as Potent and Selective Inhibitors of CDPK1. *ACS Medicinal Chemistry Letters*, **2015**, 6, 1184-1189	4.3	27
66	Use of thermal melt curves to assess the quality of enzyme preparations. *Analytical Biochemistry*, **2010**, 399, 268-75	3.1	25
65	Reduced Activity of Mutant Calcium-Dependent Protein Kinase 1 Is Compensated in Plasmodium falciparum through the Action of Protein Kinase G. *MBio*, **2016**, 7,	7.8	25
64	Therapeutic Efficacy of Bumped Kinase Inhibitor 1369 in a Pig Model of Acute Diarrhea Caused by Cryptosporidium hominis. *Antimicrobial Agents and Chemotherapy*, **2018**, 62,	5.9	24
63	Resistance mutations at the lipid substrate binding site of Plasmodium falciparum protein farnesyltransferase. *Molecular and Biochemical Parasitology*, **2007**, 152, 66-71	1.9	24
62	Theileria equi isolates vary in susceptibility to imidocarb dipropionate but demonstrate uniform in vitro susceptibility to a bumped kinase inhibitor. *Parasites and Vectors*, **2015**, 8, 33	4	23
61	A Novel Calcium-Dependent Kinase Inhibitor, Bumped Kinase Inhibitor 1517, Cures Cryptosporidiosis in Immunosuppressed Mice. *Journal of Infectious Diseases*, **2016**, 214, 1850-1855	7	23

60	Advances in bumped kinase inhibitors for human and animal therapy for cryptosporidiosis. *International Journal for Parasitology*, **2017**, 47, 753-763	4.3	22
59	Profile of William C. Campbell, Satoshi Ōmura, and Youyou Tu, 2015 Nobel Laureates in Physiology or Medicine. *Proceedings of the National Academy of Sciences of the United States of America*, **2015**, 112, 15773-6	11.5	22
58	Optimization of Methionyl tRNA-Synthetase Inhibitors for Treatment of Infection. *Antimicrobial Agents and Chemotherapy*, **2019**, 63,	5.9	21
57	Bumped Kinase Inhibitors as therapy for apicomplexan parasitic diseases: lessons learned. *International Journal for Parasitology*, **2020**, 50, 413-422	4.3	21
56	Development of 5-Aminopyrazole-4-carboxamide-based Bumped-Kinase Inhibitors for Cryptosporidiosis Therapy. *Journal of Medicinal Chemistry*, **2019**, 62, 3135-3146	8.3	18
55	Safety and efficacy of the bumped kinase inhibitor BKI-1553 in pregnant sheep experimentally infected with Neospora caninum tachyzoites. *International Journal for Parasitology: Drugs and Drug Resistance*, **2018**, 8, 112-124	4	17
54	Selective inhibition of Sarcocystis neurona calcium-dependent protein kinase 1 for equine protozoal myeloencephalitis therapy. *International Journal for Parasitology*, **2016**, 46, 871-880	4.3	17
53	Optimization of Electrospray Ionization by Statistical Design of Experiments and Response Surface Methodology: Protein-Ligand Equilibrium Dissociation Constant Determinations. *Journal of the American Society for Mass Spectrometry*, **2016**, 27, 1520-30	3.5	17
52	Two Novel Calcium-Dependent Protein Kinase 1 Inhibitors Interfere with Vertical Transmission in Mice Infected with Neospora caninum Tachyzoites. *Antimicrobial Agents and Chemotherapy*, **2017**, 61,	5.9	16
51	Bumped kinase inhibitor prohibits egression in Babesia bovis. *Veterinary Parasitology*, **2016**, 215, 22-8	2.8	16
50	In vitro efficacy of bumped kinase inhibitors against Besnoitia besnoiti tachyzoites. *International Journal for Parasitology*, **2017**, 47, 811-821	4.3	16
49	5-Aminopyrazole-4-Carboxamide-Based Compounds Prevent the Growth of Cryptosporidium parvum. *Antimicrobial Agents and Chemotherapy*, **2017**, 61,	5.9	14
48	5-Aminopyrazole-4-carboxamide analogues are selective inhibitors of Plasmodium falciparum microgametocyte exflagellation and potential malaria transmission blocking agents. *Bioorganic and Medicinal Chemistry Letters*, **2016**, 26, 5487-5491	2.9	14
47	Treatment with Bumped Kinase Inhibitor 1294 Is Safe and Leads to Significant Protection against Abortion and Vertical Transmission in Sheep Experimentally Infected with Toxoplasma gondii during Pregnancy. *Antimicrobial Agents and Chemotherapy*, **2019**, 63,	5.9	13
46	Trypanosoma cruzi infection does not impair major histocompatibility complex class I presentation of antigen to cytotoxic T lymphocytes. *European Journal of Immunology*, **1997**, 27, 2541-8	6.1	13
45	Brucella melitensis Methionyl-tRNA-Synthetase (MetRS), a Potential Drug Target for Brucellosis. *PLoS ONE*, **2016**, 11, e0160350	3.7	13
44	Elicitation of broadly protective sarbecovirus immunity by receptor-binding domain nanoparticle vaccines **2021**,		12
43	Toxoplasma Calcium-Dependent Protein Kinase 1 Inhibitors: Probing Activity and Resistance Using Cellular Thermal Shift Assays. *Antimicrobial Agents and Chemotherapy*, **2018**, 62,	5.9	11

42	High-throughput screening of the ReFRAME, Pandemic Box, and COVID Box drug repurposing libraries against SARS-CoV-2 nsp15 endoribonuclease to identify small-molecule inhibitors of viral activity. *PLoS ONE*, **2021**, 16, e0250019	3.7	10
41	Enzymatic and Structural Characterization of the Glucokinase. *Antimicrobial Agents and Chemotherapy*, **2019**, 63,	5.9	10
40	In silico detection of SARS-CoV-2 specific B-cell epitopes and validation in ELISA for serological diagnosis of COVID-19. *Scientific Reports*, **2021**, 11, 4290	4.9	9
39	In Vitro Culture of Cryptosporidium parvum Using Hollow Fiber Bioreactor: Applications for Simultaneous Pharmacokinetic and Pharmacodynamic Evaluation of Test Compounds. *Methods in Molecular Biology*, **2020**, 2052, 335-350	1.4	8
38	Pharmacokinetics and In Vivo Efficacy of Pyrazolopyrimidine, Pyrrolopyrimidine, and 5-Aminopyrazole-4-Carboxamide Bumped Kinase Inhibitors against Toxoplasmosis. *Journal of Infectious Diseases*, **2019**, 219, 1464-1473	7	8
37	Bumped kinase inhibitor 1369 is effective against Cystoisospora suis in vivo and in vitro. *International Journal for Parasitology: Drugs and Drug Resistance*, **2019**, 10, 9-19	4	7
36	: Differential Proteome of Multinucleated Complexes Induced by the Bumped Kinase Inhibitor BKI-1294. *Microorganisms*, **2020**, 8,	4.9	7
35	Development of a target identification approach using native mass spectrometry. *Scientific Reports*, **2021**, 11, 2387	4.9	7
34	P-Glycoprotein-Mediated Efflux Reduces the In Vivo Efficacy of a Therapeutic Targeting the Gastrointestinal Parasite Cryptosporidium. *Journal of Infectious Diseases*, **2019**, 220, 1188-1198	7	6
33	: Structure and Fate of Multinucleated Complexes Induced by the Bumped Kinase Inhibitor BKI-1294. *Pathogens*, **2020**, 9,	4.5	6
32	Structures of glyceraldehyde 3-phosphate dehydrogenase in Neisseria gonorrhoeae and Chlamydia trachomatis. *Protein Science*, **2020**, 29, 768-778	6.3	6
31	Crystal structure and putative substrate identification for the Entamoeba histolytica low molecular weight tyrosine phosphatase. *Molecular and Biochemical Parasitology*, **2014**, 193, 33-44	1.9	6
30	SARS-CoV-2 spike conformation determines plasma neutralizing activity. **2021**,		6
29	Susceptibility Testing of Medically Important Parasites. *Clinical Microbiology Reviews*, **2017**, 30, 647-669	34	5
28	7 H-Pyrrolo[2,3- d]pyrimidin-4-amine-Based Inhibitors of Calcium-Dependent Protein Kinase 1 Have Distinct Inhibitory and Oral Pharmacokinetic Characteristics Compared with 1 H-Pyrazolo[3,4-d]pyrimidin-4-amine-Based Inhibitors. *ACS Infectious Diseases*, **2018**, 4, 516-522	5.5	5
27	Fragment screening of infectious disease targets in a structural genomics environment. *Methods in Enzymology*, **2011**, 493, 533-56	1.7	5
26	One health therapeutics: Target-Based drug development for cryptosporidiosis and other apicomplexa diseases. *Veterinary Parasitology*, **2021**, 289, 109336	2.8	5
25	Recombinant human G6PD for quality control and quality assurance of novel point-of-care diagnostics for G6PD deficiency. *PLoS ONE*, **2017**, 12, e0177885	3.7	4

24	In silico detection of SARS-CoV-2 specific B-cell epitopes and validation in ELISA for serological diagnosis of COVID-19		4
23	Naegleria fowleri: Protein structures to facilitate drug discovery for the deadly, pathogenic free-living amoeba. *PLoS ONE*, **2021**, 16, e0241738	3.7	4
22	Taming the Boys for Global Good: Contraceptive Strategy to Stop Malaria Transmission. *Molecules*, **2020**, 25,	4.8	3
21	In vitro growth inhibition of Theileria equi by bumped kinase inhibitors. *Veterinary Parasitology*, **2018**, 251, 90-94	2.8	3
20	An essential farnesylated kinesin in Trypanosoma brucei. *PLoS ONE*, **2011**, 6, e26508	3.7	3
19	In vitro activity, safety and in vivo efficacy of the novel bumped kinase inhibitor BKI-1748 in non-pregnant and pregnant mice experimentally infected with Neospora caninum tachyzoites and Toxoplasma gondii oocysts. *International Journal for Parasitology: Drugs and Drug Resistance*, **2021**, 16, 99-101	4	3
18	Emergence and phenotypic characterization of the global SARS-CoV-2 C.1.2 lineage.. *Nature Communications*, **2022**, 13, 1976	17.4	3
17	Structural changes in the SARS-CoV-2 spike E406W mutant escaping a clinical monoclonal antibody cocktail. **2022**,		2
16	Solution structure for an Encephalitozoon cuniculi adrenodoxin-like protein in the oxidized state. *Protein Science*, **2020**, 29, 809-817	6.3	2
15	Reduced treatment frequencies with bumped kinase inhibitor 1369 are effective against porcine cystoisosporosis. *International Journal for Parasitology: Drugs and Drug Resistance*, **2020**, 14, 37-45	4	2
14	Comparative assessment of the effects of bumped kinase inhibitors on early zebrafish embryo development and pregnancy in mice. *International Journal of Antimicrobial Agents*, **2020**, 56, 106099	14.3	2
13	Repurposing Infectious Disease Hits as Anti- Leads. *ACS Infectious Diseases*, **2021**, 7, 1275-1282	5.5	2
12	Toward a structome of Acinetobacter baumannii drug targets. *Protein Science*, **2020**, 29, 789-802	6.3	1
11	Structure and analysis of nucleoside diphosphate kinase from Borrelia burgdorferi prepared in a transition-state complex with ADP and vanadate moieties. *Acta Crystallographica Section F, Structural Biology Communications*, **2018**, 74, 373-384	1.1	1
10	The Bacterial Sec Pathway of Protein Export: Screening and Follow-Up. *Journal of Biomolecular Screening*, **2015**, 20, 921-6		1
9	Calcium-Dependent Protein Kinases of Apicomplexan Parasites as Drug Targets **2013**, 293-316		1
8	Pharmacokinetics and pharmacodynamics of clofazimine for treatment of cryptosporidiosis. *Antimicrobial Agents and Chemotherapy*, **2021**, AAC0156021	5.9	1
7	Naegleria fowleri: protein structures to facilitate drug discovery for the deadly, pathogenic free-living amoeba		1

6	Pyrrolopyrimidine Bumped Kinase Inhibitors for the Treatment of Cryptosporidiosis. *ACS Infectious Diseases*, **2021**, 7, 1200-1207	5.5	1
5	Endochin-like quinolones (ELQs) and bumped kinase inhibitors (BKIs): Synergistic and additive effects of combined treatments against Neospora caninum infection in vitro and in vivo. *International Journal for Parasitology: Drugs and Drug Resistance*, **2021**, 17, 92-106	4	1
4	High-throughput screening of the ReFRAME, Pandemic Box, and COVID Box drug repurposing libraries against SARS-CoV2 nsp15 endoribonuclease to identify small-molecule inhibitors of viral activity		1
3	A short-term treatment with BKI-1294 does not protect foetuses from sheep experimentally infected with Neospora caninum tachyzoites during pregnancy. *International Journal for Parasitology: Drugs and Drug Resistance*, **2021**, 17, 176-185	4	0
2	Seymour J. Klebanoff: Discoverer of WBC killing mechanisms. *Proceedings of the National Academy of Sciences of the United States of America*, **2016**, 113, 12891-12892	11.5	
1	Mycobacterium Cytidylate Kinase Appears to Be an Undruggable Target. *Journal of Biomolecular Screening*, **2016**, 21, 695-700		