Kate L Seib

List of Publications by Year
in descending order

93 papers	3,873 citations	109321 35 h-index	133252 59 g-index
95 all docs	95 docs citations	95 times ranked	3548 citing authors

#	Article	IF	Citations
1	Neisseria meningitidis is structured in clades associated with restriction modification systems that modulate homologous recombination. Proceedings of the National Academy of Sciences of the United States of America, 2011, 108, 4494-4499.	7.1	198
2	The Key Role of Genomics in Modern Vaccine and Drug Design for Emerging Infectious Diseases. PLoS Genetics, 2009, 5, e1000612.	3.5	184
3	Neisseria meningitidis GNA2132, a heparin-binding protein that induces protective immunity in humans. Proceedings of the National Academy of Sciences of the United States of America, 2010, 107, 3770-3775.	7.1	184
4	Phasevarions Mediate Random Switching of Gene Expression in Pathogenic Neisseria. PLoS Pathogens, 2009, 5, e1000400.	4.7	170
5	Developing vaccines in the era of genomics: a decade of reverse vaccinology. Clinical Microbiology and Infection, 2012, 18, 109-116.	6.0	161
6	Vaccinology in the genome era. Journal of Clinical Investigation, 2009, 119, 2515-2525.	8.2	132
7	Transcriptome Analysis of Neisseria meningitidis in Human Whole Blood and Mutagenesis Studies Identify Virulence Factors Involved in Blood Survival. PLoS Pathogens, 2011, 7, e1002027.	4.7	129
8	Defenses against Oxidative Stress in Neisseria gonorrhoeae : a System Tailored for a Challenging Environment. Microbiology and Molecular Biology Reviews, 2006, 70, 344-361.	6.6	128
9	Vaccines, Reverse Vaccinology, and Bacterial Pathogenesis. Cold Spring Harbor Perspectives in Medicine, 2013, 3, a012476-a012476.	6.2	119
10	Defenses against Oxidative Stress inNeisseria gonorrhoeaeandNeisseria meningitidis:Distinctive Systems for Different Lifestyles. Journal of Infectious Diseases, 2004, 190, 136-147.	4.0	113
11	The Serogroup B Meningococcal Vaccine Bexsero Elicits Antibodies to Neisseria gonorrhoeae. Clinical Infectious Diseases, 2019, 69, 1101-1111.	5.8	101
12	Factor H-Binding Protein Is Important for Meningococcal Survival in Human Whole Blood and Serum and in the Presence of the Antimicrobial Peptide LL-37. Infection and Immunity, 2009, 77, 292-299.	2.2	99
13	Is gonococcal disease preventable? The importance of understanding immunity and pathogenesis in vaccine development. Critical Reviews in Microbiology, 2016, 42, 928-941.	6.1	94
14	The RNA Chaperone Hfq Is Involved in Stress Response and Virulence in Neisseria meningitidis and Is a Pleiotropic Regulator of Protein Expression. Infection and Immunity, 2009, 77, 1842-1853.	2.2	84
15	Characterization of the OxyR regulon of Neisseria gonorrhoeae. Molecular Microbiology, 2007, 63, 54-68.	2.5	81
16	Pilin glycosylation in Neisseria meningitidis occurs by a similar pathway to wzy-dependent O-antigen biosynthesis in Escherichia coli. Biochemical and Biophysical Research Communications, 2006, 347, 904-908.	2.1	80
17	ModM DNA methyltransferase methylome analysis reveals a potential role for Moraxella catarrhalis phasevarions in otitis media. FASEB Journal, 2014, 28, 5197-5207.	0.5	73
18	The potential impact of vaccination on the prevalence of gonorrhea. Vaccine, 2015, 33, 4520-4525.	3.8	72

#	Article	IF	Citations
19	PerR controls Mn-dependent resistance to oxidative stress in Neisseria gonorrhoeae. Molecular Microbiology, 2006, 60, 401-416.	2.5	69
20	Characterization of Diverse Subvariants of the Meningococcal Factor H (fH) Binding Protein for Their Ability To Bind fH, To Mediate Serum Resistance, and To Induce Bactericidal Antibodies. Infection and Immunity, 2011, 79, 970-981.	2.2	64
21	Phasevarions of Bacterial Pathogens: Methylomics Sheds New Light on Old Enemies. Trends in Microbiology, 2018, 26, 715-726.	7.7	62
22	Neisseria meningitidisfactor H-binding protein fHbp: a key virulence factor and vaccine antigen. Expert Review of Vaccines, 2015, 14, 841-859.	4.4	59
23	Specificity of the ModA11, ModA12 and ModD1 epigenetic regulator N6-adenine DNA methyltransferases of Neisseria meningitidis. Nucleic Acids Research, 2015, 43, 4150-4162.	14.5	58
24	Phase-variable bacterial loci: how bacteria gamble to maximise fitness in changing environments. Biochemical Society Transactions, 2019, 47, 1131-1141.	3.4	57
25	SslE Elicits Functional Antibodies That Impair In Vitro Mucinase Activity and In Vivo Colonization by Both Intestinal and Extraintestinal Escherichia coli Strains. PLoS Pathogens, 2014, 10, e1004124.	4.7	54
26	OxyR tightly regulates catalase expression in Neisseria meningitidis through both repression and activation mechanisms. Molecular Microbiology, 2008, 70, 1152-1165.	2.5	51
27	Epigenetic Regulation of Virulence and Immunoevasion by Phase-Variable Restriction-Modification Systems in Bacterial Pathogens. Annual Review of Microbiology, 2020, 74, 655-671.	7.3	50
28	MetQ of Neisseria gonorrhoeae Is a Surface-Expressed Antigen That Elicits Bactericidal and Functional Blocking Antibodies. Infection and Immunity, 2017, 85, .	2.2	47
29	Gonococcal vaccines: Public health value and preferred product characteristics; report of a WHO global stakeholder consultation, January 2019. Vaccine, 2020, 38, 4362-4373.	3.8	46
30	Phase variable restrictionÃ¢Â€Â“modification systems inMoraxella catarrhalis. FEMS Immunology and Medical Microbiology, 2002, 32, 159-165.	2.7	44
31	A Sco homologue plays a role in defence against oxidative stress in pathogenicNeisseria. FEBS Letters, 2003, 546, 411-415.	2.8	44
32	A survey of Type III restriction-modification systems reveals numerous, novel epigenetic regulators controlling phase-variable regulons; phasevarions. Nucleic Acids Research, 2018, 46, 3532-3542.	14.5	43
33	Phasevarions of bacterial pathogens â€“ phase-variable epigenetic regulators evolving from restrictionâ€“modification systems. Microbiology (United Kingdom), 2019, 165, 917-928.	1.8	42
34	Azurin of Pathogenic Neisseria spp. Is Involved in Defense against Hydrogen Peroxide and Survival within Cervical Epithelial Cells. Infection and Immunity, 2005, 73, 8444-8448.	2.2	41
35	Phasevarions Mediate Epigenetic Regulation of Antimicrobial Susceptibility in Neisseria meningitidis. Antimicrobial Agents and Chemotherapy, 2014, 58, 4219-4221.	3.2	40
36	A novel epigenetic regulator associated with the hypervirulent Neisseria meningitidis clonal complex 41/44. FASEB Journal, 2011, 25, 3622-3633.	0.5	39

#	Article	IF	Citations
37	Manganese regulation of virulence factors and oxidative stress resistance in Neisseria gonorrhoeae. Journal of Proteomics, 2010, 73, 899-916.	2.4	38
38	The Capricious Nature of Bacterial Pathogens: Phasevarions and Vaccine Development. Frontiers in Immunology, 2016, 7, 586.	4.8	37
39	Investigation of Oxidative Stress Defenses of Neisseria gonorrhoeae by Using a Human Polymorphonuclear Leukocyte Survival Assay. Infection and Immunity, 2005, 73, 5269-5272.	2.2	33
40	Influence of serogroup B meningococcal vaccine antigens on growth and survival of the meningococcus in vitro and in ex vivo and in vivo models of infection. Vaccine, 2010, 28, 2416-2427.	3.8	33
41	Neisserial Heparin Binding Antigen (NHBA) Contributes to the Adhesion of Neisseria meningitidis to Human Epithelial Cells. PLoS ONE, 2016, 11, e0162878.	2.5	33
42	Virulence determinants of Moraxella catarrhalis: distribution and considerations for vaccine development. Microbiology (United Kingdom), 2017, 163, 1371-1384.	1.8	33
43	Distribution of the type III DNA methyltransferases modA, modB and modD among Neisseria meningitidis genotypes: implications for gene regulation and virulence. Scientific Reports, 2016, 6, 21015.	3.3	32
44	Escherichia coli: Great Diversity around a Common Core. MBio, 2012, 3, .	4.1	31
45	The glycointeractome of serogroup B Neisseria meningitidis strain MC58. Scientific Reports, 2017, 7, 5693.	3.3	30
46	The sweet side of the pathogenic Neisseria: the role of glycan interactions in colonisation and disease. Pathogens and Disease, 2017, 75, .	2.0	30
47	Phase variation of DNA methyltransferases and the regulation of virulence and immune evasion in the pathogenic Neisseria. Pathogens and Disease, 2017, 75, .	2.0	27
48	Looking beyond meningococcal B with the 4CMenB vaccine: the Neisseria effect. Npj Vaccines, 2021, 6, 130.	6.0	24
49	Neisseria gonorrhoeae vaccine development: hope on the horizon?. Current Opinion in Infectious Diseases, 2018, 31, 246-250.	3.1	23
50	Lectin Activity of the TcdA and TcdB Toxins of Clostridium difficile. Infection and Immunity, 2019, 87, .	2.2	20
51	Analysis of Invasive Nontypeable Haemophilus influenzae Isolates Reveals Selection for the Expression State of Particular Phase-Variable Lipooligosaccharide Biosynthetic Genes. Infection and Immunity, 2019, 87, .	2.2	20
52	A Gonococcal Vaccine Has the Potential to Rapidly Reduce the Incidence of Neisseria gonorrhoeae Infection Among Urban Men Who Have Sex With Men. Journal of Infectious Diseases, 2022, 225, 983-993.	4.0	20
53	The Neisseria gonorrhoeae Methionine Sulfoxide Reductase (MsrA/B) Is a Surface Exposed, Immunogenic, Vaccine Candidate. Frontiers in Immunology, 2019, 10, 137.	4.8	19
54	The Moraxella catarrhalis phase-variable DNA methyltransferase ModM3 is an epigenetic regulator that affects bacterial survival in an in vivo model of otitis media. BMC Microbiology, 2019, 19, 276.	3.3	19

#	Article	IF	Citations
55	The Factor H Binding Protein of Neisseria meningitidis Interacts with Xenosiderophores in Vitro. Biochemistry, 2012, 51, 9384-9393.	2.5	17
56	Glycointeractome of Neisseria gonorrhoeae: Identification of Host Glycans Targeted by the Gonococcus To Facilitate Adherence to Cervical and Urethral Epithelial Cells. MBio, 2019, 10, .	4.1	17
57	Nasal swab bacteriology by PCR during the first 24â€‰months of life: A prospective birth cohort study. Pediatric Pulmonology, 2019, 54, 289-296.	2.0	17
58	Moraxella catarrhalis Restriction-Modification Systems are Associated with Phylogenetic Lineage and Disease. Genome Biology and Evolution, 2018, 10, 2932-2946.	2.5	15
59	Moraxella catarrhalis NucM is an entry nuclease involved in extracellular DNA and RNA degradation, cell competence and biofilm scaffolding. Scientific Reports, 2019, 9, 2579.	3.3	15
60	The Neisseria gonorrhoeae Vaccine Candidate NHBA Elicits Antibodies That Are Bactericidal, Opsonophagocytic and That Reduce Gonococcal Adherence to Epithelial Cells. Vaccines, 2020, 8, 219.	4.4	14
61	Gonorrhoea vaccines: a step in the right direction. Lancet, The, 2017, 390, 1567-1569.	13.7	13
62	The Bexsero Neisseria meningitidis serogroup B vaccine antigen NHBA is a high-affinity chondroitin sulfate binding protein. Scientific Reports, 2018, 8, 6512.	3.3	12
63	Lectin activity of the pneumococcal pilin proteins. Scientific Reports, 2017, 7, 17784.	3.3	11
64	Role of the Gonococcal Neisserial Heparin Binding Antigen in Microcolony Formation, and Serum Resistance and Adherence to Epithelial Cells. Journal of Infectious Diseases, 2020, 221, 1612-1622.	4.0	11
65	Non-typeable Haemophilus influenzae isolates from patients with chronic obstructive pulmonary disease contain new phase-variable modA methyltransferase alleles controlling phasevarions. Scientific Reports, 2019, 9, 15963.	3.3	10
66	Intractable problems require novel solutions: it's time to get serious about developing a gonorrhoea vaccine. Sexually Transmitted Infections, 2016, 92, 561-562.	1.9	9
67	Lectin activity of Pseudomonas aeruginosa vaccine candidates PSE17-1, PSE41-5 and PSE54. Biochemical and Biophysical Research Communications, 2019, 513, 287-290.	2.1	9
68	Acclimation to Nutritional Immunity and Metal Intoxication Requires Zinc, Manganese, and Copper Homeostasis in the Pathogenic Neisseriae. Frontiers in Cellular and Infection Microbiology, 0, 12, .	3.9	9
69	Complete Genome Sequence of Moraxella catarrhalis Strain CCRI-195ME, Isolated from the Middle Ear. Genome Announcements, 2017, 5, .	0.8	8
70	Closed Complete Genome Sequences of Two Nontypeable Haemophilus influenzae Strains Containing Novel modA Alleles from the Sputum of Patients with Chronic Obstructive Pulmonary Disease. Microbiology Resource Announcements, 2018, 7, .	0.6	7
71	Selfâ€derived structureâ€disrupting peptides targeting methionine aminopeptidase in pathogenic bacteria: a new strategy to generate antimicrobial peptides. FASEB Journal, 2019, 33, 2095-2104.	0.5	7
72	Random Switching of the ModA11 Type III DNA Methyltransferase of Neisseria meningitidis Regulates Entnerâ€“Doudoroff Aldolase Expression by a Methylation Change in the eda Promoter Region. Journal of Molecular Biology, 2020, 432, 5835-5842.	4.2	7

#	Article	IF	Citations
73	The meningococcal vaccine antigen GNA2091 is an analogue of YraP and plays key roles in outer membrane stability and virulence. FASEB Journal, 2019, 33, 12324-12335.	0.5	6
74	Outer membrane vesicle vaccines for Neisseria gonorrhoeae. Nature Reviews Urology, 2021, , .	3.8	6
75	Assessment of Serum Bactericidal and Opsonophagocytic Activity of Antibodies to Gonococcal Vaccine Targets. Methods in Molecular Biology, 2022, 2414, 363-372.	0.9	6
76	Moraxella catarrhalis phase-variable loci show differences in expression during conditions relevant to disease. PLoS ONE, 2020, 15, e0234306.	2.5	5
77	Modelling the in-host dynamics ofNeisseria gonorrhoeaeinfection. Pathogens and Disease, 2019, 77, .	2.0	4
78	The Lst Sialyltransferase of Neisseria gonorrhoeae Can Transfer Keto-Deoxyoctanoate as the Terminal Sugar of Lipooligosaccharide: a Glyco-Achilles Heel That Provides a New Strategy for Vaccines to Prevent Gonorrhea. MBio, 2021, 12, .	4.1	4
79	Antimicrobial susceptibility and impact of macrolide antibiotics on Moraxella catarrhalis in the upper and lower airways of children with chronic endobronchial suppuration. Journal of Medical Microbiology, 2019, 68, 1140-1147.	1.8	4
80	Epigenetics of Infectious Diseases. , 2016, , 443-458.		3
81	Proteome of a Moraxella catarrhalis Strain under Iron-Restricted Conditions. Microbiology Resource Announcements, 2020, 9, .	0.6	3
82	Characterizing the meningococcal glycointeractome: what is new?. Future Microbiology, 2018, 13, 279-282.	2.0	2
83	Gonorrhoea: past, present and future. Microbiology Australia, 2020, 41, 205.	0.4	2
84	Self-Inhibitory Peptides Targeting the Neisseria gonorrhoeae MtrCDE Efflux Pump Increase Antibiotic Susceptibility. Antimicrobial Agents and Chemotherapy, 2022, 66, AAC0154221.	3.2	2
85	Transcriptome Sequencing Data Sets for Determining Gene Expression Changes Mediated by Phase-Variable DNA Methyltransferases in Nontypeable Haemophilus influenzae Strains Isolated from Patients with Chronic Obstructive Pulmonary Disease. Microbiology Resource Announcements, 2019, 8, .	0.6	1
86	Investigation of Whole Cell Meningococcal Glycan Interactions Using High Throughput Glycobiology Techniques: Glycan Array and Surface Plasmon Resonance. Methods in Molecular Biology, 2019, 1969, 113-121.	0.9	1
87	Screening DNA Repeat Tracts of Phase Variable Genes by Fragment Analysis. Methods in Molecular Biology, 2019, 1969, 93-104.	0.9	1
88	Design of New Vaccines in the Genomic and Post-genomic Era. , 2012, , 3-15.		1
89	P09.10â€…The potential impact of vaccination on the prevalence of gonorrhoea. Sexually Transmitted Infections, 2015, 91, A151.1-A151.	1.9	0
90	O13.3â€…Vaccine development to combat antimicrobial resistant gonorrhoea. , 2017, , .		0

#	Article	IF	Citations
91	S12.1â€...Progress towards a Gonorrhoea vaccine. , 2019, , .		0
92	Transcriptome RNA Sequencing Data Set of Gene Expression in Moraxella catarrhalis On- and Off-Phase Variants of the Type III DNA Methyltransferase ModM3. Microbiology Resource Announcements, 2020, 9, .	0.6	0
93	Science meets Parliament 2015. Microbiology Australia, 2015, 36, 141.	0.4	0