## Sebastian Duchene

# List of Publications by Year in Descending Order

Source: https://exaly.com/author-pdf/3766362/sebastian-duchene-publications-by-year.pdf

Version: 2024-04-27

This document has been generated based on the publications and citations recorded by exaly.com. For the latest version of this publication list, visit the link given above.

The third column is the impact factor (IF) of the journal, and the fourth column is the number of citations of the article.

96 papers

4,656 citations

34 h-index 67 g-index

121 ext. papers

7,005 ext. citations

8.9 avg, IF

5.93 L-index

#	Paper Paper	IF	Citations
96	Assessment of Coronavirus Disease 2019 Intervention Strategies in the Nordic Countries Using Genomic Epidemiology <i>Open Forum Infectious Diseases</i> , <b>2022</b> , 9, ofab665	1	
95	The emergence of SARS-CoV-2 variants of concern is driven by acceleration of the substitution rate <i>Molecular Biology and Evolution</i> , <b>2022</b> ,	8.3	8
94	The International Virus Bioinformatics Meeting 2022. Viruses, <b>2022</b> , 14, 973	6.2	O
93	The impact of public health interventions in the Nordic countries during the first year of SARS-CoV-2 transmission and evolution. <i>Eurosurveillance</i> , <b>2021</b> , 26,	19.8	3
92	Infectious disease phylodynamics with occurrence data. <i>Methods in Ecology and Evolution</i> , <b>2021</b> , 12, 149	98 <del>7</del> .1⁄50	7 1
91	Exploring the evolution and epidemiology of European CC1-MRSA-IV: tracking a multidrug-resistant community-associated meticillin-resistant clone. <i>Microbial Genomics</i> , <b>2021</b> , 7,	4.4	2
90	Evolutionary dynamics of multidrug resistant Salmonella enterica serovar 4,[5],12:i:- in Australia. <i>Nature Communications</i> , <b>2021</b> , 12, 4786	17.4	4
89	Genomics-informed responses in the elimination of COVID-19 in Victoria, Australia: an observational, genomic epidemiological study. <i>Lancet Public Health, The</i> , <b>2021</b> , 6, e547-e556	22.4	17
88	The first wave of the COVID-19 epidemic in Spain was associated with early introductions and fast spread of a dominating genetic variant. <i>Nature Genetics</i> , <b>2021</b> , 53, 1405-1414	36.3	12
87	Development of Phylodynamic Methods for Bacterial Pathogens. <i>Trends in Microbiology</i> , <b>2021</b> , 29, 788-	7 <b>97</b> .4	3
86	Multiple introductions of multidrug-resistant typhoid associated with acute infection and asymptomatic carriage, Kenya. <i>ELife</i> , <b>2021</b> , 10,	8.9	4
85	SNPPar: identifying convergent evolution and other homoplasies from microbial whole-genome alignments. <i>Microbial Genomics</i> , <b>2021</b> , 7,	4.4	2
84	Genomic Epidemiology of the First Wave of SARS-CoV-2 in Italy. Viruses, 2020, 12,	6.2	19
83	Genomic epidemiology reveals transmission patterns and dynamics of SARS-CoV-2 in Aotearoa New Zealand. <i>Nature Communications</i> , <b>2020</b> , 11, 6351	17.4	57
82	Dating the emergence of human pathogens. <i>Science</i> , <b>2020</b> , 368, 1310-1311	33.3	5
81	Estimating Evolutionary Rates and Timescales from Time-Stamped Data 2020, 157-174		1
80	Linking Branch Lengths across Sets of Loci Provides the Highest Statistical Support for Phylogenetic Inference. <i>Molecular Biology and Evolution</i> , <b>2020</b> , 37, 1202-1210	8.3	20

### (2018-2020)

79	Temporal signal and the phylodynamic threshold of SARS-CoV-2. Virus Evolution, 2020, 6, veaa061	3.7	147
78	The Recovery, Interpretation and Use of Ancient Pathogen Genomes. Current Biology, 2020, 30, R1215-	R& <u>2</u> 31	8
77	Bayesian Evaluation of Temporal Signal in Measurably Evolving Populations. <i>Molecular Biology and Evolution</i> , <b>2020</b> , 37, 3363-3379	8.3	27
76	Tracking the COVID-19 pandemic in Australia using genomics. <i>Nature Communications</i> , <b>2020</b> , 11, 4376	17.4	97
75	The molecular clock of Mycobacterium tuberculosis. <i>PLoS Pathogens</i> , <b>2019</b> , 15, e1008067	7.6	57
74	The Asian Lineage of Zika Virus: Transmission and Evolution in Asia and the Americas. <i>Virologica Sinica</i> , <b>2019</b> , 34, 1-8	6.4	21
73	Atlas of group A streptococcal vaccine candidates compiled using large-scale comparative genomics. <i>Nature Genetics</i> , <b>2019</b> , 51, 1035-1043	36.3	67
72	Genome Analysis of Coxsackievirus A4 Isolates From Hand, Foot, and Mouth Disease Cases in Shandong, China. <i>Frontiers in Microbiology</i> , <b>2019</b> , 10, 1001	5.7	7
71	Limited Sustained Local Transmission of HIV-1 CRF01_AE in New South Wales, Australia. <i>Viruses</i> , <b>2019</b> , 11,	6.2	3
70	Can Sequence Phylogenies Safely Infer the Origin of the Global Virome?. <i>MBio</i> , <b>2019</b> , 10,	7.8	21
69	Distinct evolutionary dynamics of horizontal gene transfer in drug resistant and virulent clones of Klebsiella pneumoniae. <i>PLoS Genetics</i> , <b>2019</b> , 15, e1008114	6	115
68	Tracing Ancient Human Migrations into Sahul Using Hepatitis B Virus Genomes. <i>Molecular Biology and Evolution</i> , <b>2019</b> , 36, 942-954	8.3	12
67	BEAST 2.5: An advanced software platform for Bayesian evolutionary analysis. <i>PLoS Computational Biology</i> , <b>2019</b> , 15, e1006650	5	1014
66	Phylodynamic Model Adequacy Using Posterior Predictive Simulations. <i>Systematic Biology</i> , <b>2019</b> , 68, 358-364	8.4	10
65	Evolutionary stasis of viruses?. <i>Nature Reviews Microbiology</i> , <b>2019</b> , 17, 329	22.2	4
64	Evolution and Global Transmission of a Multidrug-Resistant, Community-Associated Methicillin-Resistant Staphylococcus aureus Lineage from the Indian Subcontinent. <i>MBio</i> , <b>2019</b> , 10,	7.8	22
63	Estimating evolutionary rates in giant viruses using ancient genomes. Virus Evolution, 2018, 4, vey006	3.7	6
62	PhyloMAd: efficient assessment of phylogenomic model adequacy. <i>Bioinformatics</i> , <b>2018</b> , 34, 2300-2301	7.2	22

61	Understanding dengue virus evolution to support epidemic surveillance and counter-measure development. <i>Infection, Genetics and Evolution</i> , <b>2018</b> , 62, 279-295	4.5	29
60	Analysis of Phylogenomic Tree Space Resolves Relationships Among Marsupial Families. <i>Systematic Biology</i> , <b>2018</b> , 67, 400-412	8.4	50
59	Inferring demographic parameters in bacterial genomic data using Bayesian and hybrid phylogenetic methods. <i>BMC Evolutionary Biology</i> , <b>2018</b> , 18, 95	3	13
58	Population genomics of hypervirulent Klebsiella pneumoniae clonal-group 23 reveals early emergence and rapid global dissemination. <i>Nature Communications</i> , <b>2018</b> , 9, 2703	17.4	104
57	Pan-genome Analysis of Ancient and Modern Salmonella enterica Demonstrates Genomic Stability of the Invasive Para C Lineage for Millennia. <i>Current Biology</i> , <b>2018</b> , 28, 2420-2428.e10	6.3	44
56	Continental synchronicity of human influenza virus epidemics despite climatic variation. <i>PLoS Pathogens</i> , <b>2018</b> , 14, e1006780	7.6	21
55	The paradox of HBV evolution as revealed from a 16th century mummy. PLoS Pathogens, 2018, 14, e100	0 <del>6</del> 7650	53
54	Bayesian molecular dating: opening up the black box. <i>Biological Reviews</i> , <b>2018</b> , 93, 1165-1191	13.5	83
53	The phylogeography and incidence of multi-drug resistant typhoid fever in sub-Saharan Africa. <i>Nature Communications</i> , <b>2018</b> , 9, 5094	17.4	53
52	A comparison of methods for estimating substitution rates from ancient DNA sequence data. <i>BMC Evolutionary Biology</i> , <b>2018</b> , 18, 70	3	17
51	Differences in Performance among Test Statistics for Assessing Phylogenomic Model Adequacy. <i>Genome Biology and Evolution</i> , <b>2018</b> , 10, 1375-1388	3.9	9
50	Laboratory and molecular surveillance of paediatric typhoidal Salmonella in Nepal: Antimicrobial resistance and implications for vaccine policy. <i>PLoS Neglected Tropical Diseases</i> , <b>2018</b> , 12, e0006408	4.8	47
49	Neanderthal behaviour, diet, and disease inferred from ancient DNA in dental calculus. <i>Nature</i> , <b>2017</b> , 544, 357-361	50.4	263
48	New Statistical Criteria Detect Phylogenetic Bias Caused by Compositional Heterogeneity. <i>Molecular Biology and Evolution</i> , <b>2017</b> , 34, 1529-1534	8.3	26
47	Comparative analysis estimates the relative frequencies of co-divergence and cross-species transmission within viral families. <i>PLoS Pathogens</i> , <b>2017</b> , 13, e1006215	7.6	143
46	The impacts of drift and selection on genomic evolution in insects. <i>PeerJ</i> , <b>2017</b> , 5, e3241	3.1	3
45	Substitution Model Adequacy and Assessing the Reliability of Estimates of Virus Evolutionary Rates and Time Scales. <i>Molecular Biology and Evolution</i> , <b>2016</b> , 33, 255-67	8.3	19
44	Benign Rabbit Caliciviruses Exhibit Evolutionary Dynamics Similar to Those of Their Virulent Relatives. <i>Journal of Virology</i> , <b>2016</b> , 90, 9317-29	6.6	26

### (2015-2016)

Estimating evolutionary rates using time-structured data: a general comparison of phylogenetic methods. <i>Bioinformatics</i> , <b>2016</b> , 32, 3375-3379	7.2	20
Evolution, Expression, and Function of Nonneuronal Ligand-Gated Chloride Channels in Drosophila melanogaster. <i>G3: Genes, Genomes, Genetics</i> , <b>2016</b> , 6, 2003-12	3.2	8
Estimating the number and assignment of clock models in analyses of multigene datasets. <i>Bioinformatics</i> , <b>2016</b> , 32, 1281-5	7.2	10
Genome-scale rates of evolutionary change in bacteria. <i>Microbial Genomics</i> , <b>2016</b> , 2, e000094	4.4	135
Cross-validation to select Bayesian hierarchical models in phylogenetics. <i>BMC Evolutionary Biology</i> , <b>2016</b> , 16, 115	3	12
Large-Scale Phylogenomic Analysis Reveals the Complex Evolutionary History of Rabies Virus in Multiple Carnivore Hosts. <i>PLoS Pathogens</i> , <b>2016</b> , 12, e1006041	7.6	93
17 Century Variola Virus Reveals the Recent History of Smallpox. <i>Current Biology</i> , <b>2016</b> , 26, 3407-3412	6.3	118
Evaluating the Adequacy of Molecular Clock Models Using Posterior Predictive Simulations. <i>Molecular Biology and Evolution</i> , <b>2015</b> , 32, 2986-95	8.3	32
Mammalian genome evolution is governed by multiple pacemakers. <i>Bioinformatics</i> , <b>2015</b> , 31, 2061-5	7.2	13
Declining transition/transversion ratios through time reveal limitations to the accuracy of nucleotide substitution models. <i>BMC Evolutionary Biology</i> , <b>2015</b> , 15, 36	3	49
INSECT PHYLOGENOMICS. Comment on "Phylogenomics resolves the timing and pattern of insect evolution". <i>Science</i> , <b>2015</b> , 349, 487	33.3	56
Simulating and detecting autocorrelation of molecular evolutionary rates among lineages. <i>Molecular Ecology Resources</i> , <b>2015</b> , 15, 688-96	8.4	60
Phylogenetic uncertainty can bias the number of evolutionary transitions estimated from ancestral state reconstruction methods. <i>Journal of Experimental Zoology Part B: Molecular and Developmental Evolution</i> , <b>2015</b> , 324, 517-24	1.8	26
Tree imbalance causes a bias in phylogenetic estimation of evolutionary timescales using heterochronous sequences. <i>Molecular Ecology Resources</i> , <b>2015</b> , 15, 785-94	8.4	25
Geographic and temporal dynamics of a global radiation and diversification in the killer whale. <i>Molecular Ecology</i> , <b>2015</b> , 24, 3964-79	5.7	54
The Performance of the Date-Randomization Test in Phylogenetic Analyses of Time-Structured Virus Data. <i>Molecular Biology and Evolution</i> , <b>2015</b> , 32, 1895-906	8.3	117
Time-dependent estimates of molecular evolutionary rates: evidence and causes. <i>Molecular Ecology</i> , <b>2015</b> , 24, 6007-12	5.7	39
Initial Evidence for Adaptive Selection on the NADH Subunit Two of Freshwater Dolphins by Analyses of Mitochondrial Genomes. <i>PLoS ONE</i> , <b>2015</b> , 10, e0123543	3.7	22
	methods. <i>Bioinformatics</i> , <b>2016</b> , 32, 3375-3379  Evolution, Expression, and Function of Nonneuronal Ligand-Gated Chloride Channels in Drosophila melanogaster. <i>G3: Genes, Genomes, Genetics</i> , <b>2016</b> , 6, 2003-12  Estimating the number and assignment of clock models in analyses of multigene datasets. <i>Bioinformatics</i> , <b>2016</b> , 32, 1281-5  Genome-scale rates of evolutionary change in bacteria. <i>Microbial Genomics</i> , <b>2016</b> , 2, e000094  Cross-validation to select Bayesian hierarchical models in phylogenetics. <i>BMC Evolutionary Biology</i> , <b>2016</b> , 16, 115  Large-Scale Phylogenomic Analysis Reveals the Complex Evolutionary History of Rabies Virus in Multiple Carnivore Hosts. <i>PLoS Pathogens</i> , <b>2016</b> , 12, e1006041  17 Century Variola Virus Reveals the Recent History of Smallpox. <i>Current Biology</i> , <b>2016</b> , 26, 3407-3412  Evaluating the Adequacy of Molecular Clock Models Using Posterior Predictive Simulations. <i>Molecular Biology and Evolution</i> , <b>2015</b> , 32, 2986-95  Mammalian genome evolution is governed by multiple pacemakers. <i>Bioinformatics</i> , <b>2015</b> , 31, 2061-5  Declining transition/transversion ratios through time reveal limitations to the accuracy of nucleotide substitution models. <i>BMC Evolutionary Biology</i> , <b>2015</b> , 15, 36  INSECT PHYLOGENOMICS. Comment on "Phylogenomics resolves the timing and pattern of insect evolution." <i>Science</i> , <b>2015</b> , 349, 487  Simulating and detecting autocorrelation of molecular evolutionary rates among lineages. <i>Molecular Ecology Resources</i> , <b>2015</b> , 15, 688-96  Phylogenetic uncertainty can bias the number of evolutionary transitions estimated from ancestral state reconstruction methods. <i>Journal of Experimental Zoology Part B: Molecular and Developmental Evolution</i> , <b>2015</b> , 24, 517-24  Tree imbalance causes a bias in phylogenetic estimation of evolutionary timescales using heterochronous sequences. <i>Molecular Ecology Resources</i> , <b>2015</b> , 15, 785-94  Geographic and temporal dynamics of a global radiation and diversification in the killer whale. <i>Molecular Biology and Evolution</i> , <b>2015</b> , 32, 1	Evolution, Expression, and Function of Nonneuronal Ligand-Gated Chloride Channels in Drosophila melanogaster. <i>G3: Genes, Genomes, Genetics</i> , 2016, 6, 2003-12  Estimating the number and assignment of clock models in analyses of multigene datasets.   John Milliam Politics, 2016, 32, 1281-5  Genome-scale rates of evolutionary change in bacteria. <i>Microbial Genomics</i> , 2016, 2, e000094  44  Cross-validation to select Bayesian hierarchical models in phylogenetics. <i>BMC Evolutionary Biology</i> , 2016, 16, 115  Large-Scale Phylogenomic Analysis Reveals the Complex Evolutionary History of Rabies Virus in Multiple Carnivore Hosts. <i>PLoS Pathogens</i> , 2016, 12, e1006041  17 Century Variola Virus Reveals the Recent History of Smallpox. <i>Current Biology</i> , 2016, 26, 3407-3412  63  Evaluating the Adequacy of Molecular Clock Models Using Posterior Predictive Simulations. <i>Molecular Biology and Evolution</i> , 2015, 32, 2986-95  Mammalian genome evolution is governed by multiple pacemakers. <i>Bioinformatics</i> , 2015, 31, 2061-5  7.2  Declining transition/transversion ratios through time reveal limitations to the accuracy of nucleotide substitution models. <i>BMC Evolutionary Biology</i> , 2015, 15, 36  INSECT PHYLOGENOMICS. Comment on "Phylogenomics resolves the timing and pattern of insect evolution". <i>Science</i> , 2015, 349, 487  Simulating and detecting autocorrelation of molecular evolutionary transitions estimated from ancestral state reconstruction methods. <i>Journal of Experimental Zoology Part B: Molecular and Developmental Evolution</i> , 2015, 324, 517-24  Tree imbalance causes a bias in phylogenetic estimation of evolutionary timescales using heterochronous sequences. <i>Molecular Ecology Resources</i> , 2015, 15, 785-94  Geographic and temporal dynamics of a global radiation and diversification in the killer whale. <i>Molecular Ecology</i> , 2015, 24, 3964-79  The Performance of the Date-Randomization Test in Phylogenetic Analyses of Time-Structured Virus Data. <i>Molecular Biology and Evolution</i> , 2015, 32, 1895-996  Time-dependent estimates of molecula

25	ClockstaR: choosing the number of relaxed-clock models in molecular phylogenetic analysis. <i>Bioinformatics</i> , <b>2014</b> , 30, 1017-9	7.2	44
24	Analyses of evolutionary dynamics in viruses are hindered by a time-dependent bias in rate estimates. <i>Proceedings of the Royal Society B: Biological Sciences</i> , <b>2014</b> , 281,	4.4	129
23	Molecular-clock methods for estimating evolutionary rates and timescales. <i>Molecular Ecology</i> , <b>2014</b> , 23, 5947-65	5.7	187
22	Using multiple relaxed-clock models to estimate evolutionary timescales from DNA sequence data. <i>Molecular Phylogenetics and Evolution</i> , <b>2014</b> , 77, 65-70	4.1	25
21	The impact of calibration and clock-model choice on molecular estimates of divergence times. <i>Molecular Phylogenetics and Evolution</i> , <b>2014</b> , 78, 277-89	4.1	108
20	The temporal evolution and global spread of Cauliflower mosaic virus, a plant pararetrovirus. <i>PLoS ONE</i> , <b>2014</b> , 9, e85641	3.7	38
19	Turnip mosaic potyvirus probably first spread to Eurasian brassica crops from wild orchids about 1000 years ago. <i>PLoS ONE</i> , <b>2013</b> , 8, e55336	3.7	64
18	Phylogeography, genetic diversity and population structure of common bottlenose dolphins in the Wider Caribbean inferred from analyses of mitochondrial DNA control region sequences and microsatellite loci: conservation and management implications. <i>Animal Conservation</i> , <b>2012</b> , 15, 95-112	3.2	21
17	Marine turtle mitogenome phylogenetics and evolution. <i>Molecular Phylogenetics and Evolution</i> , <b>2012</b> , 65, 241-50	4.1	64
16	Phylogeography and sex-biased dispersal across riverine manatee populations (Trichechus inunguis and Trichechus manatus) in South America. <i>PLoS ONE</i> , <b>2012</b> , 7, e52468	3.7	16
15	Mitogenome phylogenetics: the impact of using single regions and partitioning schemes on topology, substitution rate and divergence time estimation. <i>PLoS ONE</i> , <b>2011</b> , 6, e27138	3.7	89
14	Linking Branch Lengths Across Loci Provides the Best Fit for Phylogenetic Inference		2
13	Genome-scale rates of evolutionary change in bacteria		2
12	Millennia of genomic stability within the invasive Para C Lineage ofSalmonella enterica		9
11	Direct RNA sequencing and early evolution of SARS-CoV-2		61
10	Temporal signal and the phylodynamic threshold of SARS-CoV-2		24
9	SNPPar: identifying convergent evolution and other homoplasies from microbial whole-genome alignm	ents	6
8	Genomic epidemiology reveals transmission patterns and dynamics of SARS-CoV-2 in Aotearoa New Zea	aland	8

#### LIST OF PUBLICATIONS

7	The first wave of the Spanish COVID-19 epidemic was associated with early introductions and fast spread of a dominating genetic variant	2
6	Evolution and global transmission of a multidrug-resistant, community-associated MRSA lineage from the Indian subcontinent	1
5	Laboratory and Molecular Surveillance of Paediatric Typhoidal Salmonella in Nepal: Antimicrobial Resistance and Implications for Vaccine Policy	1
4	BEAST 2.5: An Advanced Software Platform for Bayesian Evolutionary Analysis	12
3	Bayesian Evaluation of Temporal Signal in Measurably Evolving Populations	9
2	Multiple introductions of multidrug-resistant typhoid associated with acute infection and asymptomatic carriage, Kenya	1
1	The emergence of SARS-CoV-2 variants of concern is driven by acceleration of the evolutionary rate	5