Bryan R Cullen

List of Publications by Citations

135 papers	22,379 citations	69 h-index	147 g-index
147 ext. papers	24,015 ext. citations	14.2 avg, IF	7.34 L-index

#	Paper	IF	Citations
135	Exportin-5 mediates the nuclear export of pre-microRNAs and short hairpin RNAs. *Genes and Development*, **2003**, 17, 3011-6	12.6	2037
134	Human microRNAs are processed from capped, polyadenylated transcripts that can also function as mRNAs. *Rna*, **2004**, 10, 1957-66	5.8	1312
133	The HIV-1 rev trans-activator acts through a structured target sequence to activate nuclear export of unspliced viral mRNA. *Nature*, **1989**, 338, 254-7	50.4	1111
132	Use of eukaryotic expression technology in the functional analysis of cloned genes. *Methods in Enzymology*, **1987**, 152, 684-704	1.7	746
131	MicroRNAs and small interfering RNAs can inhibit mRNA expression by similar mechanisms. *Proceedings of the National Academy of Sciences of the United States of America*, **2003**, 100, 9779-84	11.5	725
130	Both natural and designed micro RNAs can inhibit the expression of cognate mRNAs when expressed in human cells. *Molecular Cell*, **2002**, 9, 1327-33	17.6	713
129	Functional dissection of the HIV-1 Rev trans-activator--derivation of a trans-dominant repressor of Rev function. *Cell*, **1989**, 58, 205-14	56.2	684
128	Transcription and processing of human microRNA precursors. *Molecular Cell*, **2004**, 16, 861-5	17.6	631
127	MicroRNAs expressed by herpes simplex virus 1 during latent infection regulate viral mRNAs. *Nature*, **2008**, 454, 780-3	50.4	525
126	Viruses, microRNAs, and host interactions. *Annual Review of Microbiology*, **2010**, 64, 123-41	17.5	512
125	Kaposi's sarcoma-associated herpesvirus expresses an array of viral microRNAs in latently infected cells. *Proceedings of the National Academy of Sciences of the United States of America*, **2005**, 102, 5570-5	11.5	503
124	A viral microRNA functions as an orthologue of cellular miR-155. *Nature*, **2007**, 450, 1096-9	50.4	498
123	Recognition and cleavage of primary microRNA precursors by the nuclear processing enzyme Drosha. *EMBO Journal*, **2005**, 24, 138-48	13	440
122	Epstein-Barr virus microRNAs are evolutionarily conserved and differentially expressed. *PLoS Pathogens*, **2006**, 2, e23	7.6	439
121	A second human antiretroviral factor, APOBEC3F, is suppressed by the HIV-1 and HIV-2 Vif proteins. *EMBO Journal*, **2004**, 23, 2451-8	13	406
120	Transcriptional interference in avian retroviruses--implications for the promoter insertion model of leukaemogenesis. *Nature*, **1984**, 307, 241-5	50.4	364
119	Immunodeficiency virus rev trans-activator modulates the expression of the viral regulatory genes. *Nature*, **1988**, 335, 181-3	50.4	360

118	Viral and cellular microRNAs as determinants of viral pathogenesis and immunity. *Cell Host and Microbe*, **2008**, 3, 375-87	23.4	343
117	Viruses and microRNAs. *Nature Genetics*, **2006**, 38 Suppl, S25-30	36.3	331
116	The role of RNAi and microRNAs in animal virus replication and antiviral immunity. *Genes and Development*, **2009**, 23, 1151-64	12.6	307
115	Cellular inhibitors of long interspersed element 1 and Alu retrotransposition. *Proceedings of the National Academy of Sciences of the United States of America*, **2006**, 103, 8780-5	11.5	303
114	Adenovirus VA1 noncoding RNA can inhibit small interfering RNA and MicroRNA biogenesis. *Journal of Virology*, **2004**, 78, 12868-76	6.6	299
113	The viral and cellular microRNA targetome in lymphoblastoid cell lines. *PLoS Pathogens*, **2012**, 8, e1002484	7.6	270
112	A single amino acid difference in the host APOBEC3G protein controls the primate species specificity of HIV type 1 virion infectivity factor. *Proceedings of the National Academy of Sciences of the United States of America*, **2004**, 101, 3770-4	11.5	263
111	Viral microRNA targetome of KSHV-infected primary effusion lymphoma cell lines. *Cell Host and Microbe*, **2011**, 10, 515-26	23.4	252
110	Nuclear mRNA export: insights from virology. *Trends in Biochemical Sciences*, **2003**, 28, 419-24	10.3	236
109	Role and mechanism of action of the APOBEC3 family of antiretroviral resistance factors. *Journal of Virology*, **2006**, 80, 1067-76	6.6	224
108	APOBEC3A and APOBEC3B are potent inhibitors of LTR-retrotransposon function in human cells. *Nucleic Acids Research*, **2006**, 34, 89-95	20.1	220
107	The HIV-1 Tat protein: an RNA sequence-specific processivity factor?. *Cell*, **1990**, 63, 655-7	56.2	219
106	Viral and cellular messenger RNA targets of viral microRNAs. *Nature*, **2009**, 457, 421-5	50.4	218
105	Regulation of HIV-1 gene expression. *FASEB Journal*, **1991**, 5, 2361-8	0.9	199
104	Posttranscriptional m(6)A Editing of HIV-1 mRNAs Enhances Viral Gene Expression. *Cell Host and Microbe*, **2016**, 19, 675-85	23.4	198
103	Functional replacement of the HIV-1 rev protein by the HTLV-1 rex protein. *Nature*, **1988**, 335, 738-40	50.4	196
102	Inactivation of the human papillomavirus E6 or E7 gene in cervical carcinoma cells by using a bacterial CRISPR/Cas RNA-guided endonuclease. *Journal of Virology*, **2014**, 88, 11965-72	6.6	193
101	Human APOBEC3B is a potent inhibitor of HIV-1 infectivity and is resistant to HIV-1 Vif. *Virology*, **2005**, 339, 281-8	3.6	192

100	Characterization of Staphylococcus aureus Cas9: a smaller Cas9 for all-in-one adeno-associated virus delivery and paired nickase applications. *Genome Biology*, **2015**, 16, 257	18.3	179
99	MicroRNAs as mediators of viral evasion of the immune system. *Nature Immunology*, **2013**, 14, 205-10	19.1	179
98	Nuclear RNA export. *Journal of Cell Science*, **2003**, 116, 587-97	5.3	170
97	A mammalian herpesvirus uses noncanonical expression and processing mechanisms to generate viral MicroRNAs. *Molecular Cell*, **2010**, 37, 135-42	17.6	169
96	Suppression of hepatitis B virus DNA accumulation in chronically infected cells using a bacterial CRISPR/Cas RNA-guided DNA endonuclease. *Virology*, **2015**, 476, 196-205	3.6	168
95	Viruses and microRNAs: RISCy interactions with serious consequences. *Genes and Development*, **2011**, 25, 1881-94	12.6	160
94	Virally induced cellular microRNA miR-155 plays a key role in B-cell immortalization by Epstein-Barr virus. *Journal of Virology*, **2010**, 84, 11670-8	6.6	156
93	Enhancing and confirming the specificity of RNAi experiments. *Nature Methods*, **2006**, 3, 677-81	21.6	148
92	A human herpesvirus microRNA inhibits p21 expression and attenuates p21-mediated cell cycle arrest. *Journal of Virology*, **2010**, 84, 5229-37	6.6	146
91	Analysis of the interaction of primate retroviruses with the human RNA interference machinery. *Journal of Virology*, **2007**, 81, 12218-26	6.6	144
90	Analysis of human alphaherpesvirus microRNA expression in latently infected human trigeminal ganglia. *Journal of Virology*, **2009**, 83, 10677-83	6.6	137
89	Is RNA interference involved in intrinsic antiviral immunity in mammals?. *Nature Immunology*, **2006**, 7, 563-7	19.1	137
88	Analysis of the stimulatory effect of splicing on mRNA production and utilization in mammalian cells. *Rna*, **2003**, 9, 618-30	5.8	137
87	Inhibition of a yeast LTR retrotransposon by human APOBEC3 cytidine deaminases. *Current Biology*, **2005**, 15, 661-6	6.3	131
86	A viral microRNA cluster strongly potentiates the transforming properties of a human herpesvirus. *PLoS Pathogens*, **2011**, 7, e1001294	7.6	126
85	Inhibition of human immunodeficiency virus type 1 replication in primary macrophages by using Tat- or CCR5-specific small interfering RNAs expressed from a lentivirus vector. *Journal of Virology*, **2003**, 77, 11964-72	6.6	125
84	A novel assay for viral microRNA function identifies a single nucleotide polymorphism that affects Drosha processing. *Journal of Virology*, **2006**, 80, 5321-6	6.6	122
83	In-depth analysis of Kaposi's sarcoma-associated herpesvirus microRNA expression provides insights into the mammalian microRNA-processing machinery. *Journal of Virology*, **2010**, 84, 695-703	6.6	121

82	Replication of many human viruses is refractory to inhibition by endogenous cellular microRNAs. *Journal of Virology*, **2014**, 88, 8065-76	6.6	112
81	In-depth analysis of the interaction of HIV-1 with cellular microRNA biogenesis and effector mechanisms. *MBio*, **2013**, 4, e000193	7.8	109
80	RNA interference: antiviral defense and genetic tool. *Nature Immunology*, **2002**, 3, 597-9	19.1	108
79	MicroRNA-17~92 plays a causative role in lymphomagenesis by coordinating multiple oncogenic pathways. *EMBO Journal*, **2013**, 32, 2377-91	13	106
78	A neuron-specific host microRNA targets herpes simplex virus-1 ICP0 expression and promotes latency. *Cell Host and Microbe*, **2014**, 15, 446-56	23.4	102
77	Epitranscriptomic Enhancement of Influenza A Virus Gene Expression and Replication. *Cell Host and Microbe*, **2017**, 22, 377-386.e5	23.4	102
76	Is RNA interference a physiologically relevant innate antiviral immune response in mammals?. *Cell Host and Microbe*, **2013**, 14, 374-8	23.4	96
75	Functions of the auxiliary gene products of the human immunodeficiency virus type 1. *Virology*, **1990**, 178, 1-5	3.6	95
74	Differential RISC association of endogenous human microRNAs predicts their inhibitory potential. *Nucleic Acids Research*, **2014**, 42, 4629-39	20.1	92
73	EBV BART MicroRNAs Target Multiple Pro-apoptotic Cellular Genes to Promote Epithelial Cell Survival. *PLoS Pathogens*, **2015**, 11, e1004979	7.6	86
72	Molecular basis for cell tropism of CXCR4-dependent human immunodeficiency virus type 1 isolates. *Journal of Virology*, **2001**, 75, 6776-85	6.6	83
71	Addition of m6A to SV40 late mRNAs enhances viral structural gene expression and replication. *PLoS Pathogens*, **2018**, 14, e1006919	7.6	80
70	The members of an Epstein-Barr virus microRNA cluster cooperate to transform B lymphocytes. *Journal of Virology*, **2011**, 85, 9801-10	6.6	79
69	Mutational inactivation of herpes simplex virus 1 microRNAs identifies viral mRNA targets and reveals phenotypic effects in culture. *Journal of Virology*, **2013**, 87, 6589-603	6.6	77
68	Derivation and characterization of Dicer- and microRNA-deficient human cells. *Rna*, **2014**, 20, 923-37	5.8	75
67	Derivation and function of small interfering RNAs and microRNAs. *Virus Research*, **2004**, 102, 3-9	6.4	71
66	Epitranscriptomic Addition of mC to HIV-1 Transcripts Regulates Viral Gene Expression. *Cell Host and Microbe*, **2019**, 26, 217-227.e6	23.4	69
65	Five questions about viruses and microRNAs. *PLoS Pathogens*, **2010**, 6, e1000787	7.6	68

64	Influenza A virus expresses high levels of an unusual class of small viral leader RNAs in infected cells. *MBio*, **2010**, 1,	7.8	67
63	Targeting hepatitis B virus cccDNA using CRISPR/Cas9. *Antiviral Research*, **2015**, 123, 188-92	10.8	66
62	Induction of stable RNA interference in mammalian cells. *Gene Therapy*, **2006**, 13, 503-8	4	62
61	Cloning and analysis of microRNAs encoded by the primate gamma-herpesvirus rhesus monkey rhadinovirus. *Virology*, **2007**, 364, 21-7	3.6	61
60	Identification of viral microRNAs expressed in human sacral ganglia latently infected with herpes simplex virus 2. *Journal of Virology*, **2010**, 84, 1189-92	6.6	59
59	Human papillomavirus genotype 31 does not express detectable microRNA levels during latent or productive virus replication. *Journal of Virology*, **2006**, 80, 10890-3	6.6	57
58	EBV Noncoding RNAs. *Current Topics in Microbiology and Immunology*, **2015**, 391, 181-217	3.3	56
57	Production of functional small interfering RNAs by an amino-terminal deletion mutant of human Dicer. *Proceedings of the National Academy of Sciences of the United States of America*, **2015**, 112, E6945-54	11.5	55
56	Viral Epitranscriptomics. *Journal of Virology*, **2017**, 91,	6.6	54
55	Search for microRNAs expressed by intracellular bacterial pathogens in infected mammalian cells. *PLoS ONE*, **2014**, 9, e106434	3.7	47
54	MicroRNA target site identification by integrating sequence and binding information. *Nature Methods*, **2013**, 10, 630-3	21.6	46
53	Herpesvirus microRNAs: phenotypes and functions. *Current Opinion in Virology*, **2011**, 1, 211-5	7.5	46
52	Bacterial CRISPR/Cas DNA endonucleases: A revolutionary technology that could dramatically impact viral research and treatment. *Virology*, **2015**, 479-480, 213-20	3.6	44
51	Identification of novel, highly expressed retroviral microRNAs in cells infected by bovine foamy virus. *Journal of Virology*, **2014**, 88, 4679-86	6.6	44
50	Evolutionary conservation of primate lymphocryptovirus microRNA targets. *Journal of Virology*, **2014**, 88, 1617-35	6.6	43
49	Expression of CRISPR/Cas single guide RNAs using small tRNA promoters. *Rna*, **2015**, 21, 1683-9	5.8	42
48	A cluster of virus-encoded microRNAs accelerates acute systemic Epstein-Barr virus infection but does not significantly enhance virus-induced oncogenesis in vivo. *Journal of Virology*, **2013**, 87, 5437-46	6.6	39
47	How do viruses avoid inhibition by endogenous cellular microRNAs?. *PLoS Pathogens*, **2013**, 9, e1003694	7.6	38

46	Does the human immunodeficiency virus Tat trans-activator contain a discrete activation domain?. *Virology*, **1990**, 178, 560-7	3.6	38
45	Epigenetic and epitranscriptomic regulation of viral replication. *Nature Reviews Microbiology*, **2020**, 18, 559-570	22.2	37
44	Analysis of rhesus rhadinovirus microRNAs expressed in virus-induced tumors from infected rhesus macaques. *Virology*, **2010**, 405, 592-9	3.6	36
43	Specific induction of endogenous viral restriction factors using CRISPR/Cas-derived transcriptional activators. *Proceedings of the National Academy of Sciences of the United States of America*, **2015**, 112, E7249-56	11.5	33
42	Viral RNAs: lessons from the enemy. *Cell*, **2009**, 136, 592-7	56.2	31
41	Extensive Epitranscriptomic Methylation of A and C Residues on Murine Leukemia Virus Transcripts Enhances Viral Gene Expression. *MBio*, **2019**, 10,	7.8	30
40	Viruses and RNA interference: issues and controversies. *Journal of Virology*, **2014**, 88, 12934-6	6.6	30
39	Structural and functional analysis of the avian leukemia virus constitutive transport element. *Rna*, **1999**, 5, 1645-55	5.8	30
38	Acetylation of Cytidine Residues Boosts HIV-1 Gene Expression by Increasing Viral RNA Stability. *Cell Host and Microbe*, **2020**, 28, 306-312.e6	23.4	26
37	Analysis of the mRNA targetome of microRNAs expressed by Marek's disease virus. *MBio*, **2014**, 5, e01060813	7.8	26
36	Targeting HPV16 DNA using CRISPR/Cas inhibits anal cancer growth. *Future Virology*, **2018**, 13, 475-482	2.4	25
35	The human endogenous retrovirus K Rev response element coincides with a predicted RNA folding region. *Rna*, **2000**, 6, 1551-64	5.8	23
34	Influenza A virus-derived siRNAs increase in the absence of NS1 yet fail to inhibit virus replication. *Rna*, **2018**, 24, 1172-1182	5.8	22
33	Persistently adenovirus-infected lymphoid cells express microRNAs derived from the viral VAI and especially VAII RNA. *Virology*, **2013**, 447, 140-5	3.6	22
32	Gene Editing: A New Tool for Viral Disease. *Annual Review of Medicine*, **2017**, 68, 401-411	17.4	21
31	Epstein-Barr Viruses (EBVs) Deficient in EBV-Encoded RNAs Have Higher Levels of Latent Membrane Protein 2 RNA Expression in Lymphoblastoid Cell Lines and Efficiently Establish Persistent Infections in Humanized Mice. *Journal of Virology*, **2015**, 89, 11711-4	6.6	20
30	A "microRNA-like" small RNA expressed by Dengue virus?. *Proceedings of the National Academy of Sciences of the United States of America*, **2014**, 111, E2359	11.5	20
29	The Epstein-Barr virus miR-BHRF1 microRNAs regulate viral gene expression in cis. *Virology*, **2017**, 512, 113-123	3.6	19

28	Insights into the mechanisms underlying the inactivation of HIV-1 proviruses by CRISPR/Cas. *Virology*, **2018**, 520, 116-126	3.6	17
27	Probing RNA Conformational Equilibria within the Functional Cellular Context. *Cell Reports*, **2020**, 30, 2472-2480.e4	10.6	16
26	HIV-1 Vif: counteracting innate antiretroviral defenses. *Molecular Therapy*, **2003**, 8, 525-7	11.7	16
25	Does RNA interference have a future as a treatment for HIV-1 induced disease?. *AIDS Reviews*, **2005**, 7, 22-5	1.5	13
24	Induced Packaging of Cellular MicroRNAs into HIV-1 Virions Can Inhibit Infectivity. *MBio*, **2017**, 8,	7.8	12
23	RNA Interference in Mammals: The Virus Strikes Back. *Immunity*, **2017**, 46, 970-972	32.3	12
22	Optimization of a multiplex CRISPR/Cas system for use as an antiviral therapeutic. *Methods*, **2015**, 91, 82-86	4.6	11
21	Immunology. Outwitted by viral RNAs. *Science*, **2007**, 317, 329-30	33.3	10
20	Assaying nuclear messenger RNA export in human cells. *Methods in Molecular Biology*, **2004**, 257, 85-92	1.4	10
19	Epitranscriptomic addition of mA regulates HIV-1 RNA stability and alternative splicing. *Genes and Development*, **2021**, 35, 992-1004	12.6	10
18	A lentiviral vector bearing a reverse intron demonstrates superior expression of both proteins and microRNAs. *RNA Biology*, **2017**, 14, 1570-1579	4.8	8
17	Reversal of Epigenetic Silencing Allows Robust HIV-1 Replication in the Absence of Integrase Function. *MBio*, **2020**, 11,	7.8	8
16	MicroRNA expression by an oncogenic retrovirus. *Proceedings of the National Academy of Sciences of the United States of America*, **2012**, 109, 2695-6	11.5	8
15	A new entry route for HIV. *Nature Medicine*, **2001**, 7, 20-1	50.5	7
14	Partial reconstitution of the RNAi response in human cells using Drosophila gene products. *Rna*, **2017**, 23, 153-160	5.8	6
13	Understanding the characteristics of nonspecific binding of drug-like compounds to canonical stem-loop RNAs and their implications for functional cellular assays. *Rna*, **2021**, 27, 12-26	5.8	5
12	Protocols for expression and functional analysis of viral microRNAs. *Methods in Enzymology*, **2007**, 427, 229-43	1.7	4
11	Tax Induces the Recruitment of NF-B to Unintegrated HIV-1 DNA To Rescue Viral Gene Expression and Replication. *Journal of Virology*, **2021**, 95, e0028521	6.6	4

10	The virology-RNA biology connection. *Rna*, **2015**, 21, 592-4	5.8	3
9	Making a NeST for a persistent virus. *Cell Host and Microbe*, **2013**, 13, 241-2	23.4	3
8	Mapping RNA Modifications Using Photo-Crosslinking-Assisted Modification Sequencing. *Methods in Molecular Biology*, **2021**, 2298, 123-134	1.4	3
7	Analysis of viral microRNA expression by elephant endotheliotropic herpesvirus 1. *Virology*, **2014**, 454-455, 102-8	3.6	2
6	Epitranscriptomic Addition of m 5C to HIV-1 Transcripts Regulates Viral Gene Expression. *SSRN Electronic Journal*,	1	1
5	The Epstein-Barr Virus miR-BHRF1 microRNAs Regulate Viral Gene Expression incis		1
4	Mapping of pseudouridine residues on cellular and viral transcripts using a novel antibody-based technique. *Rna*, **2021**, 27, 1400-1411	5.8	1
3	HIV-1 Packing to Leave. *Cell*, **2014**, 159, 975-976	56.2	
2	Interview with Bryan R Cullen. *Future Virology*, **2014**, 9, 345-350	2.4	
1	Viruses, microRNAs and RNA Interference. *FASEB Journal*, **2009**, 23, 194.3	0.9	