Eric A Miska

List of Publications by Citations

150 papers	28,951 citations	57 h-index	170 g-index
186 ext. papers	32,379 ext. citations	14.2 avg, IF	6.74 L-index

#	Paper	IF	Citations
150	MicroRNA expression profiles classify human cancers. *Nature*, **2005**, 435, 834-8	50.4	7870
149	Selective recognition of methylated lysine 9 on histone H3 by the HP1 chromo domain. *Nature*, **2001**, 410, 120-4	50.4	2213
148	Requirement of bic/microRNA-155 for normal immune function. *Science*, **2007**, 316, 608-11	33.3	1584
147	MicroRNA expression in zebrafish embryonic development. *Science*, **2005**, 309, 310-1	33.3	1312
146	Retinoblastoma protein recruits histone deacetylase to repress transcription. *Nature*, **1998**, 391, 597-601	50.4	1092
145	Implication of sperm RNAs in transgenerational inheritance of the effects of early trauma in mice. *Nature Neuroscience*, **2014**, 17, 667-9	25.5	818
144	Genetic unmasking of an epigenetically silenced microRNA in human cancer cells. *Cancer Research*, **2007**, 67, 1424-9	10.1	795
143	MicroRNA expression profiling of human breast cancer identifies new markers of tumor subtype. *Genome Biology*, **2007**, 8, R214	18.3	742
142	How microRNAs control cell division, differentiation and death. *Current Opinion in Genetics and Development*, **2005**, 15, 563-8	4.9	684
141	The genomic substrate for adaptive radiation in African cichlid fish. *Nature*, **2014**, 513, 375-381	50.4	656
140	microRNA-155 regulates the generation of immunoglobulin class-switched plasma cells. *Immunity*, **2007**, 27, 847-59	32.3	650
139	Microarray analysis of microRNA expression in the developing mammalian brain. *Genome Biology*, **2004**, 5, R68	18.3	630
138	piRNAs can trigger a multigenerational epigenetic memory in the germline of C. elegans. *Cell*, **2012**, 150, 88-99	56.2	524
137	HDAC4 deacetylase associates with and represses the MEF2 transcription factor. *EMBO Journal*, **1999**, 18, 5099-107	13	445
136	The let-7 MicroRNA family members mir-48, mir-84, and mir-241 function together to regulate developmental timing in Caenorhabditis elegans. *Developmental Cell*, **2005**, 9, 403-14	10.2	379
135	Most Caenorhabditis elegans microRNAs are individually not essential for development or viability. *PLoS Genetics*, **2007**, 3, e215	6	368
134	MicroRNA biogenesis is required for mouse primordial germ cell development and spermatogenesis. *PLoS ONE*, **2008**, 3, e1738	3.7	356

133	MicroRNA: implications for cancer. *Virchows Archiv Fur Pathologische Anatomie Und Physiologie Und Fur Klinische Medizin*, **2008**, 452, 1-10	5.1	331
132	The shaping and functional consequences of the microRNA landscape in breast cancer. *Nature*, **2013**, 497, 378-82	50.4	321
131	Piwi and piRNAs act upstream of an endogenous siRNA pathway to suppress Tc3 transposon mobility in the Caenorhabditis elegans germline. *Molecular Cell*, **2008**, 31, 79-90	17.6	311
130	piRNAs: from biogenesis to function. *Development (Cambridge)*, **2014**, 141, 3458-71	6.6	284
129	A Slicer-independent role for Argonaute 2 in hematopoiesis and the microRNA pathway. *Genes and Development*, **2007**, 21, 1999-2004	12.6	277
128	The E7 oncoprotein associates with Mi2 and histone deacetylase activity to promote cell growth. *EMBO Journal*, **1999**, 18, 2449-58	13	273
127	Function, targets, and evolution of Caenorhabditis elegans piRNAs. *Science*, **2012**, 337, 574-578	33.3	265
126	The SUMO E3 ligase RanBP2 promotes modification of the HDAC4 deacetylase. *EMBO Journal*, **2002**, 21, 2682-91	13	258
125	Considerations when investigating lncRNA function in vivo. *ELife*, **2014**, 3, e03058	8.9	252
124	Natural and experimental infection of Caenorhabditis nematodes by novel viruses related to nodaviruses. *PLoS Biology*, **2011**, 9, e1000586	9.7	243
123	Nuclear receptor corepressors partner with class II histone deacetylases in a Sin3-independent repression pathway. *Genes and Development*, **2000**, 14, 45-54	12.6	237
122	Members of the miRNA-200 family regulate olfactory neurogenesis. *Neuron*, **2008**, 57, 41-55	13.9	218
121	Transgenerational inheritance: Models and mechanisms of non-DNA sequence-based inheritance. *Science*, **2016**, 354, 59-63	33.3	214
120	Genomic islands of speciation separate cichlid ecomorphs in an East African crater lake. *Science*, **2015**, 350, 1493-1498	33.3	204
119	LIN-28 and the poly(U) polymerase PUP-2 regulate let-7 microRNA processing in Caenorhabditis elegans. *Nature Structural and Molecular Biology*, **2009**, 16, 1016-20	17.6	197
118	The co-repressor mSin3A is a functional component of the REST-CoREST repressor complex. *Journal of Biological Chemistry*, **2000**, 275, 9461-7	5.4	184
117	MEF-2 function is modified by a novel co-repressor, MITR. *EMBO Journal*, **1999**, 18, 5085-98	13	166
116	Acetylation of importin-alpha nuclear import factors by CBP/p300. *Current Biology*, **2000**, 10, 467-70	6.3	162

115	Whole-genome sequences of Malawi cichlids reveal multiple radiations interconnected by gene flow. *Nature Ecology and Evolution*, **2018**, 2, 1940-1955	12.3	160
114	Pan-arthropod analysis reveals somatic piRNAs as an ancestral defence against transposable elements. *Nature Ecology and Evolution*, **2018**, 2, 174-181	12.3	155
113	miRNAs in cancer: approaches, aetiology, diagnostics and therapy. *Human Molecular Genetics*, **2007**, 16 Spec No 1, R106-13	5.6	153
112	Acetylation of beta-catenin by CREB-binding protein (CBP). *Journal of Biological Chemistry*, **2002**, 277, 25562-7	5.4	142
111	A deletion polymorphism in the Caenorhabditis elegans RIG-I homolog disables viral RNA dicing and antiviral immunity. *ELife*, **2013**, 2, e00994	8.9	111
110	Formation and abundance of 5-hydroxymethylcytosine in RNA. *ChemBioChem*, **2015**, 16, 752-5	3.8	109
109	Differential localization of HDAC4 orchestrates muscle differentiation. *Nucleic Acids Research*, **2001**, 29, 3439-47	20.1	106
108	Small RNAs break out: the molecular cell biology of mobile small RNAs. *Nature Reviews Molecular Cell Biology*, **2014**, 15, 525-35	48.7	104
107	Ancient and novel small RNA pathways compensate for the loss of piRNAs in multiple independent nematode lineages. *PLoS Biology*, **2015**, 13, e1002061	9.7	87
106	Reduced insulin/IGF-1 signaling restores germ cell immortality to Caenorhabditis elegans Piwi mutants. *Cell Reports*, **2014**, 7, 762-73	10.6	86
105	The microRNA miR-124 controls gene expression in the sensory nervous system of Caenorhabditis elegans. *Nucleic Acids Research*, **2010**, 38, 3780-93	20.1	82
104	COMRADES determines in vivo RNA structures and interactions. *Nature Methods*, **2018**, 15, 785-788	21.6	80
103	Differential impact of the HEN1 homolog HENN-1 on 21U and 26G RNAs in the germline of Caenorhabditis elegans. *PLoS Genetics*, **2012**, 8, e1002702	6	77
102	Tertiary siRNAs mediate paramutation in C. elegans. *PLoS Genetics*, **2015**, 11, e1005078	6	76
101	A quantitative targeted proteomics approach to validate predicted microRNA targets in C. elegans. *Nature Methods*, **2010**, 7, 837-42	21.6	71
100	Abundant and dynamically expressed miRNAs, piRNAs, and other small RNAs in the vertebrate Xenopus tropicalis. *Genome Research*, **2009**, 19, 1766-75	9.7	69
99	The Short- and Long-Range RNA-RNA Interactome of SARS-CoV-2. *Molecular Cell*, **2020**, 80, 1067-1077.e5	17.6	65
98	Alterations in sperm long RNA contribute to the epigenetic inheritance of the effects of postnatal trauma. *Molecular Psychiatry*, **2020**, 25, 2162-2174	15.1	65

97	Wolbachia Blocks Viral Genome Replication Early in Infection without a Transcriptional Response by the Endosymbiont or Host Small RNA Pathways. *PLoS Pathogens*, **2016**, 12, e1005536	7.6	63
96	Oral transfer of chemical cues, growth proteins and hormones in social insects. *ELife*, **2016**, 5,	8.9	61
95	In vivo structural characterization of the SARS-CoV-2 RNA genome identifies host proteins vulnerable to repurposed drugs. *Cell*, **2021**, 184, 1865-1883.e20	56.2	61
94	A team of heterochromatin factors collaborates with small RNA pathways to combat repetitive elements and germline stress. *ELife*, **2017**, 6,	8.9	58
93	A comparative metabolomic study of NHR-49 in Caenorhabditis elegans and PPAR-alpha in the mouse. *FEBS Letters*, **2008**, 582, 1661-6	3.8	55
92	The conserved miR-51 microRNA family is redundantly required for embryonic development and pharynx attachment in Caenorhabditis elegans. *Genetics*, **2010**, 185, 897-905	4	50
91	Two Piwi proteins, Xiwi and Xili, are expressed in the Xenopus female germline. *Rna*, **2009**, 15, 337-45	5.8	50
90	PRDE-1 is a nuclear factor essential for the biogenesis of Ruby motif-dependent piRNAs in C. elegans. *Genes and Development*, **2014**, 28, 783-96	12.6	49
89	Epigenetic remodelling licences adult cholangiocytes for organoid formation and liver regeneration. *Nature Cell Biology*, **2019**, 21, 1321-1333	23.4	48
88	Competition between virus-derived and endogenous small RNAs regulates gene expression in Caenorhabditis elegans. *Genome Research*, **2013**, 23, 1258-70	9.7	48
87	Developmental characterization of the microRNA-specific C. elegans Argonautes alg-1 and alg-2. *PLoS ONE*, **2012**, 7, e33750	3.7	46
86	Terminal uridylyltransferases target RNA viruses as part of the innate immune system. *Nature Structural and Molecular Biology*, **2018**, 25, 778-786	17.6	44
85	Molecular biology. Is there social RNA?. *Science*, **2013**, 341, 467-8	33.3	42
84	The Helicase Aquarius/EMB-4 Is Required to Overcome Intronic Barriers to Allow Nuclear RNAi Pathways to Heritably Silence Transcription. *Developmental Cell*, **2017**, 42, 241-255.e6	10.2	42
83	NSUN2 introduces 5-methylcytosines in mammalian mitochondrial tRNAs. *Nucleic Acids Research*, **2019**, 47, 8720-8733	20.1	41
82	Ancestral Hybridization Facilitated Species Diversification in the Lake Malawi Cichlid Fish Adaptive Radiation. *Molecular Biology and Evolution*, **2020**, 37, 1100-1113	8.3	41
81	MiR-210 is induced by Oct-2, regulates B cells, and inhibits autoantibody production. *Journal of Immunology*, **2013**, 191, 3037-3048	5.3	40
80	Antiviral RNA Interference against Orsay Virus Is neither Systemic nor Transgenerational in Caenorhabditis elegans. *Journal of Virology*, **2015**, 89, 12035-46	6.6	33

79	Genome-wide identification of targets and function of individual MicroRNAs in mouse embryonic stem cells. *PLoS Genetics*, **2010**, 6, e1001163	6	33
78	The microRNAs of Caenorhabditis elegans. *Seminars in Cell and Developmental Biology*, **2010**, 21, 728-37	7.5	32
77	A LIN28-dependent structural change in pre-let-7g directly inhibits dicer processing. *Biochemistry*, **2011**, 50, 7514-21	3.2	31
76	Post-developmental microRNA expression is required for normal physiology, and regulates aging in parallel to insulin/IGF-1 signaling in C. elegans. *Rna*, **2012**, 18, 2220-35	5.8	31
75	A study of Caenorhabditis elegans DAF-2 mutants by metabolomics and differential correlation networks. *Molecular BioSystems*, **2013**, 9, 1632-42		30
74	Cysteine synthases CYSL-1 and CYSL-2 mediate C. elegans heritable adaptation to P. vranovensis infection. *Nature Communications*, **2020**, 11, 1741	17.4	27
73	Caenorhabditis elegans RSD-2 and RSD-6 promote germ cell immortality by maintaining small interfering RNA populations. *Proceedings of the National Academy of Sciences of the United States of America*, **2014**, 111, E4323-31	11.5	27
72	An Alternative STAT Signaling Pathway Acts in Viral Immunity in. *MBio*, **2017**, 8,	7.8	26
71	Betaine acts on a ligand-gated ion channel in the nervous system of the nematode C. elegans. *Nature Neuroscience*, **2013**, 16, 1794-801	25.5	26
70	------Widespread conservation and lineage-specific diversification of genome-wide DNA methylation patterns across arthropods. *PLoS Genetics*, **2020**, 16, e1008864	6	24
69	The Profile and Dynamics of RNA Modifications in Animals. *ChemBioChem*, **2017**, 18, 979-984	3.8	23
68	A Secreted RNA Binding Protein Forms RNA-Stabilizing Granules in the Honeybee Royal Jelly. *Molecular Cell*, **2019**, 74, 598-608.e6	17.6	23
67	SLAM-ITseq: sequencing cell type-specific transcriptomes without cell sorting. *Development (Cambridge)*, **2018**, 145,	6.6	22
66	tRNA fragments: novel players in intergenerational inheritance. *Cell Research*, **2016**, 26, 395-6	24.7	21
65	RNAi pathways in the recognition of foreign RNA: antiviral responses and host-parasite interactions in nematodes. *Biochemical Society Transactions*, **2013**, 41, 876-80	5.1	20
64	Identification of small molecule inhibitors of the Lin28-mediated blockage of pre-let-7g processing. *Organic and Biomolecular Chemistry*, **2016**, 14, 10208-10216	3.9	20
63	2′O-Methyl-5-hydroxymethylcytidine: A Second Oxidative Derivative of 5-Methylcytidine in RNA. *Journal of the American Chemical Society*, **2017**, 139, 1766-1769	16.4	19
62	Natural Genetic Variation in a Multigenerational Phenotype in C. elegans. *Current Biology*, **2018**, 28, 2588-2596.e8	8.3	19

61	RIP-chip-SRM--a new combinatorial large-scale approach identifies a set of translationally regulated bantam/miR-58 targets in C. elegans. *Genome Research*, **2012**, 22, 1360-71	9.7	17
60	Whole genome sequences of Malawi cichlids reveal multiple radiations interconnected by gene flow		17
59	Small RNA profiling of Xenopus embryos reveals novel miRNAs and a new class of small RNAs derived from intronic transposable elements. *Genome Research*, **2014**, 24, 96-106	9.7	16
58	Identification of functional long non-coding RNAs in C. elegans. *BMC Biology*, **2019**, 17, 14	7.3	15
57	The USTC co-opts an ancient machinery to drive piRNA transcription in. *Genes and Development*, **2019**, 33, 90-102	12.6	15
56	Antiviral RNA interference in animals: piecing together the evidence. *Nature Structural and Molecular Biology*, **2013**, 20, 1239-41	17.6	14
55	RNA-binding protein GLD-1/quaking genetically interacts with the mir-35 and the let-7 miRNA pathways in Caenorhabditis elegans. *Open Biology*, **2013**, 3, 130151	7	14
54	Tissue- and sex-specific small RNAomes reveal sex differences in response to the environment. *PLoS Genetics*, **2019**, 15, e1007905	6	13
53	E. coli OxyS non-coding RNA does not trigger RNAi in C. elegans. *Scientific Reports*, **2015**, 5, 9597	4.9	12
52	Getting a grip on piRNA cluster transcription. *Cell*, **2014**, 157, 1253-1254	56.2	9
51	Involvement of circulating factors in the transmission of paternal experiences through the germline. *EMBO Journal*, **2020**, 39, e104579	13	9
50	Translational adaptation to heat stress is mediated by RNA 5-methylcytosine in Caenorhabditis elegans. *EMBO Journal*, **2021**, 40, e105496	13	9
49	Artificial and natural RNA interactions between bacteria and C. elegans. *RNA Biology*, **2017**, 14, 415-420	4.8	8
48	Sequencing cell-type-specific transcriptomes with SLAM-ITseq. *Nature Protocols*, **2019**, 14, 2261-2278	18.8	7
47	High-Throughput Quantitative RT-PCR in Single and Bulk C. elegans Samples Using Nanofluidic Technology. *Journal of Visualized Experiments*, **2020**,	1.6	7
46	Functional genomic, computational and proteomic analysis of C. elegans microRNAs. *Briefings in Functional Genomics & Proteomics*, **2008**, 7, 228-35		6
45	MicroExonator enables systematic discovery and quantification of microexons across mouse embryonic development. *Genome Biology*, **2021**, 22, 43	18.3	6
44	A Family of Argonaute-Interacting Proteins Gates Nuclear RNAi. *Molecular Cell*, **2020**, 78, 862-875.e8	17.6	5

43	The short- and long-range RNA-RNA Interactome of SARS-CoV-2		5
42	DEPS-1 is required for piRNA-dependent silencing and PIWI condensate organisation in Caenorhabditis elegans. *Nature Communications*, **2020**, 11, 4242	17.4	5
41	Toward genetic modification of plant-parasitic nematodes: delivery of macromolecules to adults and expression of exogenous mRNA in second stage juveniles. *G3: Genes, Genomes, Genetics*, **2021**, 11,	3.2	5
40	The RNA polymerase II subunit RPB-9 recruits the integrator complex to terminate Caenorhabditis elegans piRNA transcription. *EMBO Journal*, **2021**, 40, e105565	13	5
39	Mature sperm small-RNA profile in the sparrow: implications for transgenerational effects of age on fitness. *Environmental Epigenetics*, **2019**, 5, dvz007	2.4	4
38	Single paternal dexamethasone challenge programs offspring metabolism and reveals multiple candidates in RNA-mediated inheritance. *IScience*, **2021**, 24, 102870	6.1	4
37	Selective inhibitors of trypanosomal uridylyl transferase RET1 establish druggability of RNA post-transcriptional modifications. *RNA Biology*, **2017**, 14, 611-619	4.8	3
36	The genome sequence of the channel bull blenny, (Günther, 1861). *Wellcome Open Research*, **2020**, 5, 148	4.8	3
35	Visualizing formation of the active site in the mitochondrial ribosome. *ELife*, **2021**, 10,	8.9	3
34	Widespread conservation and lineage-specific diversification of genome-wide DNA methylation patterns across arthropods		3
33	Taming transposable elements in vertebrates: from epigenetic silencing to domestication.. *Trends in Genetics*, **2022**,	8.5	3
32	Mapping epigenetic divergence in the massive radiation of Lake Malawi cichlid fishes. *Nature Communications*, **2021**, 12, 5870	17.4	2
31	Intergenerational adaptations to stress are evolutionarily conserved, stress-specific, and have deleterious trade-offs. *ELife*, **2021**, 10,	8.9	2
30	A genetic pathway encoding double-stranded RNA transporters and interactors regulates growth and plasticity inCaenorhabditis elegans		2
29	Ancestral hybridisation facilitated species diversification in the Lake Malawi cichlid fish adaptive radiation		2
28	Evolutionary divergence of novel open reading frames in cichlids speciation. *Scientific Reports*, **2020**, 10, 21570	4.9	2
27	Intergenerational adaptations to stress are evolutionarily conserved, stress-specific, and have deleterious trade-offs		2
26	Epigenetic Divergence during Early Stages of Speciation in an African Crater Lake Cichlid Fish		2

25	The microRNAs of C. elegans7-21		1
24	Epigenetic Regulation during Primordial Germ Cell Development and Differentiation. *Sexual Development*, **2021**, 1-21	1.6	1
23	Structural features within the NORAD long noncoding RNA underlie efficient repression of Pumilio activity		1
22	Transcriptional activity and epigenetic regulation of transposable elements in the symbiotic fungus. *Genome Research*, **2021**,	9.7	1
21	The USTC complex co-opts an ancient machinery to drive piRNA transcription in C. elegans		1
20	Identification of functional long non-coding RNAs in C. elegans		1
19	A novel mode of communication between blood and the germline for the inheritance of paternal experiences		1
18	Evolutionary divergence of novel open reading frames in cichlids speciation		1
17	Translational adaptation to heat stress is mediated by 5-methylcytosine RNA modification inCaenorhabditis elegans		1
16	Mapping epigenetic divergence in the massive radiation of Lake Malawi cichlid fishes		1
15	Terminal uridylyltransferases target RNA viruses as part of the innate immune system in animals		1
14	C. elegans heritably adapts to P. vranovensis infection via a mechanism that requires the cysteine synthases cysl-1 and cysl-2		1
13	Alternative splicing modulation by G-quadruplexes		1
12	An alternative STAT signaling pathway acts in antiviral immunity in Caenorhabditis elegans		1
11	SID-2 negatively regulates development likely independent of nutritional dsRNA uptake. *RNA Biology*, **2021**, 18, 888-899	4.8	1
10	Can brain activity transmit transgenerationally?. *Current Topics in Developmental Biology*, **2021**, 144, 1-18	5.3	1
9	Differential use of multiple genetic sex determination systems in divergent ecomorphs of an African crater lake cichlid		1
8	Who watches the watchmen? RNAi pathway-derived ribosomal small RNAs burgeon in absence of piRNAs. *Developmental Cell*, **2021**, 56, 2269-2270	10.2	0

7 Identification and Expression Profiling of Small RNA Populations Using High-Throughput Sequencing **2012**, 123-138

6 [illegible]Widespread conservation and lineage-specific diversification of genome-wide DNA methylation patterns across arthropods **2020**, 16, e1008864

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