Rhonda Bassel-Duby

List of Publications by Year
in descending order

86 papers	11,080 citations	47006 47 h-index	53230 85 g-index
88 all docs	88 docs citations	88 times ranked	13962 citing authors

#	Article	IF	Citations
1	Heart repair by reprogramming non-myocytes with cardiac transcription factors. Nature, 2012, 485, 599-604.	27.8	1,044
2	Postnatal genome editing partially restores dystrophin expression in a mouse model of muscular dystrophy. Science, 2016, 351, 400-403.	12.6	804
3	Hippo pathway effector Yap promotes cardiac regeneration. Proceedings of the National Academy of Sciences of the United States of America, 2013, 110, 13839-13844.	7.1	735
4	Signaling Pathways in Skeletal Muscle Remodeling. Annual Review of Biochemistry, 2006, 75, 19-37.	11.1	685
5	A peptide encoded by a transcript annotated as long noncoding RNA enhances SERCA activity in muscle. Science, 2016, 351, 271-275.	12.6	634
6	Prevention of muscular dystrophy in mice by CRISPR/Cas9â€“mediated editing of germline DNA. Science, 2014, 345, 1184-1188.	12.6	595
7	Gene editing restores dystrophin expression in a canine model of Duchenne muscular dystrophy. Science, 2018, 362, 86-91.	12.6	405
8	Transcription of the non-coding RNA upperhand controls Hand2 expression and heart development. Nature, 2016, 539, 433-436.	27.8	301
9	Control of muscle formation by the fusogenic micropeptide myomixer. Science, 2017, 356, 323-327.	12.6	301
10	Independent Signals Control Expression of the Calcineurin Inhibitory Proteins MCIP1 and MCIP2 in Striated Muscles. Circulation Research, 2000, 87, E61-8.	4.5	292
11	Therapeutic approaches for cardiac regeneration and repair. Nature Reviews Cardiology, 2018, 15, 585-600.	13.7	268
12	Correction of diverse muscular dystrophy mutations in human engineered heart muscle by single-site genome editing. Science Advances, 2018, 4, eaap9004.	10.3	200
13	CRISPR-Cas9 corrects Duchenne muscular dystrophy exon 44 deletion mutations in mice and human cells. Science Advances, 2019, 5, eaav4324.	10.3	190
14	CRISPR-Cpf1 correction of muscular dystrophy mutations in human cardiomyocytes and mice. Science Advances, 2017, 3, e1602814.	10.3	189
15	Single-cut genome editing restores dystrophin expression in a new mouse model of muscular dystrophy. Science Translational Medicine, 2017, 9, .	12.4	188
16	Widespread control of calcium signaling by a family of SERCA-inhibiting micropeptides. Science Signaling, 2016, 9, ra119.	3.6	168
17	Akt1/protein kinase B enhances transcriptional reprogramming of fibroblasts to functional cardiomyocytes. Proceedings of the National Academy of Sciences of the United States of America, 2015, 112, 11864-11869.	7.1	158
18	A mouse model for adult cardiac-specific gene deletion with CRISPR/Cas9. Proceedings of the National Academy of Sciences of the United States of America, 2016, 113, 338-343.	7.1	153

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19	Myomaker is essential for muscle regeneration. Genes and Development, 2014, 28, 1641-1646.	5.9	141
20	Cardiac-Specific LIM Protein FHL2 Modifies the Hypertrophic Response to Î²-Adrenergic Stimulation. Circulation, 2001, 103, 2731-2738.	1.6	136
21	CRISPR Correction of Duchenne Muscular Dystrophy. Annual Review of Medicine, 2019, 70, 239-255.	12.2	130
22	Precise correction of Duchenne muscular dystrophy exon deletion mutations by base and prime editing. Science Advances, 2021, 7, .	10.3	127
23	Concerted regulation of myofiber-specific gene expression and muscle performance by the transcriptional repressor Sox6. Proceedings of the National Academy of Sciences of the United States of America, 2011, 108, 10196-10201.	7.1	122
24	Induction of diverse cardiac cell types by reprogramming fibroblasts with cardiac transcription factors. Development (Cambridge), 2014, 141, 4267-4278.	2.5	122
25	A Twist2-dependent progenitor cell contributes to adult skeletal muscle. Nature Cell Biology, 2017, 19, 202-213.	10.3	118
26	MOXI Is a Mitochondrial Micropeptide That Enhances Fatty Acid Î²-Oxidation. Cell Reports, 2018, 23, 3701-3709.	6.4	118
27	Enhanced CRISPR-Cas9 correction of Duchenne muscular dystrophy in mice by a self-complementary AAV delivery system. Science Advances, 2020, 6, eaay6812.	10.3	114
28	Notch Inhibition Enhances Cardiac Reprogramming by Increasing MEF2C Transcriptional Activity. Stem Cell Reports, 2017, 8, 548-560.	4.8	108
29	Cell-Type-Specific Gene Regulatory Networks Underlying Murine Neonatal Heart Regeneration at Single-Cell Resolution. Cell Reports, 2020, 33, 108472.	6.4	99
30	Dynamic Transcriptional Responses to Injury of Regenerative and Non-regenerative Cardiomyocytes Revealed by Single-Nucleus RNA Sequencing. Developmental Cell, 2020, 53, 102-116.e8.	7.0	95
31	Myocyte nuclear factor, a novel winged-helix transcription factor under both developmental and neural regulation in striated myocytes.. Molecular and Cellular Biology, 1994, 14, 4596-4605.	2.3	94
32	Mechanistic basis of neonatal heart regeneration revealed by transcriptome and histone modification profiling. Proceedings of the National Academy of Sciences of the United States of America, 2019, 116, 18455-18465.	7.1	94
33	hnRNP U protein is required for normal pre-mRNA splicing and postnatal heart development and function. Proceedings of the National Academy of Sciences of the United States of America, 2015, 112, E3020-9.	7.1	90
34	Degenerative and regenerative pathways underlying Duchenne muscular dystrophy revealed by single-nucleus RNA sequencing. Proceedings of the National Academy of Sciences of the United States of America, 2020, 117, 29691-29701.	7.1	90
35	ZNF281 enhances cardiac reprogramming by modulating cardiac and inflammatory gene expression. Genes and Development, 2017, 31, 1770-1783.	5.9	87
36	The DWORF micropeptide enhances contractility and prevents heart failure in a mouse model of dilated cardiomyopathy. ELife, 2018, 7, .	6.0	86

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37	Functional correction of dystrophin actin binding domain mutations by genome editing. JCI Insight, 2017, 2, .	5.0	80
38	A 40-kilodalton protein binds specifically to an upstream sequence element essential for muscle-specific transcription of the human myoglobin promoter.. Molecular and Cellular Biology, 1992, 12, 5024-5032.	2.3	77
39	<scp>MED</scp>13â€dependent signaling from the heart confers leanness by enhancing metabolism in adipose tissue and liver. EMBO Molecular Medicine, 2014, 6, 1610-1621.	6.9	77
40	Angiotensin II Induces Skeletal Muscle Atrophy by Activating TFEB-Mediated MuRF1 Expression. Circulation Research, 2015, 117, 424-436.	4.5	76
41	Cardiac Reprogramming Factors Synergistically Activate Genome-wide Cardiogenic Stage-Specific Enhancers. Cell Stem Cell, 2019, 25, 69-86.e5.	11.1	72
42	Fusogenic micropeptide Myomixer is essential for satellite cell fusion and muscle regeneration. Proceedings of the National Academy of Sciences of the United States of America, 2018, 115, 3864-3869.	7.1	71
43	Role of calcineurin in striated muscle: development, adaptation, and disease. Biochemical and Biophysical Research Communications, 2003, 311, 1133-1141.	2.1	66
44	Genetic and epigenetic regulation of cardiomyocytes in development, regeneration and disease. Development (Cambridge), 2018, 145, .	2.5	66
45	Structureâ€“function analysis of myomaker domains required for myoblast fusion. Proceedings of the National Academy of Sciences of the United States of America, 2016, 113, 2116-2121.	7.1	65
46	Correction of muscular dystrophies by CRISPR gene editing. Journal of Clinical Investigation, 2020, 130, 2766-2776.	8.2	60
47	Nrf1 promotes heart regeneration and repair by regulating proteostasis and redox balance. Nature Communications, 2021, 12, 5270.	12.8	59
48	Blockade to pathological remodeling of infarcted heart tissue using a porcupine antagonist. Proceedings of the National Academy of Sciences of the United States of America, 2017, 114, 1649-1654.	7.1	53
49	Correction of Three Prominent Mutations in Mouse and Human Models of Duchenne Muscular Dystrophy by Single-Cut Genome Editing. Molecular Therapy, 2020, 28, 2044-2055.	8.2	51
50	Requirement of the fusogenic micropeptide myomixer for muscle formation in zebrafish. Proceedings of the National Academy of Sciences of the United States of America, 2017, 114, 11950-11955.	7.1	48
51	The histone reader PHF7 cooperates with the SWI/SNF complex at cardiac super enhancers to promote direct reprogramming. Nature Cell Biology, 2021, 23, 467-475.	10.3	45
52	Myocardin-related transcription factors are required for cardiac development and function. Developmental Biology, 2015, 406, 109-116.	2.0	44
53	Collaborative interactions between MEF-2 and Sp1 in muscle-specific gene regulation. Journal of Cellular Biochemistry, 1998, 70, 366-375.	2.6	42
54	KLHL41 stabilizes skeletal muscle sarcomeres by nonproteolytic ubiquitination. ELife, 2017, 6, .	6.0	40

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55	RBPMS is an RNA-binding protein that mediates cardiomyocyte binucleation and cardiovascular development. Developmental Cell, 2022, 57, 959-973.e7.	7.0	40
56	Myocyte Nuclear Factor, a Novel Winged-Helix Transcription Factor under both Developmental and Neural Regulation in Striated Myocytes. Molecular and Cellular Biology, 1994, 14, 4596-4605.	2.3	38
57	Sequence elements required for transcriptional activity of the human myoglobin promoter in intact myocardium.. Circulation Research, 1993, 73, 360-366.	4.5	37
58	CRISPR-Mediated Activation of Endogenous Gene Expression in the Postnatal Heart. Circulation Research, 2020, 126, 6-24.	4.5	37
59	High-Phosphate Diet Induces Exercise Intolerance and Impairs Fatty Acid Metabolism in Mice. Circulation, 2019, 139, 1422-1434.	1.6	36
60	NURR1 activation in skeletal muscle controls systemic energy homeostasis. Proceedings of the National Academy of Sciences of the United States of America, 2019, 116, 11299-11308.	7.1	35
61	Severe muscle wasting and denervation in mice lacking the RNA-binding protein ZFP106. Proceedings of the National Academy of Sciences of the United States of America, 2016, 113, E4494-503.	7.1	34
62	A 40-Kilodalton Protein Binds Specifically to an Upstream Sequence Element Essential for Muscle-Specific Transcription of the Human Myoglobin Promoter. Molecular and Cellular Biology, 1992, 12, 5024-5032.	2.3	33
63	A MED13-dependent skeletal muscle gene program controls systemic glucose homeostasis and hepatic metabolism. Genes and Development, 2016, 30, 434-446.	5.9	32
64	In vivo non-invasive monitoring of dystrophin correction in a new Duchenne muscular dystrophy reporter mouse. Nature Communications, 2019, 10, 4537.	12.8	32
65	Prednisolone rescues Duchenne muscular dystrophy phenotypes in human pluripotent stem cellâ€“derived skeletal muscle in vitro. Proceedings of the National Academy of Sciences of the United States of America, 2021, 118, .	7.1	32
66	Myoediting: Toward Prevention of Muscular Dystrophy by Therapeutic Genome Editing. Physiological Reviews, 2018, 98, 1205-1240.	28.8	31
67	Myocardin-related transcription factors are required for skeletal muscle development. Development (Cambridge), 2016, 143, 2853-61.	2.5	28
68	Twist2 amplification in rhabdomyosarcoma represses myogenesis and promotes oncogenesis by redirecting MyoD DNA binding. Genes and Development, 2019, 33, 626-640.	5.9	27
69	Cullin-3â€“RING ubiquitin ligase activity is required for striated muscle function in mice. Journal of Biological Chemistry, 2018, 293, 8802-8811.	3.4	26
70	A consolidated AAV system for single-cut CRISPR correction of a common Duchenne muscular dystrophy mutation. Molecular Therapy - Methods and Clinical Development, 2021, 22, 122-132.	4.1	20
71	The cardiac-enriched microprotein mitolamban regulates mitochondrial respiratory complex assembly and function in mice. Proceedings of the National Academy of Sciences of the United States of America, 2022, 119, .	7.1	19
72	The nuclear envelope protein Net39 is essential for muscle nuclear integrity and chromatin organization. Nature Communications, 2021, 12, 690.	12.8	17

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73	Identification of a multipotent Twist2-expressing cell population in the adult heart. Proceedings of the National Academy of Sciences of the United States of America, 2018, 115, E8430-E8439.	7.1	16
74	Direct reprogramming as a route to cardiac repair. Seminars in Cell and Developmental Biology, 2022, 122, 3-13.	5.0	16
75	Cardiac Myoediting Attenuates Cardiac Abnormalities in Human and Mouse Models of Duchenne Muscular Dystrophy. Circulation Research, 2021, 129, 602-616.	4.5	16
76	Sema3a-Nrp1 Signaling Mediates Fast-Twitch Myofiber Specificity of Tw2+ Cells. Developmental Cell, 2019, 51, 89-98.e4.	7.0	14
77	Regulation of cold-induced thermogenesis by the RNA binding protein FAM195A. Proceedings of the National Academy of Sciences of the United States of America, 2021, 118, .	7.1	13
78	Inhibitor-Resistant Tissue-Type Plasminogen Activator: An Improved Thrombolytic Agent In Vitro. Thrombosis and Haemostasis, 1994, 71, 124-128.	3.4	13
79	Long-term maintenance of dystrophin expression and resistance to injury of skeletal muscle in gene edited DMD mice. Molecular Therapy - Nucleic Acids, 2022, 28, 154-167.	5.1	12
80	CRISPR/Cas correction of muscular dystrophies. Experimental Cell Research, 2021, 408, 112844.	2.6	11
81	A myocardin-adjacent lncRNA balances SRF-dependent gene transcription in the heart. Genes and Development, 2021, 35, 835-840.	5.9	10
82	Secreted MG53 From Striated Muscle Impairs Systemic Insulin Sensitivity. Circulation, 2019, 139, 915-917.	1.6	8
83	Impaired activity of the fusogenic micropeptide Myomixer causes myopathy resembling Carey-Fineman-Ziter syndrome. Journal of Clinical Investigation, 2022, 132, .	8.2	7
84	Control of Muscle Metabolism by the Mediator Complex. Cold Spring Harbor Perspectives in Medicine, 2018, 8, a029843.	6.2	6
85	Toward CRISPR Therapies for Cardiomyopathies. Circulation, 2021, 144, 1525-1527.	1.6	6
86	P2570Synergistic activation of the cardiac enhancer landscape during reprogramming. European Heart Journal, 2019, 40, .	2.2	0