## Irina M Conboy

## List of Publications by Year in descending order

Source: https://exaly.com/author-pdf/4443021/publications.pdf

Version: 2024-02-01

68 papers

9,639 citations

33 h-index 102487 66 g-index

108 all docs 108 docs citations

108 times ranked 10225 citing authors

#	Article	IF	Citations
1	Rejuvenation of aged progenitor cells by exposure to a young systemic environment. Nature, 2005, 433, 760-764.	27.8	1,926
2	Notch-Mediated Restoration of Regenerative Potential to Aged Muscle. Science, 2003, 302, 1575-1577.	12.6	964
3	The Regulation of Notch Signaling Controls Satellite Cell Activation and Cell Fate Determination in Postnatal Myogenesis. Developmental Cell, 2002, 3, 397-409.	7.0	779
4	Nanoparticle delivery of Cas9 ribonucleoprotein and donor DNA in vivo induces homology-directed DNA repair. Nature Biomedical Engineering, 2017, 1, 889-901.	22.5	566
5	A Temporal Switch from Notch to Wnt Signaling in Muscle Stem Cells Is Necessary for Normal Adult Myogenesis. Cell Stem Cell, 2008, 2, 50-59.	11.1	546
6	Isolation of Adult Mouse Myogenic Progenitors. Cell, 2004, 119, 543-554.	28.9	446
7	Imbalance between pSmad3 and Notch induces CDK inhibitors in old muscle stem cells. Nature, 2008, 454, 528-532.	27.8	432
8	Detection of unamplified target genes via CRISPR–Cas9 immobilized on a graphene field-effect transistor. Nature Biomedical Engineering, 2019, 3, 427-437.	22.5	418
9	Cellular and Molecular Signatures of Muscle Regeneration: Current Concepts and Controversies in Adult Myogenesis. Cell, 2005, 122, 659-667.	28.9	375
10	Oxytocin is an age-specific circulating hormone that is necessary for muscle maintenance and regeneration. Nature Communications, 2014, 5, 4082.	12.8	307
11	Aging, Stem Cells and Tissue Regeneration: Lessons from Muscle. Cell Cycle, 2005, 4, 407-410.	2.6	267
12	Loss of stem cell regenerative capacity within aged niches. Aging Cell, 2007, 6, 371-382.	6.7	206
13	Relative roles of TGF $\hat{\mathbf{e}}\hat{\mathbf{e}}^21$ and Wnt in the systemic regulation and aging of satellite cell responses. Aging Cell, 2009, 8, 676-689.	6.7	206
14	Molecular aging and rejuvenation of human muscle stem cells. EMBO Molecular Medicine, 2009, 1, 381-391.	6.9	204
15	A single heterochronic blood exchange reveals rapid inhibition of multiple tissues by old blood. Nature Communications, 2016, 7, 13363.	12.8	204
16	Heterochronic parabiosis for the study of the effects of aging on stem cells and their niches. Cell Cycle, 2012, 11, 2260-2267.	2.6	198
17	Heterochronic parabiosis: historical perspective and methodological considerations for studies of aging and longevity. Aging Cell, 2013, 12, 525-530.	6.7	198
18	Systemic attenuation of the TGF- $\hat{l}^2$ pathway by a single drug simultaneously rejuvenates hippocampal neurogenesis and myogenesis in the same old mammal. Oncotarget, 2015, 6, 11959-11978.	1.8	101

#	Article	IF	Citations
19	Age-Associated Increase in BMP Signaling Inhibits Hippocampal Neurogenesis. Stem Cells, 2015, 33, 1577-1588.	3.2	83
20	Discrimination of single-point mutations in unamplified genomic DNA via Cas9 immobilized on a graphene field-effect transistor. Nature Biomedical Engineering, 2021, 5, 713-725.	22.5	77
21	Aging of signal transduction pathways, and pathology. Experimental Cell Research, 2008, 314, 1951-1961.	2.6	72
22	Age dependent increase in the levels of osteopontin inhibits skeletal muscle regeneration. Aging, 2012, 4, 553-566.	3.1	67
23	Phosphatidylserine directly and positively regulates fusion of myoblasts into myotubes. Biochemical and Biophysical Research Communications, 2011, 414, 9-13.	2.1	62
24	Rejuvenation of three germ layers tissues by exchanging old blood plasma with saline-albumin. Aging, 2020, 12, 8790-8819.	3.1	59
25	Systemic Problems: A perspective on stem cell aging and rejuvenation. Aging, 2015, 7, 754-765.	3.1	57
26	Regulating the Notch pathway in embryonic, adult and old stem cells. Current Opinion in Pharmacology, 2007, 7, 303-309.	3.5	51
27	Differentiation rather than aging of muscle stem cells abolishes their telomerase activity. Biotechnology Progress, 2009, 25, 1130-1137.	2.6	49
28	Plasma dilution improves cognition and attenuates neuroinflammation in old mice. GeroScience, 2021, 43, 1-18.	4.6	46
29	Pharmacological inhibition of myostatin/TGF- $\hat{l}^2$ receptor/pSmad3 signaling rescues muscle regenerative responses in mouse model of type 1 diabetes. Acta Pharmacologica Sinica, 2013, 34, 1052-1060.	6.1	45
30	An oral microjet vaccination system elicits antibody production in rabbits. Science Translational Medicine, $2017, 9, .$	12.4	44
31	Immuno-Analysis and FACS Sorting of Adult Muscle Fiber-Associated Stem/Precursor Cells. Methods in Molecular Biology, 2010, 621, 165-173.	0.9	41
32	Age-Specific Functional Epigenetic Changes in p21 and p16 in Injury-Activated Satellite Cells. Stem Cells, 2015, 33, 951-961.	3.2	40
33	Embryonic anti-aging niche. Aging, 2011, 3, 555-563.	3.1	35
34	Regenerative Capacity of Old Muscle Stem Cells Declines without Significant Accumulation of DNA Damage. PLoS ONE, 2013, 8, e63528.	2.5	35
35	Application of bio-orthogonal proteome labeling to cell transplantation and heterochronic parabiosis. Nature Communications, 2017, 8, 643.	12.8	34
36	Skeletal muscle as an experimental model of choice to study tissue aging and rejuvenation. Skeletal Muscle, 2020, 10, 4.	4.2	32

#	Article	IF	CITATIONS
37	Novel Genetic Regulation of  T Helper 1 (Th1)/Th2 Cytokine Production and Encephalitogenicity in Inbred Mouse Strains. Journal of Experimental Medicine, 1997, 185, 439-452.	8.5	26
38	Embryonic vs. Adult Myogenesis: Challenging the 'Regeneration Recapitulates Development' Paradigm. Journal of Molecular Cell Biology, 2010, 2, 1-4.	3.3	25
39	Sorting single satellite cells from individual myofibers reveals heterogeneity in cell-surface markers and myogenic capacity. Integrative Biology (United Kingdom), 2013, 5, 692-702.	1.3	25
40	Rejuvenation of brain, liver and muscle by simultaneous pharmacological modulation of two signaling determinants, that change in opposite directions with age. Aging, 2019, 11, 5628-5645.	3.1	24
41	Preparation of Adult Muscle Fiber-Associated Stem/Precursor Cells. Methods in Molecular Biology, 2010, 621, 149-163.	0.9	24
42	Notch signaling pathway and tissue engineering. Frontiers in Bioscience - Landmark, 2007, 12, 5143.	3.0	22
43	Graphene-based biosensor for on-chip detection of bio-orthogonally labeled proteins to identify the circulating biomarkers of aging during heterochronic parabiosis. Lab on A Chip, 2018, 18, 3230-3238.	6.0	20
44	Inhibitors of Tyrosine Phosphatases and Apoptosis Reprogram Lineage-Marked Differentiated Muscle to Myogenic Progenitor Cells. Chemistry and Biology, 2011, 18, 1153-1166.	6.0	19
45	SnoN activates p53 directly to regulate aging and tumorigenesis. Aging Cell, 2012, 11, 902-911.	6.7	17
46	DNA methyltransferase-3–dependent nonrandom template segregation in differentiating embryonic stem cells. Journal of Cell Biology, 2013, 203, 73-85.	5.2	17
47	Analysis of Regulatory Elements of the Developmentally Controlled Chorions15Promoter in TransgenicDrosophila. Developmental Biology, 1996, 174, 115-124.	2.0	15
48	Making gene editing a therapeutic reality. F1000Research, 2018, 7, 1970.	1.6	15
49	Unexpected evolutionarily conserved rapid effects of viral infection on oxytocin receptor and TGF- $\hat{l}^2$ /pSmad3. Skeletal Muscle, 2017, 7, 7.	4.2	14
50	hESC-secreted proteins can be enriched for multiple regenerative therapies by heparin-binding. Aging, 2013, 5, 357-372.	3.1	13
51	Mechanisms of action of hESC-secreted proteins that enhance human and mouse myogenesis. Aging, 2014, 6, 602-620.	3.1	13
52	The Microfluidic Toolbox for Analyzing Exosome Biomarkers of Aging. Molecules, 2021, 26, 535.	3.8	12
53	Rapid and Electronic Identification and Quantification of Ageâ€Specific Circulating Exosomes via Biologically Activated Graphene Transistors. Advanced Biology, 2021, 5, e2000594.	2.5	12
54	Erythrocytes, a New Contributor to Ageâ€Associated Loss of Blood–Brain Barrier Integrity. Advanced Science, 2021, 8, 2101912.	11.2	8

#	Article	IF	Citations
55	Geometric control of myogenic cell fate. International Journal of Nanomedicine, 2006, 1, 203-212.	6.7	8
56	TMPRSS11a is a novel ageâ€altered, tissue specific regulator of migration and wound healing. FASEB Journal, 2021, 35, e21597.	0.5	7
57	Key Age-Imposed Signaling Changes That Are Responsible for the Decline of Stem Cell Function. Sub-Cellular Biochemistry, 2018, 90, 119-143.	2.4	6
58	Attenuation of age-elevated blood factors by repositioning plasmapheresis: A novel perspective and approach. Transfusion and Apheresis Science, 2021, 60, 103162.	1.0	5
59	The Regulation of Notch Signaling Controls Satellite Cell Activation and Cell Fate Determination in Postnatal Myogenesis. Developmental Cell, 2006, 10, 273.	7.0	4
60	K-means quantization for a web-based open-source flow cytometry analysis platform. Scientific Reports, 2021, 11, 6735.	3.3	3
61	Case Report: Therapeutic and immunomodulatory effects of plasmapheresis in long-haul COVID. F1000Research, 2021, 10, 1189.	1.6	3
62	Immunomodulation for the management of corona virus disease (COVID-19). Transfusion and Apheresis Science, 2020, 59, 102856.	1.0	2
63	Mechanisms and Minimization of False Discovery of Metabolic Bioorthogonal Noncanonical Amino Acid Proteomics. Rejuvenation Research, 2022, 25, 95-109.	1.8	2
64	Case Report: Therapeutic and immunomodulatory effects of plasmapheresis in long-haul COVID. F1000Research, 0, 10, 1189.	1.6	2
65	Biomaterial Applications in the Adult Skeletal Muscle Satellite Cell Niche: Deliberate Control of Muscle Stem Cells and Muscle Regeneration in the Aged Niche. Studies in Mechanobiology, Tissue Engineering and Biomaterials, 2010, , 275-308.	1.0	1
66	Autologous treatment for ALS with implication for broad neuroprotection. Translational Neurodegeneration, 2022, 11, 16.	8.0	1
67	Using Label-Free Screening to Investigate Stem-Cells from their Microanatomical Niche. Biophysical Journal, 2012, 102, 726a.	0.5	0
68	Calibrating Notch/TGF-Î <sup>2</sup> Signaling for Youthful, Healthy Tissue Maintenance and Repair. , 2010, , 439-449.		O