Hannele Ruohola-Baker

List of Publications by Year in Descending Order

106 papers	10,045 citations	45 h-index	100 g-index
117 ext. papers	11,398 ext. citations	10.1 avg, IF	6 L-index

#	Paper	IF	Citations
106	Amino acid primed mTOR activity is essential for heart regeneration.. *IScience*, **2022**, 25, 103574	6.1	1
105	dCas9 fusion to computer-designed PRC2 inhibitor reveals functional TATA box in distal promoter region.. *Cell Reports*, **2022**, 38, 110457	10.6	0
104	Design of protein binding proteins from target structure alone.. *Nature*, **2022**,	50.4	13
103	Multivalent designed proteins neutralize SARS-CoV-2 variants of concern and confer protection against infection in mice.. *Science Translational Medicine*, **2022**, 14, eabn1252	17.5	3
102	Cross-validation of SARS-CoV-2 responses in kidney organoids and clinical populations. *JCI Insight*, **2021**,	9.9	1
101	F-domain valency determines outcome of signaling through the angiopoietin pathway. *EMBO Reports*, **2021**, 22, e53471	6.5	4
100	Designed proteins assemble antibodies into modular nanocages. *Science*, **2021**, 372,	33.3	35
99	Epigenetics and regenerative medicine **2021**, 853-872		
98	Design of biologically active binary protein 2D materials. *Nature*, **2021**, 589, 468-473	50.4	33
97	Multivalent designed proteins protect against SARS-CoV-2 variants of concern **2021**,		4
96	Combinatorial metabolism drives the naive to primed pluripotent chromatin landscape. *Experimental Cell Research*, **2020**, 389, 111913	4.2	2
95	Metabolic Control over mTOR-Dependent Diapause-like State. *Developmental Cell*, **2020**, 52, 236-250.e7	10.2	29
94	Germline stem cell aging in the Drosophila ovary. *Current Opinion in Insect Science*, **2020**, 37, 57-62	5.1	4
93	Using Mitochondrial Trifunctional Protein Deficiency to Understand Maternal Health. *Journal of Cellular Signaling*, **2020**, 1, 97-101	1	
92	F-domain valency determines outcome of signaling through the angiopoietin pathway **2020**,		28
91	Designed proteins assemble antibodies into modular nanocages **2020**,		5
90	Epigenetic metabolites license stem cell states. *Current Topics in Developmental Biology*, **2020**, 138, 209-240	3.5	4

89	Fatty Acids Enhance the Maturation of Cardiomyocytes Derived from Human Pluripotent Stem Cells. *Stem Cell Reports*, **2019**, 13, 657-668	8	93
88	Enhancer Chromatin and 3D Genome Architecture Changes from Naive to Primed Human Embryonic Stem Cell States. *Stem Cell Reports*, **2019**, 12, 1129-1144	8	22
87	Integrated epigenomic profiling reveals endogenous retrovirus reactivation in renal cell carcinoma. *EBioMedicine*, **2019**, 41, 427-442	8.8	16
86	PIXUL-ChIP: integrated high-throughput sample preparation and analytical platform for epigenetic studies. *Nucleic Acids Research*, **2019**, 47, e69	20.1	7
85	Folliculin regulates mTORC1/2 and WNT pathways in early human pluripotency. *Nature Communications*, **2019**, 10, 632	17.4	25
84	TFPa/HADHA is required for fatty acid beta-oxidation and cardiolipin re-modeling in human cardiomyocytes. *Nature Communications*, **2019**, 10, 4671	17.4	37
83	Metabolism as an early predictor of DPSCs aging. *Scientific Reports*, **2019**, 9, 2195	4.9	14
82	microRNAs Regulating Human and Mouse Naïve Pluripotency. *International Journal of Molecular Sciences*, **2019**, 20,	6.3	5
81	Inducible CRISPR genome editing platform in naive human embryonic stem cells reveals JARID2 function in self-renewal. *Cell Cycle*, **2018**, 17, 535-549	4.7	7
80	Single-Cell Transcriptomic Analysis of Cardiac Differentiation from Human PSCs Reveals HOPX-Dependent Cardiomyocyte Maturation. *Cell Stem Cell*, **2018**, 23, 586-598.e8	18	131
79	WNT/β-catenin signaling regulates mitochondrial activity to alter the oncogenic potential of melanoma in a PTEN-dependent manner. *Oncogene*, **2017**, 36, 3119-3136	9.2	39
78	Drosophila melanogaster as a Model of Muscle Degeneration Disorders. *Current Topics in Developmental Biology*, **2017**, 121, 83-109	5.3	17
77	Metabolic remodeling during the loss and acquisition of pluripotency. *Development (Cambridge)*, **2017**, 144, 541-551	6.6	92
76	Loss of rescues stem cell aging in germ line. *ELife*, **2017**, 6,	8.9	11
75	Gene-Edited Human Kidney Organoids Reveal Mechanisms of Disease in Podocyte Development. *Stem Cells*, **2017**, 35, 2366-2378	5.8	67
74	First critical repressive H3K27me3 marks in embryonic stem cells identified using designed protein inhibitor. *Proceedings of the National Academy of Sciences of the United States of America*, **2017**, 114, 10125-10130	11.5	24
73	miRNAs in Muscle Diseases. *Pancreatic Islet Biology*, **2016**, 295-307	0.4	
72	Metabolic RemodeLIN of Pluripotency. *Cell Stem Cell*, **2016**, 19, 3-4	18	5

71	Metabolic remodeling in early development and cardiomyocyte maturation. *Seminars in Cell and Developmental Biology*, **2016**, 52, 84-92	7.5	41
70	Mature Let-7 miRNAs fine tune expression of LIN28B in pluripotent human embryonic stem cells. *Stem Cell Research*, **2016**, 17, 498-503	1.6	14
69	Wnt/β-catenin signaling promotes self-renewal and inhibits the primed state transition in naïve human embryonic stem cells. *Proceedings of the National Academy of Sciences of the United States of America*, **2016**, 113, E6382-E6390	11.5	67
68	Tie-mediated signal from apoptotic cells protects stem cells in Drosophila melanogaster. *Nature Communications*, **2015**, 6, 7058	17.4	32
67	Let-7 family of microRNA is required for maturation and adult-like metabolism in stem cell-derived cardiomyocytes. *Proceedings of the National Academy of Sciences of the United States of America*, **2015**, 112, E2785-94	11.5	160
66	The metabolome regulates the epigenetic landscape during naive-to-primed human embryonic stem cell transition. *Nature Cell Biology*, **2015**, 17, 1523-35	23.4	249
65	miRNA sensitivity to Drosha levels correlates with pre-miRNA secondary structure. *Rna*, **2014**, 20, 621-31	5.8	19
64	Hypoxia-inducible factors have distinct and stage-specific roles during reprogramming of human cells to pluripotency. *Cell Stem Cell*, **2014**, 14, 592-605	18	163
63	Dystrophin-deficient cardiomyocytes derived from human urine: new biologic reagents for drug discovery. *Stem Cell Research*, **2014**, 12, 467-80	1.6	87
62	Tri-iodo-l-thyronine promotes the maturation of human cardiomyocytes-derived from induced pluripotent stem cells. *Journal of Molecular and Cellular Cardiology*, **2014**, 72, 296-304	5.8	254
61	Derivation of naive human embryonic stem cells. *Proceedings of the National Academy of Sciences of the United States of America*, **2014**, 111, 4484-9	11.5	344
60	Molecular mechanism of sphingosine-1-phosphate action in Duchenne muscular dystrophy. *DMM Disease Models and Mechanisms*, **2014**, 7, 41-54	4.1	45
59	Regulation of stem cell populations by microRNAs. *Advances in Experimental Medicine and Biology*, **2013**, 786, 329-51	3.6	96
58	Increased sphingosine-1-phosphate improves muscle regeneration in acutely injured mdx mice. *Skeletal Muscle*, **2013**, 3, 20	5.1	45
57	Genetic elevation of sphingosine 1-phosphate suppresses dystrophic muscle phenotypes in Drosophila. *Development (Cambridge)*, **2013**, 140, 136-46	6.6	29
56	Hypoxia induces re-entry of committed cells into pluripotency. *Stem Cells*, **2013**, 31, 1737-48	5.8	89
55	Drosophila as a starting point for developing therapeutics for the rare disease Duchenne Muscular Dystrophy. *Rare Diseases (Austin, Tex)*, **2013**, 1, e24995		10
54	MicroRNA regulation and role in stem cell maintenance, cardiac differentiation and hypertrophy. *Current Molecular Medicine*, **2013**, 13, 757-64	2.5	37

53	HIF1α induced switch from bivalent to exclusively glycolytic metabolism during ESC-to-EpiSC/hESC transition. *EMBO Journal*, **2012**, 31, 2103-16	13	368
52	Loss-of-Function Screen Reveals Novel Regulators Required for Drosophila Germline Stem Cell Self-Renewal. *G3: Genes, Genomes, Genetics*, **2012**, 2, 343-51	3.2	5
51	HIF induces human embryonic stem cell markers in cancer cells. *Cancer Research*, **2011**, 71, 4640-52	10.1	390
50	Assessment of hypoxia inducible factor levels in cancer cell lines upon hypoxic induction using a novel reporter construct. *PLoS ONE*, **2011**, 6, e27460	3.7	31
49	Embryonal carcinoma cell induction of miRNA and mRNA changes in co-cultured prostate stromal fibromuscular cells. *Journal of Cellular Physiology*, **2011**, 226, 1479-88	7	12
48	Characterization of microRNAs involved in embryonic stem cell states. *Stem Cells and Development*, **2010**, 19, 935-50	4.4	138
47	Dystroglycan and mitochondrial ribosomal protein L34 regulate differentiation in the Drosophila eye. *PLoS ONE*, **2010**, 5, e10488	3.7	17
46	Chronic hypoxia impairs muscle function in the Drosophila model of Duchenne's muscular dystrophy (DMD). *PLoS ONE*, **2010**, 5, e13450	3.7	14
45	Dicer-1-dependent Dacapo suppression acts downstream of Insulin receptor in regulating cell division of Drosophila germline stem cells. *Development (Cambridge)*, **2009**, 136, 1497-507	6.6	57
44	microRNAs regulate human embryonic stem cell division. *Cell Cycle*, **2009**, 8, 3729-41	4.7	138
43	The conserved WW-domain binding sites in Dystroglycan C-terminus are essential but partially redundant for Dystroglycan function. *BMC Developmental Biology*, **2009**, 9, 18	3.1	9
42	PIWI goes solo in the soma. *Developmental Cell*, **2009**, 16, 627-8	10.2	4
41	Small RNAs: keeping stem cells in line. *Cell*, **2008**, 132, 563-6	56.2	92
40	microRNA and stem cell function. *Cell and Tissue Research*, **2008**, 331, 57-66	4.2	128
39	MicroRNA discovery and profiling in human embryonic stem cells by deep sequencing of small RNA libraries. *Stem Cells*, **2008**, 26, 2496-505	5.8	247
38	Genetic modifier screens reveal new components that interact with the Drosophila dystroglycan-dystrophin complex. *PLoS ONE*, **2008**, 3, e2418	3.7	50
37	Dissecting muscle and neuronal disorders in a Drosophila model of muscular dystrophy. *EMBO Journal*, **2007**, 26, 481-93	13	105
36	A putative Src homology 3 domain binding motif but not the C-terminal dystrophin WW domain binding motif is required for dystroglycan function in cellular polarity in Drosophila. *Journal of Biological Chemistry*, **2007**, 282, 15159-69	5.4	19

35	Stage-specific differences in the requirements for germline stem cell maintenance in the Drosophila ovary. *Cell Stem Cell*, **2007**, 1, 698-709	18	53
34	Stem cells signal to the niche through the Notch pathway in the Drosophila ovary. *Current Biology*, **2006**, 16, 2352-8	6.3	117
33	The MicroRNA pathway plays a regulatory role in stem cell division. *Cell Cycle*, **2006**, 5, 172-5	4.7	71
32	Border of Notch activity establishes a boundary between the two dorsal appendage tube cell types. *Developmental Biology*, **2006**, 297, 461-70	3.1	41
31	Notch signaling through tramtrack bypasses the mitosis promoting activity of the JNK pathway in the mitotic-to-endocycle transition of Drosophila follicle cells. *BMC Developmental Biology*, **2006**, 6, 16	3.1	40
30	Stem cell division is regulated by the microRNA pathway. *Nature*, **2005**, 435, 974-8	50.4	581
29	Genome wide analysis of transcript levels after perturbation of the EGFR pathway in the Drosophila ovary. *Developmental Dynamics*, **2005**, 232, 709-24	2.9	28
28	Fringe-dependent notch activation and tramtrack function are required for specification of the polar cells in Drosophila oogenesis. *Developmental Dynamics*, **2005**, 232, 1013-20	2.9	9
27	The mitotic-to-endocycle switch in Drosophila follicle cells is executed by Notch-dependent regulation of G1/S, G2/M and M/G1 cell-cycle transitions. *Development (Cambridge)*, **2004**, 131, 3169-81	6.6	109
26	Notch-dependent Fizzy-related/Hec1/Cdh1 expression is required for the mitotic-to-endocycle transition in Drosophila follicle cells. *Current Biology*, **2004**, 14, 630-6	6.3	83
25	Bottom-Up and Top-Down Approaches to the Synthesis of Monodispersed Spherical Colloids of Low Melting-Point Metals. *Nano Letters*, **2004**, 4, 2047-2050	11.5	354
24	Ethylene glycol-mediated synthesis of metal oxide nanowires. *Journal of Materials Chemistry*, **2004**, 14, 695		466
23	Maelstrom, a Drosophila spindle-class gene, encodes a protein that colocalizes with Vasa and RDE1/AGO1 homolog, Aubergine, in nuage. *Development (Cambridge)*, **2003**, 130, 859-71	6.6	203
22	Electrospinning of Polymeric and Ceramic Nanofibers as Uniaxially Aligned Arrays. *Nano Letters*, **2003**, 3, 1167-1171	11.5	1256
21	A solution-phase, precursor route to polycrystalline SnO2 nanowires that can be used for gas sensing under ambient conditions. *Journal of the American Chemical Society*, **2003**, 125, 16176-7	16.4	877
20	Single Crystalline Nanowires of Lead Can Be Synthesized through Thermal Decomposition of Lead Acetate in Ethylene Glycol. *Nano Letters*, **2003**, 3, 1163-1166	11.5	53
19	Dystroglycan is required for polarizing the epithelial cells and the oocyte in Drosophila. *Development (Cambridge)*, **2003**, 130, 173-84	6.6	141
18	Maelstrom is required to position the MTOC in stage 2-6 Drosophila oocytes. *Development Genes and Evolution*, **2001**, 211, 44-8	1.8	23

17	Notch-Delta signaling induces a transition from mitotic cell cycle to endocycle inDrosophilafollicle cells. *Development (Cambridge)*, **2001**, 128, 4737-4746	6.6	150
16	The homeobox gene mirror links EGF signalling to embryonic dorso-ventral axis formation through notch activation. *Nature Genetics*, **2000**, 24, 429-33	36.3	74
15	Laminin A is required for follicle cell-oocyte signaling that leads to establishment of the anterior-posterior axis in Drosophila. *Current Biology*, **2000**, 10, 683-6	6.3	42
14	Characterization of differentially expressed genes in purified Drosophila follicle cells: toward a general strategy for cell type-specific developmental analysis. *Proceedings of the National Academy of Sciences of the United States of America*, **1999**, 96, 5559-64	11.5	101
13	Role of Notch pathway in terminal follicle cell differentiation during Drosophila oogenesis. *Development Genes and Evolution*, **1999**, 209, 301-11	1.8	44
12	Mosaic analysis in the drosophila ovary reveals a common hedgehog-inducible precursor stage for stalk and polar cells. *Genetics*, **1999**, 151, 739-48	4	75
11	maelstrom is required for an early step in the establishment of Drosophila oocyte polarity: posterior localization of grk mRNA. *Development (Cambridge)*, **1997**, 124, 4661-4671	6.6	65
10	Expression of constitutively active Notch arrests follicle cells at a precursor stage during Drosophila oogenesis and disrupts the anterior-posterior axis of the oocyte. *Development (Cambridge)*, **1996**, 122, 3639-3650	6.6	63
9	Pointed, an ETS domain transcription factor, negatively regulates the EGF receptor pathway in Drosophila oogenesis. *Development (Cambridge)*, **1996**, 122, 3745-3754	6.6	67
8	Expression of constitutively active Notch arrests follicle cells at a precursor stage during Drosophila oogenesis and disrupts the anterior-posterior axis of the oocyte. *Development (Cambridge)*, **1996**, 122, 3639-50	6.6	24
7	The role of gene cassettes in axis formation during Drosophila oogenesis. *Trends in Genetics*, **1994**, 10, 89-94	8.5	35
6	Transient posterior localization of a kinesin fusion protein reflects anteroposterior polarity of the Drosophila oocyte. *Current Biology*, **1994**, 4, 289-300	6.3	269
5	Spatially localized rhomboid is required for establishment of the dorsal-ventral axis in Drosophila oogenesis. *Cell*, **1993**, 73, 953-65	56.2	139
4	Isolator: accurate and stable analysis of isoform-level expression in RNA-Seq experiments		5
3	Computer Designed PRC2 Inhibitor, EBdCas9, Reveals Functional TATA boxes in Distal Promoter Regions		1
2	Conserved epigenetic regulatory logic infers genes governing cell identity		2
1	Robust de novo design of protein binding proteins from target structural information alone		1