

# Patrick O'Farrell

## List of Publications by Year in descending order

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102  
papers

18,467  
citations

28190

55  
h-index

30848

102  
g-index

114  
all docs

114  
docs citations

114  
times ranked

10703  
citing authors

#	ARTICLE	IF	CITATIONS
1	High resolution two-dimensional electrophoresis of basic as well as acidic proteins. <i>Cell</i> , 1977, 12, 1133-1142.	13.5	3,808
2	Comparative Genomics of the Eukaryotes. <i>Science</i> , 2000, 287, 2204-2215.	6.0	1,573
3	Genetic control of cell division patterns in the <i>Drosophila</i> embryo. <i>Cell</i> , 1989, 57, 177-187.	13.5	604
4	The sequence specificity of homeodomain-DNA interaction. <i>Cell</i> , 1988, 54, 1081-1090.	13.5	534
5	The engrailed locus of <i>drosophila</i> : In situ localization of transcripts reveals compartment-specific expression. <i>Cell</i> , 1985, 40, 45-53.	13.5	483
6	The endocytic pathway mediates cell entry of dsRNA to induce RNAi silencing. <i>Nature Cell Biology</i> , 2006, 8, 793-802.	4.6	470
7	The roles of <i>Drosophila</i> cyclins A and B in mitotic control. <i>Cell</i> , 1990, 61, 535-547.	13.5	463
8	The three postblastoderm cell cycles of <i>Drosophila</i> embryogenesis are regulated in G2 by string. <i>Cell</i> , 1990, 62, 469-480.	13.5	442
9	Expression and function of <i>Drosophila</i> cyclin a during embryonic cell cycle progression. <i>Cell</i> , 1989, 56, 957-968.	13.5	432
10	Development of embryonic pattern in <i>D. melanogaster</i> as revealed by accumulation of the nuclear engrailed protein. <i>Cell</i> , 1985, 43, 59-69.	13.5	431
11	The <i>Drosophila</i> developmental gene, engrailed, encodes a sequence-specific DNA binding activity. <i>Nature</i> , 1985, 318, 630-635.	13.7	425
12	Two-tiered regulation of spatially patterned engrailed gene expression during <i>Drosophila</i> embryogenesis. <i>Nature</i> , 1988, 332, 604-609.	13.7	404
13	Progression of the cell cycle through mitosis leads to abortion of nascent transcripts. <i>Cell</i> , 1991, 67, 303-310.	13.5	377
14	A restriction map of the bacteriophage T4 genome. <i>Molecular Genetics and Genomics</i> , 1980, 179, 421-435.	2.4	342
15	Multiple modes of engrailed regulation in the progression towards cell fate determination. <i>Nature</i> , 1991, 352, 404-410.	13.7	270
16	Activation and repression of transcription by homeodomain-containing proteins that bind a common site. <i>Nature</i> , 1988, 336, 744-749.	13.7	254
17	Terminal Cytokinesis Events Uncovered after an RNAi Screen. <i>Current Biology</i> , 2004, 14, 1685-1693.	1.8	252
18	Identification of <i>Drosophila</i> Gene Products Required for Phagocytosis of <i>Candida albicans</i> . <i>PLoS Biology</i> , 2005, 4, e4.	2.6	246

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19	The glucocorticoid domain: Steroid-mediated changes in the rate of synthesis of rat hepatoma proteins. <i>Cell</i> , 1978, 13, 41-55.	13.5	238
20	Nitric oxide contributes to induction of innate immune responses to gram-negative bacteria in <i>Drosophila</i> . <i>Genes and Development</i> , 2003, 17, 115-125.	2.7	235
21	Nitric Oxide Contributes to Behavioral, Cellular, and Developmental Responses to Low Oxygen in <i>Drosophila</i> . <i>Cell</i> , 1999, 98, 105-114.	13.5	231
22	Mutations causing charge alterations in regulatory subunits of the cAMP-dependent protein kinase of cultured S49 lymphoma cells. <i>Cell</i> , 1977, 10, 381-391.	13.5	224
23	Functional Dissection of an Innate Immune Response by a Genome-Wide RNAi Screen. <i>PLoS Biology</i> , 2004, 2, e203.	2.6	218
24	The suppression of defective translation by ppGpp and its role in the stringent response. <i>Cell</i> , 1978, 14, 545-557.	13.5	216
25	An evolutionarily conserved cyclin homolog from <i>Drosophila</i> rescues yeast deficient in G1 cyclins. <i>Cell</i> , 1991, 66, 1207-1216.	13.5	174
26	Embryonic Cleavage Cycles: How Is a Mouse Like a Fly?. <i>Current Biology</i> , 2004, 14, R35-R45.	1.8	171
27	Spatial Programming of Gene Expression in Early <i>Drosophila</i> Embryogenesis. <i>Annual Review of Cell Biology</i> , 1986, 2, 49-80.	26.0	170
28	The state of engrailed expression is not clonally transmitted during early <i>Drosophila</i> development. <i>Cell</i> , 1992, 68, 923-931.	13.5	168
29	Triggering the all-or-nothing switch into mitosis. <i>Trends in Cell Biology</i> , 2001, 11, 512-519.	3.6	166
30	From Egg to Gastrula: How the Cell Cycle Is Remodeled During the <i>Drosophila</i> Mid-Blastula Transition. <i>Annual Review of Genetics</i> , 2014, 48, 269-294.	3.2	165
31	Barriers to Male Transmission of Mitochondrial DNA in Sperm Development. <i>Developmental Cell</i> , 2012, 22, 660-668.	3.1	155
32	The schedule of destruction of three mitotic cyclins can dictate the timing of events during exit from mitosis. <i>Current Biology</i> , 2001, 11, 671-683.	1.8	145
33	Fluctuations in Cyclin E levels are required for multiple rounds of endocycle S phase in <i>Drosophila</i> . <i>Current Biology</i> , 1998, 8, 235-238.	1.8	133
34	Chapter 27 Two-Dimensional Polyacrylamide Gel Electrophoretic Fractionation. <i>Methods in Cell Biology</i> , 1977, 16, 407-420.	0.5	130
35	The making of a maggot: patterning the <i>Drosophila</i> embryonic epidermis. <i>Current Opinion in Genetics and Development</i> , 1994, 4, 529-534.	1.5	130
36	Rho-dependent control of anillin behavior during cytokinesis. <i>Journal of Cell Biology</i> , 2008, 180, 285-294.	2.3	126

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37	A Nuclear GFP That Marks Nuclei in Living <i>Drosophila</i> Embryos; Maternal Supply Overcomes a Delay in the Appearance of Zygotic Fluorescence. <i>Developmental Biology</i> , 1995, 170, 726-729.	0.9	121
38	Rho-kinase Controls Cell Shape Changes during Cytokinesis. <i>Current Biology</i> , 2006, 16, 359-370.	1.8	117
39	A Cell-Autonomous, Ubiquitous Marker for the Analysis of <i>Drosophila</i> Genetic Mosaics. <i>Developmental Biology</i> , 1994, 164, 328-331.	0.9	109
40	Limb morphogenesis: connections between patterning and growth. <i>Current Biology</i> , 1997, 7, R186-R195.	1.8	109
41	Developmental Control of Late Replication and S Phase Length. <i>Current Biology</i> , 2010, 20, 2067-2077.	1.8	104
42	Manipulating the Metazoan Mitochondrial Genome with Targeted Restriction Enzymes. <i>Science</i> , 2008, 321, 575-577.	6.0	103
43	Mutations of the <i>Drosophila</i> <i>dDP</i> , <i>dE2F</i> , and <i>cyclin E</i> Genes Reveal Distinct Roles for the E2F-DP Transcription Factor and Cyclin E during the G <sub>1</sub> -S Transition. <i>Molecular and Cellular Biology</i> , 1998, 18, 141-151.	1.1	101
44	S-phase function of <i>Drosophila</i> cyclin A and its downregulation in G1 phase. <i>Current Biology</i> , 1997, 7, 488-499.	1.8	100
45	Transmission of mitochondrial mutations and action of purifying selection in <i>Drosophila melanogaster</i> . <i>Nature Genetics</i> , 2014, 46, 393-397.	9.4	97
46	Size control: Cell proliferation does not equal growth. <i>Current Biology</i> , 1998, 8, R687-R689.	1.8	88
47	Cyclin B Destruction Triggers Changes in Kinetochores Behavior Essential for Successful Anaphase. <i>Current Biology</i> , 2003, 13, 647-653.	1.8	81
48	Transcribed genes are localized according to chromosomal position within polarized <i>Drosophila</i> embryonic nuclei. <i>Current Biology</i> , 1999, 9, 1263-S6.	1.8	77
49	Timing the <i>Drosophila</i> Mid-Blastula Transition: A Cell Cycle-Centered View. <i>Trends in Genetics</i> , 2016, 32, 496-507.	2.9	74
50	The Cell Cycle Program in Germ Cells of the <i>Drosophila</i> Embryo. <i>Developmental Biology</i> , 1998, 196, 160-170.	0.9	72
51	A universal target sequence is bound in vitro by diverse homeodomains. <i>Mechanisms of Development</i> , 1993, 43, 57-70.	1.7	70
52	TALE-light imaging reveals maternally guided, H3K9me2/3-independent emergence of functional heterochromatin in <i>Drosophila</i> embryos. <i>Genes and Development</i> , 2016, 30, 579-593.	2.7	70
53	Anillin: a pivotal organizer of the cytokinetic machinery. <i>Biochemical Society Transactions</i> , 2008, 36, 439-441.	1.6	67
54	Mechanism and Regulation of Cdc25/Twine Protein Destruction in Embryonic Cell-Cycle Remodeling. <i>Current Biology</i> , 2013, 23, 118-126.	1.8	66

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55	Quiescence: early evolutionary origins and universality do not imply uniformity. <i>Philosophical Transactions of the Royal Society B: Biological Sciences</i> , 2011, 366, 3498-3507.	1.8	65
56	Rapid embryonic cell cycles defer the establishment of heterochromatin by Eggless/SetDB1 in <i>Drosophila</i> . <i>Genes and Development</i> , 2019, 33, 403-417.	2.7	64
57	Hypoxia and Nitric Oxide Induce a Rapid, Reversible Cell Cycle Arrest of the <i>Drosophila</i> Syncytial Divisions. <i>Journal of Biological Chemistry</i> , 2001, 276, 1930-1937.	1.6	63
58	<i>Drosophila</i> Calcineurin Promotes Induction of Innate Immune Responses. <i>Current Biology</i> , 2007, 17, 2087-2093.	1.8	63
59	Rif1 prolongs the embryonic S phase at the <i>Drosophila</i> mid-blastula transition. <i>PLoS Biology</i> , 2018, 16, e2005687.	2.6	62
60	Embryonic onset of late replication requires Cdc25 down-regulation. <i>Genes and Development</i> , 2012, 26, 714-725.	2.7	61
61	<i>Drosophila wee1</i> Has an Essential Role in the Nuclear Divisions of Early Embryogenesis. <i>Genetics</i> , 2000, 155, 159-166.	1.2	61
62	Chromosome Association of Minichromosome Maintenance Proteins in <i>Drosophila</i> Endoreplication Cycles. <i>Journal of Cell Biology</i> , 1998, 140, 451-460.	2.3	59
63	RNAi of Mitotic Cyclins in <i>Drosophila</i> Uncouples the Nuclear and Centrosome Cycle. <i>Current Biology</i> , 2008, 18, 245-254.	1.8	59
64	Selfish drive can trump function when animal mitochondrial genomes compete. <i>Nature Genetics</i> , 2016, 48, 798-802.	9.4	59
65	Qualifying for the license to replicate. <i>Cell</i> , 1995, 81, 825-828.	13.5	57
66	Nitric oxide-induced suspended animation promotes survival during hypoxia. <i>EMBO Journal</i> , 2003, 22, 580-587.	3.5	57
67	Cell cycle roles for two 14-3-3 proteins during <i>Drosophila</i> development. <i>Journal of Cell Science</i> , 2001, 114, 3445-3454.	1.2	56
68	The Degradation of Two Mitotic Cyclins Contributes to the Timing of Cytokinesis. <i>Current Biology</i> , 2003, 13, 373-383.	1.8	55
69	Chromosome Association of Minichromosome Maintenance Proteins in <i>Drosophila</i> Mitotic Cycles. <i>Journal of Cell Biology</i> , 1997, 139, 13-21.	2.3	50
70	Mitotic Regulators Govern Progress through Steps in the Centrosome Duplication Cycle. <i>Journal of Cell Biology</i> , 1999, 147, 1371-1378.	2.3	50
71	Rux is a cyclin-dependent kinase inhibitor (CKI) specific for mitotic cyclin-Cdk complexes. <i>Current Biology</i> , 1999, 9, 1392-1402.	1.8	50
72	Anomalous centriole configurations are detected in <i>Drosophila</i> wing disc cells upon Cdk1 inactivation. <i>Journal of Cell Science</i> , 2003, 116, 137-143.	1.2	46

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73	Big genes and little genes and deadlines for transcription. <i>Nature</i> , 1992, 359, 366-367.	13.7	45
74	Growing an Embryo from a Single Cell: A Hurdle in Animal Life: Figure 1.. <i>Cold Spring Harbor Perspectives in Biology</i> , 2015, 7, a019042.	2.3	45
75	Selections that isolate recombinant mitochondrial genomes in animals. <i>ELife</i> , 2015, 4, .	2.8	45
76	<i>Drosophila</i> grapes/CHK1 mutants are defective in cyclin proteolysis and coordination of mitotic events. <i>Current Biology</i> , 1999, 9, 919-S1.	1.8	44
77	DNA replication times the cell cycle and contributes to the mid-blastula transition in <i>Drosophila</i> embryos. <i>Journal of Cell Biology</i> , 2009, 187, 7-14.	2.3	43
78	Cyclin B3 Is a Mitotic Cyclin that Promotes the Metaphase-Anaphase Transition. <i>Current Biology</i> , 2015, 25, 811-816.	1.8	43
79	Influence of cyclin type and dose on mitotic entry and progression in the early <i>Drosophila</i> embryo. <i>Journal of Cell Biology</i> , 2009, 184, 639-646.	2.3	42
80	Cdks and the <i>Drosophila</i> cell cycle. <i>Current Opinion in Genetics and Development</i> , 1997, 7, 17-22.	1.5	39
81	The Mitochondrial DNA Polymerase Promotes Elimination of Paternal Mitochondrial Genomes. <i>Current Biology</i> , 2017, 27, 1033-1039.	1.8	39
82	An RNA Interference Screen Identifies a Novel Regulator of Target of Rapamycin That Mediates Hypoxia Suppression of Translation in <i>Drosophila</i> S2 Cells. <i>Molecular Biology of the Cell</i> , 2008, 19, 4051-4061.	0.9	35
83	Illuminating DNA replication during <i>Drosophila</i> development using TALE-lights. <i>Current Biology</i> , 2014, 24, R144-R145.	1.8	35
84	Involvement of an SCF <sup>Smb</sup> complex in timely elimination of E2F upon initiation of DNA replication in <i>Drosophila</i> . <i>BMC Genetics</i> , 2003, 4, 9.	2.7	32
85	Connecting Cell Behavior to Patterning: Lessons from the Cell Cycle. <i>Cell</i> , 1997, 88, 309-314.	13.5	31
86	Nitric oxide synthase is not essential for <i>Drosophila</i> development. <i>Current Biology</i> , 2010, 20, R141-R142.	1.8	30
87	Conserved responses to oxygen deprivation. <i>Journal of Clinical Investigation</i> , 2001, 107, 671-674.	3.9	25
88	The proteomics era: The early days of two-dimensional gels. <i>Proteomics</i> , 2008, 8, 4842-4852.	1.3	24
89	Sister Chromatids Fail to Separate during an Induced Endoreplication Cycle in <i>Drosophila</i> Embryos. <i>Current Biology</i> , 2002, 12, 829-833.	1.8	22
90	Dissection of a Hypoxia-induced, Nitric Oxide-mediated Signaling Cascade. <i>Molecular Biology of the Cell</i> , 2009, 20, 4083-4090.	0.9	22

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91	A Genome-wide Screen Reveals that Reducing Mitochondrial DNA Polymerase Can Promote Elimination of Deleterious Mitochondrial Mutations. <i>Current Biology</i> , 2019, 29, 4330-4336.e3.	1.8	22
92	Cloning of <i>Drosophila</i> MCM homologs and analysis of their requirement during embryogenesis. <i>Gene</i> , 1997, 192, 283-289.	1.0	21
93	Interphase-arrested <i>Drosophila</i> embryos activate zygotic gene expression and initiate mid-blastula transition events at a low nuclear-cytoplasmic ratio. <i>PLoS Biology</i> , 2020, 18, e3000891.	2.6	20
94	Unanimity waits in the wings. <i>Nature</i> , 1994, 368, 188-189.	13.7	17
95	Phagocytosis of <i>Candida albicans</i> by RNAi-Treated <i>Drosophila</i> S2 Cells. <i>Methods in Molecular Biology</i> , 2009, 470, 347-358.	0.4	15
96	Chapter 27 The Use of Photoactivatable Reagents for the Study of Cell Lineage in <i>Drosophila</i> Embryogenesis. <i>Methods in Cell Biology</i> , 1994, 44, 533-543.	0.5	13
97	Different cyclin types collaborate to reverse the S-phase checkpoint and permit prompt mitosis. <i>Journal of Cell Biology</i> , 2012, 198, 973-980.	2.3	12
98	Sophisticated lessons from simple organisms: appreciating the value of curiosity-driven research. <i>DMM Disease Models and Mechanisms</i> , 2017, 10, 1381-1389.	1.2	12
99	Application of <i>drosophila</i> molecular genetics in the study of neural function – studies of the shaker locus for a potassium channel. <i>Trends in Neurosciences</i> , 1985, 8, 234-238.	4.2	9
100	Temporal control of late replication and coordination of origin firing by self-stabilizing Rif1-PP1 hubs in <i>Drosophila</i> . <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2022, 119, .	3.3	6
101	Two-Dimensional Gel Electrophoresis and the Beginning of Proteomics. <i>Clinical Chemistry</i> , 2014, 60, 1012-1013.	1.5	2
102	Chapter 4 Studies of Shaker Mutations Affecting a K <sup>+</sup> Channel in <i>Drosophila</i> . <i>Current Topics in Membranes and Transport</i> , 1985, 23, 67-77.	0.6	1