Allan C Spradling

List of Publications by Citations

108 papers	22,442 citations	64 h-index	126 g-index
126 ext. papers	25,166 ext. citations	16.7 avg, IF	7.05 L-index

#	Paper	IF	Citations
108	The genome sequence of Drosophila melanogaster. *Science*, **2000**, 287, 2185-95	33.3	4857
107	Stem cells and niches: mechanisms that promote stem cell maintenance throughout life. *Cell*, **2008**, 132, 598-611	56.2	1449
106	Stem cells find their niche. *Nature*, **2001**, 414, 98-104	50.4	1171
105	The adult Drosophila posterior midgut is maintained by pluripotent stem cells. *Nature*, **2006**, 439, 470-4	50.4	773
104	The BDGP gene disruption project: single transposon insertions associated with 40% of Drosophila genes. *Genetics*, **2004**, 167, 761-81	4	668
103	A niche maintaining germ line stem cells in the Drosophila ovary. *Science*, **2000**, 290, 328-30	33.3	644
102	The Berkeley Drosophila Genome Project gene disruption project: Single P-element insertions mutating 25% of vital Drosophila genes. *Genetics*, **1999**, 153, 135-77	4	621
101	decapentaplegic is essential for the maintenance and division of germline stem cells in the Drosophila ovary. *Cell*, **1998**, 94, 251-60	56.2	544
100	Mouse ovarian germ cell cysts undergo programmed breakdown to form primordial follicles. *Developmental Biology*, **2001**, 234, 339-51	3.1	523
99	Vectors for P element-mediated gene transfer in Drosophila. *Nucleic Acids Research*, **1983**, 11, 6341-51	20.1	512
98	Multipotent Drosophila intestinal stem cells specify daughter cell fates by differential notch signaling. *Science*, **2007**, 315, 988-92	33.3	484
97	Stem cells and their progeny respond to nutritional changes during Drosophila oogenesis. *Developmental Biology*, **2001**, 231, 265-78	3.1	453
96	MiMIC: a highly versatile transposon insertion resource for engineering Drosophila melanogaster genes. *Nature Methods*, **2011**, 8, 737-43	21.6	419
95	The carnegie protein trap library: a versatile tool for Drosophila developmental studies. *Genetics*, **2007**, 175, 1505-31	4	405
94	Chromatin loosening by poly(ADP)-ribose polymerase (PARP) at Drosophila puff loci. *Science*, **2003**, 299, 560-2	33.3	391
93	The effect of chromosomal position on the expression of the Drosophila xanthine dehydrogenase gene. *Cell*, **1983**, 34, 47-57	56.2	384
92	Male and female Drosophila germline stem cells: two versions of immortality. *Science*, **2007**, 316, 402-4	33.3	351

91	The stem cell niche: theme and variations. *Current Opinion in Cell Biology*, **2004**, 16, 693-9	9	281
90	slow border cells, a locus required for a developmentally regulated cell migration during oogenesis, encodes Drosophila C/EBP. *Cell*, **1992**, 71, 51-62	56.2	276
89	Differentiating germ cells can revert into functional stem cells in Drosophila melanogaster ovaries. *Nature*, **2004**, 428, 564-9	50.4	273
88	Messenger RNA in heat-shocked Drosophila cells. *Journal of Molecular Biology*, **1977**, 109, 559-87	6.5	272
87	The Drosophila gene disruption project: progress using transposons with distinctive site specificities. *Genetics*, **2011**, 188, 731-43	4	253
86	The Drosophila ovarian and testis stem cell niches: similar somatic stem cells and signals. *Developmental Cell*, **2005**, 9, 501-10	10.2	252
85	An empty Drosophila stem cell niche reactivates the proliferation of ectopic cells. *Proceedings of the National Academy of Sciences of the United States of America*, **2003**, 100, 4633-8	11.5	233
84	Drosophila stem cell niches: a decade of discovery suggests a unified view of stem cell regulation. *Developmental Cell*, **2011**, 21, 159-71	10.2	230
83	A Balbiani body and the fusome mediate mitochondrial inheritance during Drosophila oogenesis. *Development (Cambridge)*, **2003**, 130, 1579-90	6.6	223
82	A library of MiMICs allows tagging of genes and reversible, spatial and temporal knockdown of proteins in Drosophila. *ELife*, **2015**, 4,	8.9	199
81	Germline stem cells. *Cold Spring Harbor Perspectives in Biology*, **2011**, 3, a002642	10.2	195
80	Germline cysts: a conserved phase of germ cell development?. *Trends in Cell Biology*, **1999**, 9, 257-62	18.3	191
79	Germline stem cell division and egg chamber development in transplanted Drosophila germaria. *Developmental Biology*, **1993**, 159, 140-52	3.1	186
78	Fusome asymmetry and oocyte determination in Drosophila. *Genesis*, **1995**, 16, 6-12		175
77	Mouse oocytes within germ cell cysts and primordial follicles contain a Balbiani body. *Proceedings of the National Academy of Sciences of the United States of America*, **2007**, 104, 187-92	11.5	168
76	The Drosophila heterochromatic gene encoding poly(ADP-ribose) polymerase (PARP) is required to modulate chromatin structure during development. *Genes and Development*, **2002**, 16, 2108-19	12.6	163
75	Physiological and stem cell compartmentalization within the Drosophila midgut. *ELife*, **2013**, 2, e00886	8.9	156
74	Mouse oocytes differentiate through organelle enrichment from sister cyst germ cells. *Science*, **2016**, 352, 95-9	33.3	153

73	An epithelial niche in the Drosophila ovary undergoes long-range stem cell replacement. *Cell Stem Cell*, **2007**, 1, 277-85	18	151
72	Female mice lack adult germ-line stem cells but sustain oogenesis using stable primordial follicles. *Proceedings of the National Academy of Sciences of the United States of America*, **2013**, 110, 8585-90	11.5	134
71	Long-term live imaging provides new insight into stem cell regulation and germline-soma coordination in the Drosophila ovary. *Development (Cambridge)*, **2011**, 138, 2207-15	6.6	129
70	Reduced DNA polytenization of a minichromosome region undergoing position-effect variegation in Drosophila. *Cell*, **1990**, 63, 97-107	56.2	128
69	Polyploidization and cell fusion contribute to wound healing in the adult Drosophila epithelium. *Current Biology*, **2013**, 23, 2224-2232	6.3	124
68	Mouse primordial germ cells produce cysts that partially fragment prior to meiosis. *Development (Cambridge)*, **2013**, 140, 2075-81	6.6	116
67	Transcriptional silencing and reactivation in transgenic zebrafish. *Genetics*, **2009**, 182, 747-55	4	113
66	Two clusters of genes for major chorion proteins of Drosophila melanogaster. *Cell*, **1980**, 19, 905-14	56.2	111
65	Steroid Signaling Establishes a Female Metabolic State and Regulates SREBP to Control Oocyte Lipid Accumulation. *Current Biology*, **2015**, 25, 993-1004	6.3	105
64	Identification and genetic localization of mRNAs from ovarian follicle cells of Drosophila melanogaster. *Cell*, **1979**, 16, 589-98	56.2	105
63	The expression profile of purified Drosophila germline stem cells. *Developmental Biology*, **2005**, 283, 486-502	3.1	101
62	Two very different components of messenger RNA in an insect cell line. *Cell*, **1975**, 4, 131-7	56.2	100
61	Localization of a cis-acting element responsible for the developmentally regulated amplification of Drosophila chorion genes. *Cell*, **1984**, 38, 45-54	56.2	99
60	Drosophila stem cells share a common requirement for the histone H2B ubiquitin protease scrawny. *Science*, **2009**, 323, 248-51	33.3	98
59	A gene-specific library for. *ELife*, **2018**, 7,	8.9	85
58	Searching chromatin for stem cell identity. *Cell*, **2006**, 125, 233-6	56.2	81
57	The Drosophila hindgut lacks constitutively active adult stem cells but proliferates in response to tissue damage. *Cell Stem Cell*, **2009**, 5, 290-7	18	79
56	A genetic toolkit for tagging intronic MiMIC containing genes. *ELife*, **2015**, 4,	8.9	78

55	New components of the Drosophila fusome suggest it plays novel roles in signaling and transport. *Developmental Biology*, **2008**, 317, 59-71	3.1	76
54	Cyclin A associates with the fusome during germline cyst formation in the Drosophila ovary. *Developmental Biology*, **2000**, 218, 53-63	3.1	75
53	Drosophila eggshell production: identification of new genes and coordination by Pxt. *PLoS ONE*, **2011**, 6, e19943	3.7	73
52	Regulation of epithelial stem cell replacement and follicle formation in the Drosophila ovary. *Genetics*, **2010**, 184, 503-15	4	71
51	DNA sequence of a 3.8 kilobase pair region controlling Drosophila chorion gene amplification. *Chromosoma*, **1985**, 92, 136-42	2.8	70
50	Error-prone polyploid mitosis during normal Drosophila development. *Genes and Development*, **2010**, 24, 2294-302	12.6	69
49	Drosophila P elements preferentially transpose to replication origins. *Proceedings of the National Academy of Sciences of the United States of America*, **2011**, 108, 15948-53	11.5	68
48	Electron Transport Chain Remodeling by GSK3 during Oogenesis Connects Nutrient State to Reproduction. *Cell*, **2016**, 164, 420-32	56.2	66
47	Fragile X mental retardation 1 gene enhances the translation of large autism-related proteins. *Science*, **2018**, 361, 709-712	33.3	66
46	Clueless, a conserved Drosophila gene required for mitochondrial subcellular localization, interacts genetically with parkin. *DMM Disease Models and Mechanisms*, **2009**, 2, 490-9	4.1	65
45	Chorion gene amplification in Drosophila: A model for metazoan origins of DNA replication and S-phase control. *Methods*, **1999**, 18, 407-17	4.6	64
44	The messenger-like poly(A)-containing RNA species from the mitochondria of mammals and insects. *Cell*, **1974**, 1, 31-35	56.2	64
43	Ovulation in Drosophila is controlled by secretory cells of the female reproductive tract. *ELife*, **2013** , 2, e00415	8.9	64
42	The Drosophila P68 RNA helicase regulates transcriptional deactivation by promoting RNA release from chromatin. *Genes and Development*, **2006**, 20, 977-89	12.6	61
41	Controlling P element insertional mutagenesis. *Trends in Genetics*, **1988**, 4, 254-8	8.5	59
40	Steroid signaling within Drosophila ovarian epithelial cells sex-specifically modulates early germ cell development and meiotic entry. *PLoS ONE*, **2012**, 7, e46109	3.7	57
39	Incomplete replication generates somatic DNA alterations within Drosophila polytene salivary gland cells. *Genes and Development*, **2014**, 28, 1840-55	12.6	55
38	Developmentally regulated expression of Drosophila chorion genes introduced at diverse chromosomal positions. *Journal of Molecular Biology*, **1986**, 187, 33-45	6.5	51

37	Regulation of chromatin structure and gene activity by poly(ADP-ribose) polymerases. *Current Topics in Developmental Biology*, **2003**, 56, 55-83	5.3	50
36	Replication and expression of an X-linked cluster of Drosophila chorion genes. *Developmental Biology*, **1986**, 117, 294-305	3.1	50
35	Two distinct pathways of pregranulosa cell differentiation support follicle formation in the mouse ovary. *Proceedings of the National Academy of Sciences of the United States of America*, **2020**, 117, 20015-20026	11.5	48
34	Breaking out of the mold: diversity within adult stem cells and their niches. *Current Opinion in Genetics and Development*, **2006**, 16, 463-8	4.9	46
33	Drosophila poly(ADP-ribose) glycohydrolase mediates chromatin structure and SIR2-dependent silencing. *Genetics*, **2006**, 172, 363-71	4	45
32	Matrix metalloproteinase 2 is required for ovulation and corpus luteum formation in Drosophila. *PLoS Genetics*, **2015**, 11, e1004989	6	41
31	An efficient CRISPR-based strategy to insert small and large fragments of DNA using short homology arms. *ELife*, **2019**, 8,	8.9	41
30	Epigenetic stability increases extensively during Drosophila follicle stem cell differentiation. *Proceedings of the National Academy of Sciences of the United States of America*, **2010**, 107, 7389-94	11.5	39
29	Wound-Induced Polyploidization: Regulation by Hippo and JNK Signaling and Conservation in Mammals. *PLoS ONE*, **2016**, 11, e0151251	3.7	36
28	Drosophila bearing the ocelliless mutation underproduce two major chorion proteins both of which map near this gene. *Cell*, **1979**, 16, 609-16	56.2	35
27	Dietary Lipids Modulate Notch Signaling and Influence Adult Intestinal Development and Metabolism in Drosophila. *Developmental Cell*, **2018**, 47, 98-111.e5	10.2	35
26	Alpha-endosulfine, a potential regulator of insulin secretion, is required for adult tissue growth control in Drosophila. *Developmental Biology*, **2004**, 266, 310-21	3.1	33
25	Replication forks are not found in a Drosophila minichromosome demonstrating a gradient of polytenization. *Chromosoma*, **1992**, 102, 15-9	2.8	32
24	Methods with insect cells in suspension culture. II. Drosophila melanogaster. *Methods in Cell Biology* , **1975**, 10, 195-208	1.8	32
23	New roles for model genetic organisms in understanding and treating human disease: report from the 2006 Genetics Society of America meeting. *Genetics*, **2006**, 172, 2025-32	4	28
22	Efficient Expression of Genes in the Germline Using a UAS Promoter Free of Interference by Hsp70 piRNAs. *Genetics*, **2018**, 209, 381-387	4	26
21	NR5A nuclear receptor Hr39 controls three-cell secretory unit formation in Drosophila female reproductive glands. *Current Biology*, **2012**, 22, 862-71	6.3	25
20	The nuclear location and chromatin organization of active chorion amplification origins. *Chromosoma*, **2001**, 110, 159-72	2.8	23

19	Unusual properties of genomic DNA molecules spanning the euchromatic-heterochromatic junction of a Drosophila minichromosome. *Nucleic Acids Research*, **1994**, 22, 5068-75	20.1	19
18	Developmental biology. The mother of all stem cells?. *Science*, **2007**, 315, 469-70	33.3	17
17	The progenitor state is maintained by lysine-specific demethylase 1-mediated epigenetic plasticity during Drosophila follicle cell development. *Genes and Development*, **2014**, 28, 2739-49	12.6	15
16	The role of metabolic states in development and disease. *Current Opinion in Genetics and Development*, **2017**, 45, 58-68	4.9	14
15	An abundant quiescent stem cell population in Malpighian tubules protects principal cells from kidney stones. *ELife*, **2020**, 9,	8.9	11
14	Prolonged ovarian storage of mature oocytes dramatically increases meiotic spindle instability. *ELife*, **2019**, 8,	8.9	10
13	Learning the common language of genetics. *Genetics*, **2006**, 174, 1-3	4	7
12	Identification of Genes Mediating Drosophila Follicle Cell Progenitor Differentiation by Screening for Modifiers of GAL4::UAS Variegation. *G3: Genes, Genomes, Genetics*, **2017**, 7, 309-318	3.2	6
11	Differentiating female germ cells initiate Polycomb silencing by regulating PRC2-interacting proteins. *ELife*, **2020**, 9,	8.9	5
10	Single-Cell Lineage Analysis of Oogenesis in Mice. *Methods in Molecular Biology*, **2017**, 1463, 125-138	1.4	4
9	Polytene Chromosome Structure and Somatic Genome Instability. *Cold Spring Harbor Symposia on Quantitative Biology*, **2017**, 82, 293-304	3.9	4
8	The living-tissue microscope: the importance of studying stem cells in their natural, undisturbed microenvironment. *Journal of Pathology*, **2011**, 225, 161-2	9.4	3
7	The Carnegie Institution of Washington, Department of Embryology. *Molecular Medicine*, **1997**, 3, 417-419	6.2	2
6	Author response: Physiological and stem cell compartmentalization within the Drosophila midgut **2013**,		2
5	Opinion: NIH must support broadly focused basic research. *Proceedings of the National Academy of Sciences of the United States of America*, **2016**, 113, 8340-2	11.5	2
4	Dietary lipids modulate Notch signaling and influence adult intestinal development and metabolism in Drosophila		1
3	High contiguity de novo genome assembly and DNA modification analyses for the fungus fly, Sciara coprophila, using single-molecule sequencing. *BMC Genomics*, **2021**, 22, 643	4.5	1
2	Reflections on the Drosophila genome. *Functional and Integrative Genomics*, **2001**, 1, 221-222	3.8	

1 The Carnegie Department of Embryology at 100: Looking Forward. *Current Topics in Developmental Biology*, **2016**, 117, 405-15 5.3