Andrew W Murray

List of Publications by Citations

71 papers	6,658 citations	21 h-index	81 g-index
91 ext. papers	7,431 ext. citations	15.7 avg, IF	6.23 L-index

#	Paper	IF	Citations
71	Cyclin is degraded by the ubiquitin pathway. *Nature*, **1991**, 349, 132-8	50.4	2102
70	Feedback control of mitosis in budding yeast. *Cell*, **1991**, 66, 519-31	56.2	1044
69	Recycling the cell cycle: cyclins revisited. *Cell*, **2004**, 116, 221-34	56.2	892
68	Creative blocks: cell-cycle checkpoints and feedback controls. *Nature*, **1992**, 359, 599-604	50.4	649
67	The speed of evolution and maintenance of variation in asexual populations. *Current Biology*, **2007**, 17, 385-94	6.3	226
66	Requirement of the spindle checkpoint for proper chromosome segregation in budding yeast meiosis. *Science*, **2000**, 289, 300-3	33.3	186
65	Cell cycle checkpoints. *Current Opinion in Cell Biology*, **1994**, 6, 872-6	9	149
64	Plant-fungal ecology. Niche engineering demonstrates a latent capacity for fungal-algal mutualism. *Science*, **2014**, 345, 94-8	33.3	143
63	Genetic drift opposes mutualism during spatial population expansion. *Proceedings of the National Academy of Sciences of the United States of America*, **2014**, 111, 1037-42	11.5	114
62	Selective sweeps in growing microbial colonies. *Physical Biology*, **2012**, 9, 026008	3	107
61	Exploring genetic suppression interactions on a global scale. *Science*, **2016**, 354,	33.3	103
60	Positive-feedback loops as a flexible biological module. *Current Biology*, **2007**, 17, 668-77	6.3	87
59	Improved use of a public good selects for the evolution of undifferentiated multicellularity. *ELife*, **2013**, 2, e00367	8.9	82
58	A novel yeast screen for mitotic arrest mutants identifies DOC1, a new gene involved in cyclin proteolysis. *Molecular Biology of the Cell*, **1997**, 8, 1877-87	3.5	77
57	Spo13 protects meiotic cohesin at centromeres in meiosis I. *Genes and Development*, **2002**, 16, 1659-71	12.6	73
56	Lesions in many different spindle components activate the spindle checkpoint in the budding yeast Saccharomyces cerevisiae. *Genetics*, **1999**, 152, 509-18	4	47
55	The mitotic feedback control gene MAD2 encodes the alpha-subunit of a prenyltransferase. *Nature*, **1993**, 366, 82-4	50.4	46

54	Evolutionary adaptation after crippling cell polarization follows reproducible trajectories. *ELife*, **2015**, 4,	8.9	43
53	A brief history of error. *Nature Cell Biology*, **2011**, 13, 1178-82	23.4	30
52	Many, but not all, lineage-specific genes can be explained by homology detection failure. *PLoS Biology*, **2020**, 18, e3000862	9.7	26
51	Physical interactions reduce the power of natural selection in growing yeast colonies. *Proceedings of the National Academy of Sciences of the United States of America*, **2018**, 115, 11448-11453	11.5	24
50	How Obstacles Perturb Population Fronts and Alter Their Genetic Structure. *PLoS Computational Biology*, **2015**, 11, e1004615	5	19
49	Chromosomal attachments set length and microtubule number in the Saccharomyces cerevisiae mitotic spindle. *Molecular Biology of the Cell*, **2014**, 25, 4034-48	3.5	18
48	Details Matter: Noise and Model Structure Set the Relationship between Cell Size and Cell Cycle Timing. *Frontiers in Cell and Developmental Biology*, **2017**, 5, 92	5.7	17
47	The evolutionary plasticity of chromosome metabolism allows adaptation to constitutive DNA replication stress. *ELife*, **2020**, 9,	8.9	16
46	A Putative Bet-Hedging Strategy Buffers Budding Yeast against Environmental Instability. *Current Biology*, **2020**, 30, 4563-4578.e4	6.3	16
45	Spatially Constrained Growth Enhances Conversional Meltdown. *Biophysical Journal*, **2016**, 110, 2800-2808	2.9	16
44	Heterozygous mutations cause genetic instability in a yeast model of cancer evolution. *Nature*, **2019**, 566, 275-278	50.4	15
43	A model for cell wall dissolution in mating yeast cells: polarized secretion and restricted diffusion of cell wall remodeling enzymes induces local dissolution. *PLoS ONE*, **2014**, 9, e109780	3.7	15
42	A Predictive Model for Yeast Cell Polarization in Pheromone Gradients. *PLoS Computational Biology*, **2016**, 12, e1004795	5	15
41	Genetic drift and selection in many-allele range expansions. *PLoS Computational Biology*, **2017**, 13, e1005866	3.9	14
40	Growing yeast into cylindrical colonies. *Biophysical Journal*, **2014**, 106, 2214-21	2.9	14
39	Evolving a 24-hr oscillator in budding yeast. *ELife*, **2014**, 3,	8.9	14
38	Cell-size regulation in budding yeast does not depend on linear accumulation of Whi5. *Proceedings of the National Academy of Sciences of the United States of America*, **2020**, 117, 14243-14250	11.5	13
37	Polymerization in the actin ATPase clan regulates hexokinase activity in yeast. *Science*, **2020**, 367, 1039-1042	3.9	13

36	Cohesion is established during DNA replication utilising chromosome associated cohesin rings as well as those loaded de novo onto nascent DNAs. *ELife*, **2020**, 9,	8.9	13
35	Tethering sister centromeres to each other suggests the spindle checkpoint detects stretch within the kinetochore. *PLoS Genetics*, **2014**, 10, e1004492	6	11
34	A model for the evolution of biological specificity: a cross-reacting DNA-binding protein causes plasmid incompatibility. *Journal of Bacteriology*, **2014**, 196, 3002-11	3.5	10
33	Seasonal changes in diet and chemical defense in the Climbing Mantella frog (Mantella laevigata). *PLoS ONE*, **2018**, 13, e0207940	3.7	10
32	Evolutionary repair: Changes in multiple functional modules allow meiotic cohesin to support mitosis. *PLoS Biology*, **2020**, 18, e3000635	9.7	9
31	Multicellularity makes somatic differentiation evolutionarily stable. *Proceedings of the National Academy of Sciences of the United States of America*, **2016**, 113, 8362-7	11.5	9
30	Can gene-inactivating mutations lead to evolutionary novelty?. *Current Biology*, **2020**, 30, R465-R471	6.3	8
29	Conservation weighting functions enable covariance analyses to detect functionally important amino acids. *PLoS ONE*, **2014**, 9, e107723	3.7	8
28	Don't make me mad, Bub!. *Developmental Cell*, **2012**, 22, 1123-5	10.2	8
27	Evolutionary Repair Experiments as a Window to the Molecular Diversity of Life. *Current Biology*, **2020**, 30, R565-R574	6.3	8
26	Many but not all lineage-specific genes can be explained by homology detection failure		5
25	Selecting for Altered Substrate Specificity Reveals the Evolutionary Flexibility of ATP-Binding Cassette Transporters. *Current Biology*, **2020**, 30, 1689-1702.e6	6.3	5
24	Microbial Range Expansions on Liquid Substrates. *Physical Review X*, **2019**, 9,	9.1	4
23	Rapid toxin sequestration modifies poison frog physiology. *Journal of Experimental Biology*, **2021**, 224,	3	4
22	Salvador Luria and Max Delbrück on Random Mutation and Fluctuation Tests. *Genetics*, **2016**, 202, 367-8	4	2
21	Bet hedging buffers budding yeast against environmental instability		2
20	Modeling the impact of single-cell stochasticity and size control on the population growth rate in asymmetrically dividing cells. *PLoS Computational Biology*, **2021**, 17, e1009080	5	2
19	Mixing genome annotation methods in a comparative analysis inflates the apparent number of lineage-specific genes		1

18	Ploidy and recombination proficiency shape the evolutionary adaptation to constitutive DNA replication stress. *PLoS Genetics*, **2021**, 17, e1009875	6	1
17	When it comes to teaching and tenure it is time to walk the walk. *ELife*, **2019**, 8,	8.9	1
16	Physical interactions reduce the power of natural selection in growing yeast colonies		1
15	Independent evolution of polymerization in the Actin ATPase clan regulates hexokinase activity		1
14	Cell size regulation in budding yeast does not depend on linear accumulation of Whi5		1
13	Antagonism between killer yeast strains as an experimental model for biological nucleation dynamics. *ELife*, **2021**, 10,	8.9	1
12	A Yeast Model for the Evolution of Multicellularity and Cellular Differentiation. *FASEB Journal*, **2013**, 27, lb241	0.9	
11	Paul Nurse and Pierre Thuriaux on wee Mutants and Cell Cycle Control. *Genetics*, **2016**, 204, 1325-1326	4	
10	Evolutionary repair: Changes in multiple functional modules allow meiotic cohesin to support mitosis **2020**, 18, e3000635		
9	Evolutionary repair: Changes in multiple functional modules allow meiotic cohesin to support mitosis **2020**, 18, e3000635		
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