Albertha Jm Walhout

List of Publications by Citations

95 papers	**8,022** citations	**45** h-index	**89** g-index
111 ext. papers	**9,592** ext. citations	**14.3** avg, IF	**5.92** L-index

#	Paper	IF	Citations
95	Evidence for dynamically organized modularity in the yeast protein-protein interaction network. *Nature*, **2004**, 430, 88-93	50.4	1381
94	GATEWAY recombinational cloning: application to the cloning of large numbers of open reading frames or ORFeomes. *Methods in Enzymology*, **2000**, 328, 575-92	1.7	496
93	Integrating ῾omic᾿ information: a bridge between genomics and systems biology. *Trends in Genetics*, **2003**, 19, 551-60	8.5	363
92	Widespread macromolecular interaction perturbations in human genetic disorders. *Cell*, **2015**, 161, 647-660	56.2	343
91	Gene regulatory networks and the role of robustness and stochasticity in the control of gene expression. *Genome Research*, **2011**, 21, 645-57	9.7	209
90	High-throughput yeast two-hybrid assays for large-scale protein interaction mapping. *Methods*, **2001**, 24, 297-306	4.6	208
89	Chromatin immunoprecipitation (ChIP) coupled to detection by quantitative real-time PCR to study transcription factor binding to DNA in Caenorhabditis elegans. *Nature Protocols*, **2008**, 3, 698-709	18.8	205
88	A multiparameter network reveals extensive divergence between C. elegans bHLH transcription factors. *Cell*, **2009**, 138, 314-27	56.2	196
87	A gene-centered C. elegans protein-DNA interaction network. *Cell*, **2006**, 125, 1193-205	56.2	194
86	The interplay between transcription factors and microRNAs in genome-scale regulatory networks. *BioEssays*, **2009**, 31, 435-45	4.1	181
85	A C. elegans genome-scale microRNA network contains composite feedback motifs with high flux capacity. *Genes and Development*, **2008**, 22, 2535-49	12.6	178
84	Diet-induced developmental acceleration independent of TOR and insulin in C. elegans. *Cell*, **2013**, 153, 240-52	56.2	170
83	Genome-scale spatiotemporal analysis of Caenorhabditis elegans microRNA promoter activity. *Genome Research*, **2008**, 18, 2005-15	9.7	162
82	A gateway-compatible yeast one-hybrid system. *Genome Research*, **2004**, 14, 2093-101	9.7	162
81	Integrating interactome, phenome, and transcriptome mapping data for the C. elegans germline. *Current Biology*, **2002**, 12, 1952-8	6.3	157
80	A protein-protein interaction map of the Caenorhabditis elegans 26S proteasome. *EMBO Reports*, **2001**, 2, 821-8	6.5	156
79	A compendium of Caenorhabditis elegans regulatory transcription factors: a resource for mapping transcription regulatory networks. *Genome Biology*, **2005**, 6, R110	18.3	142

78	Using networks to measure similarity between genes: association index selection. *Nature Methods*, **2013**, 10, 1169-76	21.6	141
77	A first version of the Caenorhabditis elegans Promoterome. *Genome Research*, **2004**, 14, 2169-75	9.7	133
76	A stele-enriched gene regulatory network in the Arabidopsis root. *Molecular Systems Biology*, **2011**, 7, 459	12.2	127
75	Unraveling transcription regulatory networks by protein-DNA and protein-protein interaction mapping. *Genome Research*, **2006**, 16, 1445-54	9.7	121
74	Bacterial Metabolism Affects the C. elegans Response to Cancer Chemotherapeutics. *Cell*, **2017**, 169, 431-441.e8	56.2	120
73	Protein interaction maps for model organisms. *Nature Reviews Molecular Cell Biology*, **2001**, 2, 55-62	48.7	118
72	Interspecies systems biology uncovers metabolites affecting C. elegans gene expression and life history traits. *Cell*, **2014**, 156, 759-70	56.2	111
71	C. elegans 14-3-3 proteins regulate life span and interact with SIR-2.1 and DAF-16/FOXO. *Mechanisms of Ageing and Development*, **2006**, 127, 741-7	5.6	107
70	Insight into transcription factor gene duplication from Caenorhabditis elegans Promoterome-driven expression patterns. *BMC Genomics*, **2007**, 8, 27	4.5	103
69	Enhanced Y1H assays for Arabidopsis. *Nature Methods*, **2011**, 8, 1053-5	21.6	92
68	C. elegans tubby regulates life span and fat storage by two independent mechanisms. *Cell Metabolism*, **2005**, 2, 35-42	24.6	91
67	Enhanced yeast one-hybrid assays for high-throughput gene-centered regulatory network mapping. *Nature Methods*, **2011**, 8, 1059-64	21.6	82
66	Integration of metabolic and gene regulatory networks modulates the C. elegans dietary response. *Cell*, **2013**, 153, 253-66	56.2	81
65	Human gene-centered transcription factor networks for enhancers and disease variants. *Cell*, **2015**, 161, 661-673	56.2	80
64	Transcription factor modularity in a gene-centered C. elegans core neuronal protein-DNA interaction network. *Genome Research*, **2007**, 17, 1061-71	9.7	80
63	c-Myc/Max heterodimers bind cooperatively to the E-box sequences located in the first intron of the rat ornithine decarboxylase (ODC) gene. *Nucleic Acids Research*, **1997**, 25, 1493-501	20.1	69
62	Functional modularity of nuclear hormone receptors in a Caenorhabditis elegans metabolic gene regulatory network. *Molecular Systems Biology*, **2010**, 6, 367	12.2	65
61	Complex expression dynamics and robustness in C. elegans insulin networks. *Genome Research*, **2013**, 23, 954-65	9.7	64

| 60 | Matrix and Steiner-triple-system smart pooling assays for high-performance transcription regulatory network mapping. *Nature Methods*, **2007**, 4, 659-64 | 21.6 | 59 |

| 59 | A Caenorhabditis elegans Genome-Scale Metabolic Network Model. *Cell Systems*, **2016**, 2, 297-311 | 10.6 | 55 |

| 58 | Extensive rewiring and complex evolutionary dynamics in a C. elegans multiparameter transcription factor network. *Molecular Cell*, **2013**, 51, 116-27 | 17.6 | 55 |

| 57 | Using a structural and logics systems approach to infer bHLH-DNA binding specificity determinants. *Nucleic Acids Research*, **2011**, 39, 4553-63 | 20.1 | 54 |

| 56 | Metabolic network rewiring of propionate flux compensates vitamin B12 deficiency in C. elegans. *ELife*, **2016**, 5, | 8.9 | 51 |

| 55 | Worms, bacteria, and micronutrients: an elegant model of our diet. *Trends in Genetics*, **2014**, 30, 496-503 | 8.5 | 50 |

| 54 | A genetic strategy to eliminate self-activator baits prior to high-throughput yeast two-hybrid screens. *Genome Research*, **1999**, 9, 1128-34 | 9.7 | 48 |

| 53 | Mapping and analysis of Caenorhabditis elegans transcription factor sequence specificities. *ELife*, **2015**, 4, | 8.9 | 48 |

| 52 | RNA Interference in Caenorhabditis elegans. *Current Protocols in Molecular Biology*, **2015**, 109, 26.3.1-26.3.30 | 2.3 | 46 |

| 51 | What does biologically meaningful mean? A perspective on gene regulatory network validation. *Genome Biology*, **2011**, 12, 109 | 18.3 | 45 |

| 50 | C. elegans and its bacterial diet as a model for systems-level understanding of host-microbiota interactions. *Current Opinion in Biotechnology*, **2017**, 46, 74-80 | 11.4 | 41 |

| 49 | Yeast one-hybrid assays for gene-centered human gene regulatory network mapping. *Nature Methods*, **2011**, 8, 1050-2 | 21.6 | 41 |

| 48 | Transcription Factor Activity Mapping of a Tissue-Specific Gene Regulatory Network. *Cell Systems*, **2015**, 1, 152-162 | 10.6 | 40 |

| 47 | The FLYWCH transcription factors FLH-1, FLH-2, and FLH-3 repress embryonic expression of microRNA genes in C. elegans. *Genes and Development*, **2008**, 22, 2520-34 | 12.6 | 40 |

| 46 | Metabolic network modeling with model organisms. *Current Opinion in Chemical Biology*, **2017**, 36, 32-39 | 9.7 | 39 |

| 45 | Chromosome-biased binding and gene regulation by the Caenorhabditis elegans DRM complex. *PLoS Genetics*, **2011**, 7, e1002074 | 6 | 39 |

| 44 | A gene-centered C. elegans protein-DNA interaction network provides a framework for functional predictions. *Molecular Systems Biology*, **2016**, 12, 884 | 12.2 | 39 |

| 43 | WormPaths: metabolic pathway annotation and visualization **2020**, | | 36 |

42	Gene-centered regulatory networks. *Briefings in Functional Genomics*, **2010**, 9, 4-12	4.9	35
41	WormCat: An Online Tool for Annotation and Visualization of Genome-Scale Data. *Genetics*, **2020**, 214, 279-294	4	33
40	Gateway Recombinational Cloning. *Cold Spring Harbor Protocols*, **2018**, 2018,	1.2	31
39	The C. elegans Snail homolog CES-1 can activate gene expression in vivo and share targets with bHLH transcription factors. *Nucleic Acids Research*, **2009**, 37, 3689-98	20.1	30
38	EDGEdb: a transcription factor-DNA interaction database for the analysis of C. elegans differential gene expression. *BMC Genomics*, **2007**, 8, 21	4.5	29
37	Understanding Metabolic Regulation at a Systems Level: Metabolite Sensing, Mathematical Predictions, and Model Organisms. *Annual Review of Genetics*, **2015**, 49, 553-75	14.5	26
36	The Oxidative Stress Response in Requires the GATA Transcription Factor ELT-3 and SKN-1/Nrf2. *Genetics*, **2017**, 206, 1909-1922	4	23
35	A compendium of Caenorhabditis elegans RNA binding proteins predicts extensive regulation at multiple levels. *G3: Genes, Genomes, Genetics*, **2013**, 3, 297-304	3.2	22
34	Food, pathogen, signal: The multifaceted nature of a bacterial diet. *Worm*, **2013**, 2, e26454		20
33	Caenorhabditis elegans metabolic gene regulatory networks govern the cellular economy. *Trends in Endocrinology and Metabolism*, **2014**, 25, 502-8	8.8	17
32	A model of elegance. *American Journal of Human Genetics*, **1998**, 63, 955-61	11	17
31	A Persistence Detector for Metabolic Network Rewiring in an Animal. *Cell Reports*, **2019**, 26, 460-468.e4	10.6	17
30	Transcription factor functionality and transcription regulatory networks. *Molecular BioSystems*, **2008**, 4, 309-14		16
29	A green fluorescent protein-based reverse two-hybrid system: application to the characterization of large numbers of potential protein-protein interactions. *Methods in Enzymology*, **2000**, 328, 74-88	1.7	16
28	A Delicate Balance between Bacterial Iron and Reactive Oxygen Species Supports Optimal C. elegans Development. *Cell Host and Microbe*, **2019**, 26, 400-411.e3	23.4	15
27	Gene-centered regulatory network mapping. *Methods in Cell Biology*, **2011**, 106, 271-88	1.8	15
26	lin-8, which antagonizes Caenorhabditis elegans Ras-mediated vulval induction, encodes a novel nuclear protein that interacts with the LIN-35 Rb protein. *Genetics*, **2005**, 171, 1017-31	4	15
25	Transcription factor binding to Caenorhabditis elegans first introns reveals lack of redundancy with gene promoters. *Nucleic Acids Research*, **2014**, 42, 153-62	20.1	14

24	E1A functions as a coactivator of retinoic acid-dependent retinoic acid receptor-beta 2 promoter activation. *Molecular Endocrinology*, **1993**, 7, 604-615		12
23	C. elegans MRP-5 Exports Vitamin B12 from Mother to Offspring to Support Embryonic Development. *Cell Reports*, **2018**, 22, 3126-3133	10.6	10
22	Gene-Centered Yeast One-Hybrid Assays. *Cold Spring Harbor Protocols*, **2016**, 2016,	1.2	10
21	Generating Bait Strains for Yeast One-Hybrid Assays. *Cold Spring Harbor Protocols*, **2016**, 2016,	1.2	9
20	A regulatory cascade of three transcription factors in a single specific neuron, DVC, in Caenorhabditis elegans. *Gene*, **2012**, 494, 73-84	3.8	8
19	Integrated version of reverse two-hybrid system for the postproteomic era. *Methods in Enzymology*, **2002**, 350, 525-45	1.7	8
18	Modeling tissue-relevant Caenorhabditis elegans metabolism at network, pathway, reaction, and metabolite levels. *Molecular Systems Biology*, **2020**, 16, e9649	12.2	8
17	methionine/S-adenosylmethionine cycle activity is sensed and adjusted by a nuclear hormone receptor. *ELife*, **2020**, 9,	8.9	7
16	Multiple transcription factors directly regulate Hox gene lin-39 expression in ventral hypodermal cells of the C. elegans embryo and larva, including the hypodermal fate regulators LIN-26 and ELT-6. *BMC Developmental Biology*, **2014**, 14, 17	3.1	5
15	Many transcription factors contribute to C. elegans growth and fat storage. *Genes To Cells*, **2017**, 22, 770-784	2.3	5
14	Evolved bacterial resistance against fluoropyrimidines can lower chemotherapy impact in the host. *ELife*, **2020**, 9,	8.9	4
13	Generating Yeast One-Hybrid DNA-Bait Strains. *Cold Spring Harbor Protocols*, **2018**, 2018,	1.2	4
12	PRIMA: a gene-centered, RNA-to-protein method for mapping RNA-protein interactions. *Translation*, **2017**, 5, e1295130		2
11	Transcriptional regulation of metabolic flux: A Caenorhabditis elegans perspective. *Current Opinion in Systems Biology*, **2019**, 15, 12-18	3.2	2
10	If two deletions don't stop growth, try three. *Science*, **2018**, 360, 269-270	33.3	2
9	Genetic adaptation to diet preserves longevity. *Cell Metabolism*, **2014**, 19, 177-8	24.6	2
8	WormCat: an online tool for annotation and visualization of Caenorhabditis elegans genome-scale data		2
7	C. elegans and its bacterial diet: An interspecies model to explore the effects of microbiota on drug response. *Drug Discovery Today: Disease Models*, **2018**, 28, 21-26	1.3	2

List of Publications

6	Gateway-Compatible Yeast One-Hybrid and Two-Hybrid Assays. *Cold Spring Harbor Protocols*, **2018**, 2018,	1.2	2
5	Worms, bugs and drugs: Caenorhabditis elegans as a model for host-microbe-drug interactions. *Current Opinion in Systems Biology*, **2017**, 6, 46-50	3.2	0
4	Compartmentalization of metabolism between cell types in multicellular organisms: a computational perspective.. *Current Opinion in Systems Biology*, **2022**, 29, 100407-100407	3.2	0
3	Genomics in 2011: challenges and opportunities. *Genome Biology*, **2011**, 12, 137	18.3	
2	Marian Walhout: transcriptional mapmaker. Interviewed by Ben Short. *Journal of Cell Biology*, **2009**, 186, 4-5	7.3	
1	gene-centered regulatory networks. *FASEB Journal*, **2010**, 24, 314.1	0.9	