

# Toni Gabaldón

## *Publication list (as of December 2017)*

*Peer-reviewed publications ( & indicates corresponding author, C= citations, other remarks such as Faculty of 1000 recommendations or editor's choice are indicated ).*

*Total citations : 9960 h-index=52*

### *Publications in international peer-reviewed journals*

1. **Gabaldón, T.** and Huynen, MA. (2003) Reconstruction of the protomitochondrial metabolism. *Science* 1;301(5633):609. **recommended in Faculty of 1000.** C=174.
2. **Gabaldón, T.** and Huynen, MA. (2004) Prediction of protein function and pathways in the genome era. *Cell. Mol. Life Sci.* 61;(7-8):930-44. C=102.
3. **Gabaldón T<sup>&</sup>.** & Huynen MA. (2004) Shaping the mitochondrial proteome. *BBA– Bioenergetics.* Vol 1659/2-3 pp 212-220. . **Among the top-5 most downloaded paper in that journal in 2005.** C=138.
4. **Gabaldón T,** Rainey D and Huynen, MA. (2005) Tracing the evolution of a large protein complex in the eukaryotes, NADH:ubiquinone oxidoreductase (Complex I) . *J. Mol. Biol.* 13;348(4):857-70. **featured in Science Editor's choice.** C=199.
5. **Gabaldón T.** and Huynen MA. (2005) Lineage-specific gene loss following mitochondrial endosymbiosis and its applications for function prediction in the eukaryotes. *Bioinformatics* 21 S2:ii144-ii150. C=36.
6. **Gabaldón T.** (2005) Evolution of proteins and proteomes: a phylogenetics approach. *Evolutionary Bioinformatics Online.* 2005:1 51-61. C=22.
7. Boxma B, Graaf RM, van der Staay GWM, vanAlen TA, Ricard G, **Gabaldón T,** van Hoek AHAM, Moon-van der Staay SY, Koopman WJH, van Hellemond JJ, Tielens AGM, Friedrich T, Veenhuis M , Huynen MA, Hackstein JHP (2005) An anaerobic mitochondrion that produces hydrogen. *Nature.* 3;434(7029):74-9. **Recommended in Faculty of 1000.** C=210.
8. Huynen, MA., Spronk C.A.E.M., **Gabaldón, T.** and Snel B (2005) Combining data from genomes, Y2H and 3D data indicates that BolA is a reductase interacting with a glutaredoxin. *FEBS-Letters* 579(3):591-596 . **C=62.**
9. Huynen MA., **Gabaldón T** and Snel B. (2005) Variation and evolution of biomolecular systems: searching for functional relevance. *FEBS-Letters* 579(8):1839-1845. C=17.
10. **Gabaldón, T.** Snel, B. van Zimmeren, F. Hemrika, W. Tabak, H. and Huynen, MA. (2006) Origin and evolution of the peroxisomal proteome. *Biology Direct* 2006 1:8. **Recommended in Faculty of 1000.** C=164.
11. **Gabaldón, T<sup>&</sup>.** (2006) Computational approaches for the prediction of protein function in the mitochondrion. *Am J Physiol Cell Physiol.* 291:1121-1128. C=15.
12. **Gabaldón, T,** Peretó J.,Montero F., Gil, R., Latorre A. and Moya A (2007). Structural analysis of a hypothetical minimal metabolism. *Philos Trans R Soc Lond B Biol Sci.* 362(1486):1751-62. C=47.
13. Huerta-Cepas J., Dopazo H, Dopazo J and **Gabaldón, T<sup>&</sup>.** (2007). The human phylome. *Genome Biology* 2007, 8:R109. C=146.
14. **Gabaldón T<sup>&</sup>.** and Huynen MA. (2007). From endosymbiont to host-controlled organelle: the hijacking of the mitochondrial protein synthesis and metabolism. *PLoS Comp Biol* 3(11):e219. C=94.

15. Schluter A, Fourcade S, Domenech-Estevéz E, **Gabaldón T**, Huerta-Cepas J, Berthommier G, Ripp R, Wanders RJ, Poch O, and Pujol A. (2007) PeroxisomeDB: a database for the peroxisomal proteome, functional genomics and disease. *Nucl Acids Res.* 35(Database issue):D815-22. C=62.
16. Tarraga J, Medina I, Arbiza L, Huerta-Cepas J, **Gabaldón, T.**, Dopazo J and Dopazo H. (2007) Phylemon: a suite of web tools for molecular evolution, phylogenetics and phylogenomics. *Nucleic Acids Res.* 35(Web Server issue):W38-42. C=48.
17. Huerta-Cepas J., Bueno A, Dopazo J and **Gabaldón, T<sup>&</sup>**. (2008). PhylomeDB: a database for genome-wide collections of gene phylogenies. *Nucleic Acids Res* 36:D491-6. C=103.
18. **Gabaldón T<sup>&</sup>**. (2008). Large-scale assignment of orthology: back to phylogenetics?. *Genome Biology* 2008. 9:235. C=145.
19. Marcet-Houben M and **Gabaldón T<sup>&</sup>**. (2009) The tree versus the forest: the fungal tree of life and the topological diversity within the yeast phylome. *PLoS ONE.* 2009;4(2):e4357. C=79.
20. Capella-Gutiérrez S, Silla-Martínez JM and **Gabaldón T<sup>&</sup>**. (2009) trimAl: a tool for automated alignment trimming in large-scale phylogenetic analyses. *Bioinformatics* 25(15):1972-3. C=1,201.
21. Marcet-Houben M. Marcedu G, and **Gabaldón T<sup>&</sup>**. (2009). Phylogenomics of the oxidative phosphorylation in fungi reveals extensive gene duplication followed by functional divergence. *BMC Evol. Biology.* 9:295. C=39.
22. Gil-Borlado MC, González-Hoyuela M, Blázquez A., García-Silva MT, **Gabaldón T**, Manzanares J, Vara J, Martín MA, Seneca S, Arenas J and Ugalde C. (2009) Pathogenic mutations in the 5' untranslated region of BCS1L mRNA in mitochondrial complex III deficiency. *Mitochondrion.* 9(5):299-305. C=23.
23. **Gabaldón T<sup>&</sup>**, Dessimoz C, Huxley-Jones J, Vilella AJ, Sonnhammer EL, Lewis S. (2009) Joining forces in the quest for orthologs. *Genome Biol.* 10(9):403. C=76.
24. Schlüter A, Real-Chicharro A, **Gabaldón T**, Sanchez-Jimenez F and Pujol A. (2009) PeroxisomeDB 2.0: an integrative view of the global peroxisomal metabolism. *Nucl Acids Res.* 8(Database issue):D800-5. C=71.
25. **Gabaldón T<sup>&</sup>**. (2010). Peroxisome diversity and evolution. *Philos Trans R Soc Lond B Biol Sci.* 365(1541):765-73. C=131.
26. Marcet-Houben M. and **Gabaldón T<sup>&</sup>**. (2010). Acquisition of prokaryotic genes by fungal genomes. *Trends in Genetics.* 26(1):5-8. C=137.
27. Mihailovitch M, Militti C, **Gabaldón T** and Gebauer F. (2010). Eukaryotic cold-shock domain proteins: highly versatile regulators of gene expression. *Bioessays* 32(2):109-18. C=100.
28. Huerta-Cepas J, Dopazo J. and **Gabaldón T<sup>&</sup>**. (2010). ETE: A python environment for tree exploration. *BMC Bioinformatics.* 11(1):24. C=283.
29. Gómez-Baldó L, Schmidt S, Maxwell CA, Bonifaci N, **Gabaldón T**, Vidalain PO, Senapedis W, Kletke A, Rosing M, Barnekow A, Rottapel R, Capellá G, Vidal M, Astrinidis A, Piekorz RP, Pujana MA. (2010) TACC3-TSC2 maintains nuclear envelope structure and controls cell division. *Cell Cycle.* 18;9(6). C=30.
30. International Aphid Genomics Consortium (Including **Gabaldón T** as analysis leader). (2010) Genome sequence of the pea aphid *Acyrtosiphon pisum*. *PLoS Biol.* 8(2):e1000313. C=577.
31. Ahmadinejad N, Dagan T, Gruenheit N, Martin W, **Gabaldón T<sup>&</sup>**. (2010) Evolution of spliceosomal introns following endosymbiotic gene transfer. *BMC Evol Biol.* 10:57. C=21.
32. Gerardo NM, Altincicek B, Anselme C, Atamian H, Barribeau SM, de Vos M, Duncan, E, Evans JD, Gabaldon T, Ghanim M, Heddi A, Kaloshian I, Latorre A, Moya A, Nakabachi A, Parker BJ, Perez-Brocail V, Pignatelli M, Rhabe Y, Ramsey JS, Spragg, C, Tamames J, Tamarit D, Tamborindeguy C, Vincent-Monegat C, Vilcinskis A. (2010) Immunity and other defenses in pea aphids, *Acyrtosiphon pisum*. *Genome Biol.* 11(2):R21. C=244.
33. Peña A, Teeling H, Huerta-Cepas J, Santos F, Yarza P, Brito-Echeverría J, Lucio M, Schmitt-Kopplin P, Meseguer I, Schenowitz C, Dossat C, Barbe V, Dopazo J, Rosselló-Mora R, Schüler M,

- Glöckner FO, Amann R, **Gabaldón T**, Antón J. (2010) Fine-scale evolution: genomic, phenotypic and ecological differentiation in two coexisting *Salinibacter ruber* strains. *ISME Journal*. 4(7):882-95. C=60.
34. Milinkovitch MC, Helaers R, Depiereux E, Tzika AC, **Gabaldón T**. (2010) 2x genomes -depth does matter. *Genome Biol*. 11(2):R16. C=54.
  35. Huerta-Cepas J, Marcet-Houben M, Pignatelli M, Moya A and **Gabaldón T**<sup>&</sup>. (2010). The pea aphid phylome: a complete catalogue of evolutionary histories and arthropod orthology and paralogy relationships for *Acyrtosiphon pisum* genes. *Insect Molecular Biology*. 19(2):13-21. C=38.
  36. Diez J, Walter. D, Muñoz-Pinedo C and **Gabaldón T**. (2010) DeathBase: a database on structure, evolution and function of proteins involved in apoptosis and other forms of cell death. *Cell Death and Differentiation* 17(5):735-6. C=21.
  37. **Gabaldón T**<sup>&</sup>. and Capella-Gutiérrez S. (2010) Lack of phylogenetic support for a supposed actinobacterial origin of peroxisomes. *Gene* 465(1-2):61-5. C=12.
  38. Benítez-Páez A, Villarroya M, Douthwaite S, **Gabaldón T**<sup>&</sup>, Armengod ME. (2010) YibK is the 2'-O-methyltransferase TrmL that modifies the wobble nucleotide in *Escherichia coli* tRNA(Leu) isoacceptors. *RNA*. 16(11):2131-43. C=37,
  39. Gil Borlado MC, Moreno Lastres D, Gonzalez Hoyuela M, Moran M, Blazquez A, Pello R, Marin Buera L, **Gabaldón T**, Garcia Peñas JJ, Martín MA, Arenas J, Ugalde C. (2010) Impact of the mitochondrial genetic background in complex III deficiency. *PLoS One*. 17;5(9). C=24.
  40. Lingner T, Mühlhausen S, **Gabaldón T**, Notredame C, Meinicke P. (2010). Predicting phenotypic traits of prokaryotes from protein domain frequencies. *BMC Bioinformatics*. 11:481. C=14
  41. Prysycz LP, Huerta-Cepas J, **Gabaldón T**<sup>&</sup>. (2011) MetaPhOrs: orthology and paralogy predictions from multiple phylogenetic evidence using a consistency-based confidence score. *Nucleic Acid Res*. 39(5):e32. C=89.
  42. Huerta-Cepas J, Capella-Gutiérrez S, Prysycz LP, Denisov I, Kormes D, Marcet-Houben M, **Gabaldón T**<sup>&</sup>. (2011) PhylomeDB v3.0: An expanding repository of genome-wide collections of phylogenies, alignments and orthology and paralogy predictions. *Nucleic Acid Res*. 39(Database issue):D556-60. **Featured article by NAR's editors**. C=138.
  43. Huerta-Cepas J, **Gabaldón T**<sup>&</sup>. (2011) Assigning duplications to relative temporal scales in genome-wide studies. *Bioinformatics* 27(1):38-45. C=40.
  44. Roetzer A, **Gabaldón T**, Schüller C. (2011) From *Saccharomyces cerevisiae* to *Candida glabrata* in a few easy steps: important adaptations for an opportunistic pathogen. *FEMS Microbiol Lett*. 314(1):1-9. C=96.
  45. Roetzer A, Klopff E, Gratz N, Marcet-Houben M, Hiller E, Rupp S, **Gabaldón T**, Kovarik P, Schüller C. (2011). Regulation of *Candida glabrata* oxidative stress resistance is adapted to host environment. *FEBS Lett*. 585(2):319-27. C=49.
  46. Marcet-Houben M, **Gabaldón T**<sup>&</sup> (2011) TreeKO: A duplication-aware algorithm for the comparison of phylogenetic trees. *Nucleic Acid Res*. 39(10):e66 C=24.
  47. Neurohr G, Naegeli A, Titos I, Theler D, Greber B, Diez J, **Gabaldón T**, Mendoza M, Barral Y. (2011) A Midzone-Based Ruler Adjusts Chromosome Compaction to Anaphase Spindle Length. *Science*. 332(6028):465-8. C=46.
  48. Vellozo AF, Véron AS, Baa-Puyoulet P, Huerta-Cepas J, Cottret L, Febvay G, Calevro F, Rahbé Y, Douglas AE, **Gabaldón T**, Sagot MF, Charles H, Colella S. (2011) CycADS: an annotation database system to ease the development and update of BioCyc databases. *Database 2011:bar008*. C=11.
  49. Huerta-Cepas J, Dopazo J, Huynen MA, **Gabaldón T**<sup>&</sup>. (2011) Evidence for short-time divergence and long-time conservation of tissue-specific expression after gene duplication. *Brief Bioinform*. 12(5)442-8. C=33.
  50. Sánchez R, Serra F, Tárraga J, Medina I, Carbonell J, Pulido L, de María A, Capella-Gutiérrez S, Huerta-Cepas J, **Gabaldón T**, Dopazo J, Dopazo H. (2011) Phylemon 2.0: a suite of web-tools for

- molecular evolution, phylogenetics, phylogenomics and hypotheses testing. *Nucleic Acids. Res.* 39(Webserver Issue):W470-4 C=100.
51. Faria R, Pinheiro A, **Gabaldón T**, Weiss S, Alexandrino P. (2011). Molecular tools for species discrimination and detection of hybridization between two closely related Clupeid fishes *Alosa alosa* and *A. fallax*. *J Appl. Ichtyil.* 27(supl.3):16-20. C=7
  52. Lopes-Silva L, Marcet-Houben M, Zerlotini A, **Gabaldón T**, Oliveira G, Alves-Nahum L (2011). Evolutionary histories of expanded peptidases families in *Schistosoma mansoni*. *Mem. Inst. Oswaldo Cruz* 106(7):846-77. C=7.
  53. Ollivier M, **Gabaldón T**, Poulain J, Gavory F, Leterme N, Gauthier JP, Legeai F, Tagu D, Simon JC, Rispe C. (2012) Comparison of gene repertoires and patterns of evolutionary rates in eight aphid species that differ by reproductive mode. *Genome Biol Evo* 4(2):155-67. C=12
  54. Bohle MH<sup>&</sup>. **Gabaldón T**<sup>&</sup>. (2012) Selection of marker genes using whole-genome DNA polymorphism analysis. *Evol. Bioinf.* 2012(8):161-169.C=3.
  55. Dessimoz C, **Gabaldón T**, Roos DS, Sonnhammer EL, Herrero J, and the Quest for Orthologs Consortium (2012) Toward Community Standards in the Quest for Orthologs. *Bioinformatics* 28(6):900-904. C=67.
  56. Lee JH, Wan KL, Mohd-Adnan A<sup>&</sup>, **Gabaldón T**<sup>&</sup>. (2012) Evolution of the ferritin family in vertebrates. *Trends in Evol. Biol.* 4:e3. C=3.
  57. Capella-Gutiérrez S, Marcet-Houben M, **Gabaldón T**<sup>&</sup> (2012) Phylogenomics supports microsporidia as the earliest diverging clade of sequenced fungi. *BMC Biology.* 10(1):47. (**Highly accessed**). C=116.
  58. Piškur J, Ling Z, Marcet-Houben M, Ishchuk OP, Aerts A, Labutti K, Copeland A, Lindquist E, Barry K, Compagno C, Bisson L, Grigoriev IV, **Gabaldón T**, Phister T. (2012). The genome of wine yeast *Dekkera bruxellensis* provides a tool to explore its food-related properties. *Int J Food Microbiol.* 157(2):202-9. C=66.
  59. Garcia-Mas J, Benjak A, Sanseverino W, Bourgeois M, Mir G, González VM, Hénaff E, Câmara F, Cozzuto L, Lowy E, Alioto T, Capella-Gutiérrez S, Blanca J, Cañizares J, Ziarsolo P, Gonzalez-Ibeas D, Rodríguez-Moreno L, Droege M, Du L, Alvarez-Tejado M, Lorente-Galdos B, Melé M, Yang L, Weng Y, Navarro A, Marques-Bonet T, Aranda MA, Nuez F, Picó B, **Gabaldón T**, Roma G, Guigó R, Casacuberta JM, Arús P, Puigdomènech P. (2012) The genome of melon (*Cucumis melo* L.). *PNAS* 109(29):11872-11877. C=304.
  60. Miranda-Saavedra D, **Gabaldón T**, Barton GJ, Langsley G, Doering C. (2012) The kinomes of apicomplexan parasites. *Microbes and Infection* 14(10):796-810. C=42.
  61. Valach M, Prysycz LP, Tomaska L, Gacser A, **Gabaldón T**, Nosek J.(2012) Mitochondrial genome variability within the *Candida parapsilosis* species complex. *Mitochondrion.* 12(5):514-519 C=13
  62. Silva LL, Marcet-Houben M, Nahum LA, Zerlotini A, **Gabaldón T**, Oliveira G. (2012) The *Schistosoma mansoni* phylome: using evolutionary genomics to gain insight into a parasite's biology. *BMC Genomics.* 13:617. (**Highly accessed**) C=17.
  63. Marcet-Houben M, Ballester AR, de la Fuente B, Harries E, Marcos JF, González-Candelas L<sup>&</sup>, **Gabaldón T**<sup>&</sup>. (2012) Genome sequence of the necrotrophic fungus *Penicillium digitatum*, the main postharvest pathogen of citrus. *BMC Genomics.* 13:646. (**Highly accessed**) . C=86.
  64. Mohd-Padil H, Mohd-Adnan A<sup>&</sup>, **Gabaldón T**<sup>&</sup>. (2013) Phylogenetic Analyses Uncover a Novel Clade of Transferrin in Nonmammalian Vertebrates. *Mol Biol Evol.* 30(4):894-905. C=5
  65. Jiménez-Guri E, Huerta-Cepas J, Cozzuto L, Wotton KR, Kang H, Himmelbauer H, Roma G, **Gabaldón T**<sup>&</sup>, Jaeger J<sup>&</sup>. (2013) Comparative transcriptomics of early dipteran development. *BMC Genomics.* 14(1):123 (**Highly accessed**) C=31.
  66. Ferreira PG, Patalano S, Chauhan R, Ffrench-Constant R, **Gabaldón T**, Guigo R, Sumner S. (2013) Transcriptome analyses of primitively eusocial wasps reveal novel insights into the evolution of sociality and the origin of alternative phenotypes. *Genome Biol.* 14(2):R20. (**Highly accessed**) C=88

67. Capella-Gutiérrez S, **Gabaldón T**<sup>&</sup> (2013) Measuring guide-tree dependency of inferred gaps in progressive aligners. *Bioinformatics* 29(8):1011-7 C=8
68. Collén J, Porcel B, Carré W, Ball SG, Chaparro C, Tonon T, Barbeyron T, Michel G, Noel B, Valentin K, Elias M, Artiguenave F, Arun A, Aury JM, Barbosa-Neto JF, Bothwell JH, Bouget FY, Brillet L, Cabello-Hurtado F, Capella-Gutiérrez S, Charrier B, Cladière L, Cock JM, Coelho SM, Colleoni C, Czjzek M, Da Silva C, Delage L, Denoëud F, Deschamps P, Dittami SM, **Gabaldón T**, Gachon CM, Groisillier A, Hervé C, Jabbari K, Katinka M, Kloareg B, Kowalczyk N, Labadie K, Leblanc C, Lopez PJ, McLachlan DH, Meslet-Cladiere L, Moustafa A, Nehr Z, Nyvall Collén P, Panaud O, Partensky F, Poulain J, Rensing SA, Rousvoal S, Samson G, Symeonidi A, Weissenbach J, Zambounis A, Wincker P, Boyen C. (2013). Genome structure and metabolic features in the red seaweed *Chondrus crispus* shed light on evolution of the Archaeplastida. *PNAS*. 110(13):5247-52. C=149.
69. **Gabaldón T**<sup>&</sup>, Koonin EV<sup>&</sup>. (2013) Functional and evolutionary implications of gene orthology. (2013) *Nat Rev Genet*. 14(5):360-6 C=189.
70. Lavín JL, Marcet-Houben M, Gutiérrez-Vázquez RL, Ramírez L, Pisabarro AG, **Gabaldón T**, Oguiza JA. (2013) FUNGALOXPHOS: An integrated database for oxidative phosphorylation in fungi. *Mitochondrion*. 13(4):357-9.
71. Hatzihristidis T, Liu S, Prysycz L, Hutchins AP, **Gabaldón T**, Tremblay ML, Miranda-Saavedra D. (2013). PTP-central: A comprehensive resource of protein tyrosine phosphatases in eukaryotic genomes. *Methods*. S1046-2023(13)00280-6. C=13.
72. i5K Consortium. (2013) The i5K Initiative: advancing arthropod genomics for knowledge, human health, agriculture, and the environment. *J Hered*. 104(5):595-600. C=115.
73. Hagen F, Ceresini PC, Polacheck I, Ma H, van Nieuwerburgh F, **Gabaldón T**, Kagan S, Pursall ER, Hoogveld HL, van Iersel LJ, Klau GW, Kelk SM, Stougie L, Bartlett KH, Voelz K, Prysycz LP, Castañeda E, Lazera M, Meyer W, Deforce D, Meis JF, May RC, Klaassen CH, Boekhout T. (2013) Ancient dispersal of the human fungal pathogen *Cryptococcus gattii* from the Amazon rainforest. *PLoS One*. 8(8):e71148. C=76.
74. **Gabaldón T**<sup>&</sup>, Martin T, Marcet-Houben M, Durrens P, Bolotin-Fukuhara M, Lespinet O, Arnais S, Boisnard S, Aguilera G, Atanasova R, Bouchier C, Couloux A, Creno S, Almeida Cruz J, Devillers H, Enache-Angoulvant A, Guitard J, Jaouen L, Ma L, Marck C, Neuvéglise C, Pelletier E, Pinard A, Poulain J, Recoquillay J, Westhof E, Wincker P, Dujon B, Hennequin C, Fairhead C<sup>&</sup>. (2013) Comparative genomics of emerging pathogens in the *Candida glabrata* clade. *BMC Genomics*. 14:623 (**Highly accessed, Recommended in Faculty of 1000**). C=68.
75. Traeger S, Altegoer F, Freitag M, **Gabaldón T**, Kempken F, Kumar A, Marcet-Houben M, Pöggeler S, Stajich JE, Nowrousian M. (2013) The genome and development-dependent transcriptomes of *Pyronema confluens*: a window into fungal evolution. *PLoS Genet*. 9(9):e1003820. C=38.
76. Prysycz LP, Németh T, Gácsér A<sup>&</sup>, **Gabaldón T**<sup>&</sup>. (2013) Unexpected Genomic Variability in Clinical and Environmental Strains of the Pathogenic Yeast *Candida parapsilosis*. *Genome Biol Evol*. 5(12):2382-92. C=19.
77. Morales L, Noel B, Porcel B, Marcet-Houben M, Hullo MF, Sacerdot C, Tekaiia F, Leh-Louis V, Despons L, Khanna V, Aury JM, Barbe V, Couloux A, Labadie K, Pelletier E, Souciet JL, Boekhout T, **Gabaldón T**, Wincker P, Dujon B. (2013). Complete DNA Sequence of *Kuraishia capsulata* Illustrates Novel Genomic Features among Budding Yeasts (Saccharomycotina). *Genome Biol Evol*. 5(12):2524-39. C=23.
78. Huerta-Cepas J, Capella-Gutiérrez S, Prysycz LP, Marcet-Houben M, **Gabaldón T**<sup>&</sup>. (2014) PhylomeDB v4: zooming into the plurality of evolutionary histories of a genome. *Nucleic*

- Acids Res.* 42(1):D897-902. C=101.
79. Powell S, Forslund K, Szklarczyk D, Trachana K, Roth A, Huerta-Cepas J, **Gabaldón T**, Rattei T, Creevey C, Kuhn M, Jensen LJ, von Mering C, Bork P. (2014) eggNOG v4.0: nested orthology inference across 3686 organisms. *Nucleic Acids Res.* 42(1):D231-9. C=247.
  80. Hinojosa-Alvarez S, Díaz-Jaimes P, Marcet-Houben M, **Gabaldón T**. (2014) The complete mitochondrial genome of the Giant Manta ray, *Manta birostris*. *Mitochondrial DNA* 26(5):787 C=1
  81. **Gabaldón T**&. (2014) A metabolic scenario for the evolutionary origin of peroxisomes from the endomembranous system. *Cell Mol Life Sci.* 71(13):2373-6. C=14.
  82. Dohm JC, Minoche AE, Holtgräwe D, Capella-Gutiérrez S, Zakrzewski F, Tafer H, Rupp O, Sörensen TR, Stracke R, Reinhardt R, Goesmann A, Kraft T, Schulz B, Stadler PF, Schmidt T, **Gabaldón T**, Lehrach H, Weisshaar B, Himmelbauer H. (2014). The genome of the recently domesticated crop plant sugar beet (*Beta vulgaris*). *Nature* 505(7484):546-9. C=206.
  83. Aguilera G, de Vienne DM, Ross ON, Hood ME, Giraud T, Petit E, **Gabaldón T**&. (2014) High Variability of Mitochondrial Gene Order among Fungi. *Genome Biol Evol.* 6(2):451-65. C=38.
  84. Krisko A, Copi T, **Gabaldón T**, Lehner B, Supek F. (2014) Inferring gene function from evolutionary change in signatures of translation efficiency. *Genome Biol.* 3;15(3):R44 C=27.
  85. Capella-Gutierrez S, Kauff F, **Gabaldón T**&. (2014) A phylogenomics approach for selecting robust sets of phylogenetic markers. *Nucleic Acids Res.* 42(7):e54. C=25
  86. Supek F, Miñana, Valcarcel J, Gabaldón T, Lehner B. (2014) Synonymous mutations frequently act as driver mutations in human cancer. *Cell* 156(6):1324-35. C=173.
  87. Prysycz LP, Németh T, Gácsér A, **Gabaldón T**&. (2014) Genome comparison of *Candida orthopsilosis* clinical strains reveals the existence of hybrids between two distinct subspecies. *Genome Biol Evol.* 6(5):1069-78 C=35.
  88. Kunze G, Gaillardin C, Czernicka M, Durrens P, Martin T, Böer E, **Gabaldón T**, Cruz JA, Talla E, Marck C, Goffeau A, Barbe V, Baret P, Baronian K, Beier S, Bleykasten C, Bode R, Casaregola S, Despons L, Fairhead C, Giersberg M, Gierski PP, Hähnel U, Hartmann A, Jankowska D, Jubin C, Jung P, Lafontaine I, Leh-Louis V, Lemaire M, Marcet-Houben M, Mascher M, Morel G, Richard GF, Riechen J, Sacerdot C, Sarkar A, Savel G, Schacherer J, Sherman DJ, Stein N, Straub ML, Thierry A, Trautwein-Schult A, Vacherie B, Westhof E, Worch S, Dujon B, Souciet JL, Wincker P, Scholz U, Neuvéglise C. (2014) The complete genome of *Blastobotrys (Arxula) adenivorans* LS3 - a yeast of biotechnological interest. *Biotechnol Biofuels.* 24;7:66. C=27.
  89. **Gabaldón T**. (2014) Evolutionary considerations on the origin of peroxisomes from the endoplasmic reticulum, and their relationships with mitochondria. *Cell Mol Life Sci.* 1(13):2379-82. C=8
  90. Galindo-Moreno J, Iurlaro R, El Mjiyad N, Díez-Pérez J, Gabaldón T, Muñoz-Pinedo C. (2014) Apolipoprotein L2 contains a BH3-like domain but it does not behave as a BH3-only protein. *Cell Death Dis.* 5:e1275. C=11
  91. Schwarzmüller T, Ma B, Hiller E, Istel F, Tscherner M, Brunke S, Ames L, Firon A, Green B, Cabral V, Marcet-Houben M, Jacobsen ID, Quintin J, Seider K, Frohner I, Glaser W, Jungwirth H, Bachellier-Bassi S, Chauvel M, Zeidler U, Ferrandon D, **Gabaldón T**, Hube B, d'Enfert C, Rupp S, Cormack B, Haynes K, Kuchler K. (2014) Systematic phenotyping of a large-scale *Candida glabrata* deletion collection reveals novel antifungal tolerance genes.

- PLoS Pathog.* 10(6):e1004211 C=52.
92. Sonnhammer EL, **Gabaldón T**, Sousa da Silva AW, Martin M, Robinson-Rechavi M, Boeckmann B, Thomas PD, Dessimoz C. (2014) Quest for Orthologs consortium. Big data and other challenges in the quest for orthologs. *Bioinformatics.* 30(21):2993-8 C=52.
  93. Schwartze VU, Winter S, Shelest E, Marcet-Houben M, Horn F, Wehner S, Linde J, Valiante V, Sammeth M, Riege K, Nowrousian M, Kaerger K, Jacobsen ID, Marz M, Brakhage AA, **Gabaldón T**<sup>&</sup>, Böcker S<sup>&</sup>, Voigt K<sup>&</sup>. (2014) Gene expansion shapes genome architecture in the human pathogen *Lichtheimia corymbifera*: an evolutionary genomics analysis in the ancient terrestrial mucorales (Mucoromycotina). *PLoS Genet.* 10(8):e1004496. C=23
  94. Zhao P, Capella-Gutiérrez S, Shi Y, Zhao X, Chen G, **Gabaldón T**<sup>&</sup>, Ma XF<sup>&</sup>. (2014) Transcriptomic analysis of a psammophyte food crop, sand rice (*Agriophyllum squarrosum*) and identification of candidate genes essential for sand dune adaptation. *BMC Genomics.* 15(1):872. C=12.
  95. Lysøe E, Harris LJ, Walkowiak S, Subramaniam R, Divon HH, Riiser ES, Llorens C, **Gabaldón T**, Kistler HC, Jonkers W, Kolseth AK, Nielsen KF, Thrane U, Frandsen RJ. (2014) The Genome of the Generalist Plant Pathogen *Fusarium avenaceum* Is Enriched with Genes Involved in Redox, Signaling and Secondary Metabolism. *PLoS One.* 19;9(11):e112703. C=25
  96. Chipman AD, et. al. (including **Gabaldón T** as a task leader) (2014) The First Myriapod Genome Sequence Reveals Conservative Arthropod Gene Content and Genome Organisation in the Centipede *Strigamia maritima*. *PLoS Biol.* 2014 Nov 25;12(11):e1002005. C=97,
  97. Castanera R, Pérez G, López L, Sancho R, Santoyo F, Alfaro M, **Gabaldón T**, Pisabarro AG, Oguiza JA, Ramírez L.. (2014) Highly expressed captured genes and cross-kingdom domains present in Helitrons create novel diversity in *Pleurotus ostreatus* and other fungi. *BMC Genomics.* 15(1):1071. C=9.
  98. Jarvis E. et al. (including **Gabaldón T**). (2014) Whole-genome analyses resolve early branches in the tree of life of modern birds. *Science* 346(6215)1320-1331. C=560.
  99. Green R. et. al. (including **Gabaldón T**). (2014) Three crocodylian genomes reveal ancestral patterns of evolution among archosaurs. *Science* 346(6215)DOI: 10.1126/science.1254449. C=109.
  100. Ballester AR, Marcet-Houben M, Levin E, Sela N, Selma-Lázaro C, Carmona L, Wisniewski M, Droby S, González-Candelas L<sup>&</sup>, **Gabaldón T**<sup>&</sup>. (2015) Genome, transcriptome, and functional analyses of *Penicillium expansum* provide new insights into secondary metabolism and pathogenicity. *Mol Plant Microbe Interact.* 28(3):232-48. C=58.
  101. Gomariz M, Martínez-García M, Santos F, Rodríguez F, Capella-Gutiérrez S, **Gabaldón T**, Rosselló-Móra R, Meseguer I, Antón J. (2015) From community approaches to single-cell genomics: the discovery of ubiquitous hyperhalophilic Bacteroidetes generalists. *ISME J.* 9(1):16-31. C=19.
  102. Kryptou E, Evangelidis T, Bobonis J, Pittis AA, **Gabaldón T**, Scazzocchio C, Mikros E, Diallinas G. (2015) Origin, diversification and substrate specificity in the family of NCS1/FUR transporters. *Mol Microbiol.* 96(5):927-50. C=16.
  103. Gérecová G, Neboháčová M, Zeman I, Prysycz LP, Tomáška L, **Gabaldón T**, Nosek J. (2015). Metabolic gene clusters encoding the enzymes of two branches of the 3-oxoadipate

- pathway in the pathogenic yeast *Candida albicans*. *FEMS Yeast Res.* 15(3)pii: fov006. C=3
104. Aversano R, Contaldi F, Ercolano MR, Grosso V, Iorizzo M, Tatino F, Xumerle L, Dal Molin A, Avanzato C, Ferrarini A, Delledonne M, Sanseverino W, Cigliano RA, Capella-Gutierrez S, **Gabaldón T**, Frusciante L, Bradeen JM, Carputo D. (2015) The *Solanum commersonii* Genome Sequence Provides Insights into Adaptation to Stress Conditions and Genome Evolution of Wild Potato Relatives. *Plant Cell.* 27(4):954-68. C=31.
  105. Perlin MH, Amselem J, Fontanillas E, Toh SS, Chen Z, Goldberg J, Duplessis S, Henrissat B, Young S, Zeng Q, Aguilera G, Petit E, Badouin H, Andrews J, Razeq D, **Gabaldón T**, Quesneville H, Giraud T, Hood ME, Schultz DJ, Cuomo CA. Sex and parasites: genomic and transcriptomic analysis of *Microbotryum lychnidis-dioicae*, the biotrophic and plant-castrating anther smut fungus. *BMC Genomics.* 16:461 C=21.
  106. Morel G, Sterck L, Swennen D, Marcet-Houben M, Onesime D, Levasseur A, Jacques N, Mallet S, Couloux A, Labadie K, Amselem J, Beckerich JM, Henrissat B, Van de Peer Y, Wincker P, Souciet JL, **Gabaldón T**, Tinsley CR, Casaregola S. (2015) Differential gene retention as an evolutionary mechanism to generate biodiversity and adaptation in yeasts. *Sci Rep.* 5:11571. C=14.
  107. Boeckmann B, Marcet-Houben M, Rees JA, Forslund K, Huerta-Cepas J, Muffato M, Yilmaz P, Xenarios I, Bork P, Lewis SE, **Gabaldón T**; (2015) Quest for Orthologs Species Tree Working Group. Quest for Orthologs Entails Quest for Tree of Life: In Search of the Gene Stream. *Genome Biol Evol.* 7(7):1988-99. C=8
  108. Mariotti M, Santesmasses D, Capella-Gutierrez S, Mateo A, Arnan C, Johnson R, D'Aniello S, Yim SH, Gladyshev VN, Serras F, Corominas M, **Gabaldón T**, Guigó R. (2015) Evolution of selenophosphate synthetases: emergence and relocation of function through independent duplications and recurrent subfunctionalization. *Genome Res.*25(9):1256-67. **Featured in the cover.** C=12
  109. Marcet-Houben M, **Gabaldón T**&. (2015) Beyond the Whole-Genome Duplication: Phylogenetic Evidence for an Ancient Interspecies Hybridization in the Baker's Yeast Lineage. *PLoS Biol.* 13(8):e1002220. C=71.
  110. González-Torres P, Prysycz LP, Santos F, Martínez-García M, **Gabaldón T**&, Antón J. (2015) Interactions between Closely Related Bacterial Strains Are Revealed by Deep Transcriptome Sequencing. *Appl Environ Microbiol.* 81(24):8445-56. C=4
  111. Patalano S, Vlasova A, Wyatt C, Ewels P, Camara F, Ferreira PG, Asher CL, Jurkowski TP, Segonds-Pichon A, Bachman M, González-Navarrete I, Minoche AE, Krueger F, Lowy E, Marcet-Houben M, Rodriguez-Ales JL, Nascimento FS, Balasubramanian S, **Gabaldón T**, Tarver JE, Andrews S, Himmelbauer H, Hughes WO, Guigó R, Reik W, Sumner S.(2015) Molecular signatures of plastic phenotypes in two eusocial insect species with simple societies. *PNAS.* 112(45):13970-5. C=54.
  112. Prysycz LP, Németh T, Saus E, Ksiezopolska E, Hegedúsová E, Nosek J, Wolfe KH, Gacser A, **Gabaldón T**& (2015). The Genomic Aftermath of Hybridization in the Opportunistic Pathogen *Candida metapsilosis*. *PLoS Genet.* 11(10):e1005626 C=19.
  113. Valdivia HO, Scholte LL, Oliveira G, **Gabaldón T**, Bartholomeu DC. (2015) The *Leishmania* metaphylome: a comprehensive survey of *Leishmania* protein phylogenetic relationships. *BMC Genomics.* 16(1):887. C=3.
  114. **Gabaldón T**&, Pittis AA. (2015) Origin and evolution of metabolic sub-cellular compartmentalization in eukaryotes. *Biochimie.* 119:262-8. C=21.



115. Julca I, Droby S, Sela N, Marcet-Houben M, **Gabaldón T**<sup>&</sup> (2015) Contrasting Genomic Diversity in Two Closely Related Postharvest Pathogens: *Penicillium digitatum* and *Penicillium expansum*. *Genome Biol Evol.* 8(1):218-27. C=4.
116. Marcet-Houben M, **Gabaldón T**<sup>&</sup> (2016) Horizontal acquisition of toxic alkaloid synthesis in a clade of plant associated fungi. *Fungal Genet Biol.* 86:71-80. C=5.
117. Banani H, Marcet-Houben M, Ballester AR, Abbruscato P, González-Candelas<sup>&</sup> L, **Gabaldón T**<sup>&</sup>, Spadaro D<sup>&</sup>. (2016) Genome sequencing and secondary metabolism of the postharvest pathogen *Penicillium griseofulvum*. *BMC Genomics.* 17(1):19. C=15
118. **Gabaldón T**<sup>&</sup>, Carreté L. (2016) The birth of a deadly yeast: tracing the evolutionary emergence of virulence traits in *Candida glabrata*. *FEMS Yeast Res.* 16(2). pii: fov110. C=11
119. Pittis A. and **Gabaldón T**<sup>&</sup>. (2016) “Late acquisition of mitochondria by a host with chimeric prokaryotic ancestry”. *Nature* 531(7592):101-4 **Featured in the cover and with a commentary in Nature.** C=80.
120. Vandewege MW, Mangum SF, **Gabaldón T**, Castoe TA, Ray DA, Hoffmann FG. (2016) Contrasting Patterns of Evolutionary Diversification in the Olfactory Repertoires of Reptile and Bird Genomes. *Genome Biol Evol.* 8(3):470-80. C=1
121. **Gabaldón T**, Ginger ML, Michels PA. (2016) Peroxisomes in parasitic protists. *Mol Biochem Parasitol.* S0166-6851(16)30013-5. doi: 10.1016/j.molbiopara.2016.02.005. C=7
122. Vlasova A, Capella-Gutiérrez S, Rendón-Anaya M, Hernández-Oñate M, Minoche AE, Erb I, Câmara F, Prieto-Barja P, Corvelo A, Sanseverino W, Westergaard G, Dohm JC, Pappas GJ Jr, Saburido-Alvarez S, Kedra D, Gonzalez I, Cozzuto L, Gómez-Garrido J, Aguilar-Morón MA, Andreu N, Aguilar OM, Garcia-Mas J, Zehnsdorf M, Vázquez MP, Delgado-Salinas A, Delaye L, Lowy E, Mentaberry A, Vianello-Brondani RP, García JL, Alioto T, Sánchez F, Himmelbauer H, Santalla M, Notredame C, **Gabaldón T**<sup>&</sup>, Herrera-Estrella A<sup>&</sup>, Guigó R<sup>&</sup>. (2016) Genome and transcriptome analysis of the Mesoamerican common bean and the role of gene duplications in establishing tissue and temporal specialization of genes. *Genome Biol.* 17(1):32. doi: 10.1186/s13059-016-0883-6. C=32.
123. Figueras A, Robledo D, Corvelo A, Hermida M, Pereiro P, Rubiolo JA, Gómez-Garrido J, Carreté L, Bello X, Gut M, Gut IG, Marcet-Houben M, Forn-Cuní G, Galán B, García JL, Abal-Fabeiro JL, Pardo BG, Taboada X, Fernández C, Vlasova A, Hermoso-Pulido A, Guigó R, Álvarez-Dios JA, Gómez-Tato A, Viñas A, Maside X, **Gabaldón T**, Novoa B, Bouza C, Alioto T, Martínez P. (2016) Whole Genome Sequencing of Turbot (*Scophthalmus maximus*; Pleuronectiformes): A Fish Adapted to Demersal Life. *DNA Res.* 23(3):181-92. C=22
124. Corrochano LM, Kuo A, Marcet-Houben M, et. al. (including **Gabaldón T** as 2nd last) Expansion of Signal Transduction Pathways in Fungi by Extensive Genome Duplication. (2016) *Curr Biol.* 2016 26(12):1577-84. C=24.
125. Cruz F, Julca I, Gómez-Garrido J, Loska D, Marcet-Houben M, Cano E, Galán B, Frias L, Ribeca P, Derdak S, Gut M, Sánchez-Fernández M, García JL, Gut IG, Vargas P<sup>&</sup>, Alioto TS<sup>&</sup>, **Gabaldón T**<sup>&</sup>. (2016) Genome sequence of the olive tree, *Olea europaea*. *Gigascience.* 2016 Jun 27;5:29. doi: 10.1186/s13742-016-0134-5. C=23.
126. Pryszcz LP, **Gabaldón T**<sup>&</sup>(2016) Redundans: an assembly pipeline for highly heterozygous genomes. *Nucleic Acids Res.* 44(12):e113. C=13.
127. Furió-Tarí P, Tarazona S, **Gabaldón T**, Enright AJ, Conesa A. (2016) spongeScan: A web for detecting microRNA binding elements in lncRNA sequences. *Nucleic Acids Res.*

- 44(W1):W176-80. C=12
128. Altenhoff AM, Boeckmann B, Capella-Gutierrez S, Dalquen DA, DeLuca T, Forslund K, Huerta-Cepas J, Linard B, Pereira C, Prysycz LP, Schreiber F, da Silva AS, Szklarczyk D, Train CM, Bork P, Lecompte O, von Mering C, Xenarios I, Sjölander K, Jensen LJ, Martin MJ, Muffato M; Quest for Orthologs consortium., **Gabaldón T**, Lewis SE, Thomas PD, Sonnhammer E, Dessimoz C. (2016) Standardized benchmarking in the quest for orthologs. *Nat Methods*. 2016 May;13(5):425-30. doi: 10.1038/nmeth.3830. C=32.
  129. Mariotti M, Lobanov AV, Manta B, Santesmasses D, Bofill A, Guigó R, **Gabaldón T**, Gladyshev VN. (2016) Lokiarchaeota Marks the Transition between the Archaeal and Eukaryotic Selenocysteine Encoding Systems. *Mol Biol Evol*. 33(9):2441-53 C=8.
  130. Pegueroles C, **Gabaldón T**&. (2016) Secondary structure impacts patterns of selection in human lncRNAs. *BMC Biol*. 14:60. C=5.
  131. Saus E, Brunet-Vega A, Iraola-Guzmán S, Pegueroles C, **Gabaldón T**&, Pericay C. (2016) Long Non-Coding RNAs As Potential Novel Prognostic Biomarkers in Colorectal Cancer. *Front Genet*. 2016 Apr 12;7:54. doi: 10.3389/fgene.2016.00054. C=21.
  132. **Gabaldón T**&, Naranjo MA, Marcet-Houben M. (2016) Evolutionary genomics of yeast pathogens in the Saccharomycotina. *FEMS Yeast Res*. 16(6) C=5.
  133. Jiang Y, Oron TR, et. al. (including **Gabaldón T**) (2016) An expanded evaluation of protein function prediction methods shows an improvement in accuracy. *Genome Biol*. 7(1):184. C=71.
  134. Zeman I, Neboháčová M, Gérecová G, Katonová K, Jánošíková E, Jakúbková M, Centárová I, Dunčková I, Tomáška L, Prysycz LP, **Gabaldón T**, Nosek J. (2016) Mitochondrial Carriers Link the Catabolism of Hydroxyaromatic Compounds to the Central Metabolism in *Candida parapsilosis*. *G3 (Bethesda)*. 6(12):4047-4058 C=1
  135. Sebé-Pedrós A, Peña MI, Capella-Gutiérrez S, Antó M, **Gabaldón T**, Ruiz-Trillo I, Sabidó E. (2016) High-Throughput Proteomics Reveals the Unicellular Roots of Animal Phosphosignaling and Cell Differentiation. *Dev Cell*. 39(2):186-197. C=8
  136. Campbell MA, Ganley AR, **Gabaldón T**, Cox MP. (2016) The Case of the Missing Ancient Fungal Polyploids. *Am Nat*. 188(6):602-614. C=7.
  137. Abascal F, Corvelo A, Cruz F, (45 other authors), **Gabaldón T**, Alioto T, Godoy JA. (2016). Extreme genomic erosion after recurrent demographic bottlenecks in the highly endangered Iberian lynx. *Genome Biology* 17(1):251 C=13.
  138. Naranjo-Ortiz MA, Brock M, Brunke S, Hube B, Marcet-Houben M, **Gabaldón T**&. (2016) Widespread Inter- and Intra-Domain Horizontal Gene Transfer of d-Amino Acid Metabolism Enzymes in Eukaryotes. *Front Microbiol*. 7:2001. C=3.
  139. Mathers TC, Chen Y, Kaithakottil G, Legeai F, Mugford ST, Baa-Puyoulet P, Bretaudeau A, Clavijo B, Colella S, Collin O, Dalmay T, Derrien T, Feng H, Gabaldón T, Jordan A, Julca I, Kettles GJ, Kowitzanich K, Lavenier D, Lenzi P, Lopez-Gomollon S, Loska D, Mapleson D, Maumus F, Moxon S, Price DR, Sugio A, van Munster M, Uzest M, Waite D, Jander G, Tagu D, Wilson AC, van Oosterhout C, Swarbreck D, Hogenhout SA. (2017) Rapid transcriptional plasticity of duplicated gene clusters enables a clonally reproducing aphid to colonise diverse plant species. *Genome Biol*. 18(1):27. C=8
  140. Rendón-Anaya M, Montero-Vargas JM, Saburido-Álvarez S, Vlasova A, Capella-Gutierrez S, Ordaz-Ortiz JJ, Aguilar OM, Vianello-Brondani RP, Santalla M, Delaye L, **Gabaldón T**, Gepts P, Winkler R, Guigó R, Delgado-Salinas A, Herrera-Estrella A. (2017) Genomic

- history of the origin and domestication of common bean unveils its closest sister species. *Genome Biol.* 18(1):60. C=5.
141. Echeverz M, García B, Sabalza A, Valle J, **Gabaldón T**, Solano C, Lasa I. (2017) Lack of the PGA exopolysaccharide in *Salmonella* as an adaptive trait for survival in the host. *PLoS Genet.* 13(5):e1006816. C=1
142. Mixão V, **Gabaldón T**&. (2017) Hybridization and emergence of virulence in opportunistic human yeast pathogens. *Yeast.* (in press) doi: 10.1002/yea.3242. C=1
143. Figueiró HV, Li G, Trindade FJ, Assis J, Pais F, Fernandes G, Santos SHD, Hughes GM, Komissarov A, Antunes A, Trinca CS, Rodrigues MR, Linderoth T, Bi K, Silveira L, Azevedo FCC, Kantek D, Ramalho E, Brassaloti RA, Villela PMS, Nunes ALV, Teixeira RHF, Morato RG, Loska D, Saragüeta P, **Gabaldón T**, Teeling EC, O'Brien SJ, Nielsen R, Coutinho LL, Oliveira G, Murphy WJ, Eizirik E. (2017). Genome-wide signatures of complex introgression and adaptive evolution in the big cats. *Sci Adv.* 3(7):e1700299. C=1
144. Cillingová A, Zeman I, Tóth R, Neboháčová M, Dunčková I, Hölcová M, Jakúbková M, Gérecová G, Pryszcz LP, Tomáška Ľ, **Gabaldón T**, Gácsér A, Nosek J. Eukaryotic transporters for hydroxyderivatives of benzoic acid. *Sci Rep.* 7(1):8998.
145. Masgrau A, Battola A, Sanmartin T, Pryszcz LP, **Gabaldón T**, Mendoza M. (2017) Distinct roles of the polarity factors Boi1 and Boi2 in the control of exocytosis and abscission in budding yeast. *Mol Biol Cell.* 28(22):3082-3094. C=1
146. Bravo-Ruiz G, Sassi AH, Marcet-Houben M, Di Pietro A, Gargouri A, **Gabaldón T**&, Roncero MIG. (2017) Regulatory Mechanisms of a Highly Pectinolytic Mutant of *Penicillium occitanis* and Functional Analysis of a Candidate Gene in the Plant Pathogen *Fusarium oxysporum*. *Front Microbiol.* 8:1627. doi: 10.3389/fmicb.2017.01627.
147. Forslund K, Pereira C, Capella-Gutierrez S, Sousa da Silva A, Altenhoff A, Huerta-Cepas J, Muffato M, Patricio M, Vandepoele K, Ebersberger I, Blake J, Fernández Breis JT; Quest for Orthologs Consortium, Boeckmann B, **Gabaldón T**, Sonnhammer E, Dessimoz C, Lewis S. (2017) Gearing up to handle the mosaic nature of life in the quest for orthologs. *Bioinformatics.* (in press) doi: 10.1093/bioinformatics/btx542. C=1
148. Villamor J, Ramos-Barbero MD, González-Torres P, **Gabaldón T**, Rosselló-Móra R, Meseguer I, Martínez-García M, Santos F, Antón J. (2017) Characterization of ecologically diverse viruses infecting co-occurring strains of cosmopolitan hyperhalophilic Bacteroidetes. *ISME J.* (in press) doi: 10.1038/ismej.2017.175
149. Carreté L, Ksiezopolska E, Pegueroles C, Gómez-Molero E, Saus E, Iraola S, Loska D, Bader O, Fairhead. C. **Gabaldón T**& (2017) Patterns of genomic variation in the opportunistic pathogen *Candida glabrata* suggest the existence of mating and a secondary association with humans. *Current Biology* (in press). [http://www.cell.com/current-biology/fulltext/S0960-9822\(17\)31472-0](http://www.cell.com/current-biology/fulltext/S0960-9822(17)31472-0)

### **Contributions to peer reviewed specialized books**

1. Huynen MA, Snel B and **Gabaldón T**. (2006) Reliable and specific protein function prediction by combining homology with genomic(s) context. *In Discovering of Biomolecular mechanisms with theoretical data analyses.* Landes Bioscience. Ed. Frank Eisenhaber
2. **Gabaldón T** and Huynen MA.. (2007) Ancestral proteome reconstruction. *In Ancestral sequence*

- reconstruction*. Ed. David Liberles. Oxford University.
3. **Gabaldón T<sup>&</sup>**. (2008). Comparative-genomics based prediction of protein function. In *Methods in Molecular Biology*, Vol, 439: Genomics Protocols. Eds Starkey M and Elaswarapu R. Humana Press Inc, Totowa, NJ.
  4. **Gabaldón T<sup>&</sup>**, Marcet-Houben M and Huerta-Cepas J. (2008) Reconstruction and analysis of large-scale phylogenetic data, challenges and opportunities. In *Computational Biology: New Research*. Edited by Russe AS. Nova Science Publishers. NY.
  5. **Gabaldón T**, Gil R., Peretó J., Latorre A. and Moya A. (2009). The core of a minimal gene set: insights from natural reduced genomes. in *Protocells: bridging nonliving and living matter* Eds. S. Rasmussen et. al., The MIT press
  6. **Gabaldón T<sup>&</sup>**. (2009) Phylogenomics of the human genome. In: *Encyclopedia for Life Sciences* (ELS). John Wiley & Sons, Ltd: Chichester.
  7. Marcet-Houben M and **Gabaldón, T** (2011). Evolution of fungi and their respiratory metabolism. In *Evolutionary Biology: Concepts, Biodiversity, Macroevolution and Genome Evolution*. 257-272 Edited by Pontarotti P. Springer-Verlag. Berlin.
  8. Peña A, Teeling H, Huerta-Cepas J, Santos F, Yarza P, Brito-Echeverría J, Lucio M, Schmitt-Kopplin P, Meseguer I, Schenowitz C, Dossat C, Barbe V, Dopazo J, Rosselló-Mora R, Schüller M, Glöckner FO, Amann R, **Gabaldón T**, Antón J. (2011) From Genomics to Microevolution and Ecology: The Case of *Salinibacter ruber*. In *Halophiles and Hypersaline Environments: Current Research and Future Trends*. 109-122. Edited by Ventosa A., Oren A. Ma Y. Springer-Verlag. Berlin.
  9. **Gabaldón T<sup>&</sup>**. (2011). Mitochondrial origins. In *Organelle Genetics : Evolution of organelle genomes and gene expression*. 3-18 Ed. Charles Bullerwell. Springer-Verlag. Berlin.
  10. Peña A, Gomariz M, Lucio M, González-Torres P, Huerta-Cepas J, Martínez-García M, Santos F, Schmitt-Kopplin P, **Gabaldón T**, Rosselló-Móra R, Antón J. (2013) *Salinibacter ruber*: the never ending microdiversity? In *Evolution of Halophiles; Genomes and Genetics*. Ed. R. Thane Papke. Horizon Press. (ISBN: 978-1-908230-42-3)
  11. Marcet-Houben, **Gabaldón T<sup>&</sup>**. (2013). Phylogenomics to understand fungal biology. In *The Mycota Vol. XIII: Fungal Genomics*, 2nd ed. (Minou Nowrousian, ed.). Springer Verlag. (ISBN: 978-3-642-45127-8)
  12. Tagu D, Calevro F, Colella S, **Gabaldón T**, Sugio A. (2016). Functional and Evolutionary Biology of Aphids. In *Biology and Ecology of Aphids*. (Andreas Vilcinska Ed.) CRC Press. (ISBN: 978-1-4822-3678-1).
  13. **Gabaldón T**, and Alioto T. (2016) Whole genome sequencing recommendations. In *Field Guidelines for Genetic Experimental Designs in High-Throughput Sequencing*. (Aransay AM, Lavín-Trueba JL Ed.). Springer (ISBN: 978-3-319-31348-1).

### **Public communication of Science**

1. **Gabaldón T**. (2005) Origen de la célula eucariota. Metabolismo proto-mitocondrial. *Investigación y Ciencia* (spanish edition of Scientific American) 343.
2. **Gabaldón T**. (2009) El Origen de las Células. *Investigación y Ciencia*: 398.
3. **Gabaldón T**. and Huerta-Cepas J. (2010) Del genoma al filoma. *Investigación y Ciencia*: 403.
4. **Gabaldón T** (2011). Phylogenomics and Genome Evolution. *Biotechnology in the mirror* (web portal) Roche.
5. **Gabaldón T** (2012). El lince ibérico entra en la era de la genómica. *Lychnos*. 9:14-21. Translated into English.

6. **Gabaldón T** (2013). No todo está en los genes: la compleja relación entre genotipo, ambiente y fenotipo. *Investigación y Ciencia*: 439.