

Curriculum vitae Carmela Gissi

Present Academic Position

Associate Professor in Molecular Biology
Dept of Biosciences, Biotechnology and Biopharmaceutics
Università degli Studi “Aldo Moro”
Bari, Italy

Education and Employment

Nov 18, 1993: Degree in Biology, Summa cum Laude, at the University of Bari (Italy)
Feb 22, 2000: PhD in Genetics and Molecular Evolution at the University of Bari (Italy)
Dec 2002: Assistant Professor in Molecular Biology at the University of Milan (Italy, Department of Biomolecular Sciences and Biotechnology)
Oct 2015: Associate Professor in Molecular Biology at the University of Bari (Italy, Department of Biosciences, Biotechnology and Biopharmaceutics)
Apr 2017: Qualification as Full Professor in Molecular Biology (Abilitazione Scientifica Nazionale Italiana, deadline 10/04/2023)

Training and Research experience

1995: Graduate student scholarship at the Department of Genetic, Division of Evolutionary Molecular Systematics, University of Lund (Sweden). Supervisor: Prof. Ulfur Arnason
1996-1999: PhD student on Genetics and Molecular Evolution at the University of Bari (four-year PhD course)
2000-2002: Postdoc at the University of Milan (Dept. of Physiology and General Biochemistry).
May 2002: Biodiberia Grant of the European Community at the Museo Nacional de Ciencias Naturales (Madrid, Spain). Project title: “Sequencing and evolutionary analysis of mitochondrial genomes of Amphibia”. Host: Dr Rafael Zardoya
Feb 2003: Biodiberia Grant of the European Community at the Museo Nacional de Ciencias Naturales (Madrid, Spain). Project title: “Sequencing and evolutionary analysis of the complete mitochondrial genome of *Pelobates cultripes* (Mesobatrachia) and *Ascaphus truei* (Archaeobatrachia)”. Host: Dr Rafael Zardoya

Publications

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Past and current research interests

Comparative Genomics

- Evolutionary analyses of the mitochondrial genome (mtDNA) of Mammalia, with particular emphasis to compositional features, nucleotide substitution pattern and lineage-specific evolutionary rates.
- Molecular phylogeny of mammals inferred from mitochondrial genes, with particular interest to the position of Glires (Rodentia plus Lagomorpha). Cloning, sequencing and evolutionary analyses of mtDNAs of rodents (*Sciurus vulgaris* and *Anomalurus sp.*) and lagomorphs (*Oryctolagus cuniculus* and *Ochotona princeps*).
- Molecular phylogeny of amphibian mtDNAs as a case study of the relative performance of nucleotide and amino acid data in phylogenetic reconstructions.

- Mitogenomics of basal chordates: amplification, sequencing, annotation and evolutionary analyses of the mtDNA of several ascidian species.
- Identification of cryptic species in *Ciona intestinalis* through molecular analyses based on mitochondrial markers; Molecular identification of the *Ciona robusta* species
- Evolutionary analyses of nuclear genes of chordates, such as genes involved in human neurodegenerative diseases, and genes involved in the innate immunity system
- Participation to the annotation of the nuclear genome of *Branchiostoma floridae* (amphioxus)
- Participation to nuclear genome projects of ascidian species belonging to the genera *Botryllus* and *Phallusia*
- Identification of cryptic species in ascidians through molecular analyses based on mitochondrial markers
- DNA barcoding

Bioinformatics

- Design and construction of the MITONUC database, collecting nuclear-encoded genes involved in mitochondrial biogenesis.
- Annotation and analysis of the mouse transcriptome (attendance to RIKEN jamborees for the functional annotation of a mouse full-length cDNA collection).
- *In silico* prediction of the transcription process and mRNA maturation in mitochondria of ascidians, using publicly available EST data of ascidians as test case.
- Collaboration to the construction of the UTRdb database, containing 5' and 3' untranslated regions (UTR) of eukaryotic mRNAs. Structural and evolutionary analyses of UTR sequences.
- Collaboration to the design of the program GENESYN, analysing gene order rearrangements.
- Design and construction of the MitoZoa database, collecting curated entries of complete and nearly-complete mtDNA entries of metazoans.

Publications on peer reviewed journals

§: Corresponding Author

*: Joint First Author

- 1) Pesole G, **Gissi C**, Lanave C, Saccone C. (1995) Glutamine synthetase gene evolution in bacteria. *Mol. Biol. Evol.* 12:189-197 [IF 2007: 6.438]
- 2) Saccone C, **Gissi C**, Lanave C, Pesole G. (1995) Molecular classification of living organisms. *J. Mol. Evol.* 40:273-278 [IF 2007: 3.234]
- 3) D'Erchia A.M, **Gissi C**, Pesole G, Saccone C, Arnason U. (1996) The guinea pig is not a rodent. *Nature* 381:597-600 [IF 2007: 28.751]
- 4) Pesole G, Ceci L.R, **Gissi C**, Saccone C, Quagliariello C. (1996) Evolution of the *nad3-rps12* gene cluster in angiosperm mitochondria: comparison of edited and unedited sequences. *J. Mol. Evol.* 43:447-452 [IF 2007: 3.234]
- 5) **Gissi C**§, Gullberg A, Arnason U. (1998) The complete mitochondrial DNA sequence of the rabbit, *Oryctolagus cuniculus*. *Genomics* 50:161-169 DOI: 10.1006/geno.1998.5282 [IF 2007: 3.613]
- 6) Reyes A, **Gissi C**, Pesole G, Saccone C. (1998) Asymmetrical directional mutation pressure in the mitochondrial genome of mammals. *Mol. Biol. Evol.* 15:957-966 [IF 2007: 6.438]
- 7) Pesole G, **Gissi C**, De Chirico A, Saccone C. (1999) Nucleotide substitution rate of mammalian mitochondrial genomes. *J. Mol. Evol.* 48: 427-434 [IF 2007: 3.234]
- 8) Saccone C, De Giorgi C, **Gissi C**, Pesole G, Reyes A. (1999) Evolutionary genomics in Metazoa: the mitochondrial DNA as a model system. *Gene* 238: 195-209 [IF 2007: 2.871]

- 9) Pesole G*, **Gissi C***, Catalano D, Grillo G, Licciulli F, Liuni S, Attimonelli M, Saccone C. (2000) MitoNuc and MitoAln: two related databases of nuclear genes coding for mitochondrial proteins. *Nucleic Acids Research* 28: 163-165 [**IF 2007: 6.945**]
- 10) Reyes A*, **Gissi C***, Pesole G, Catzeflis F. Saccone C. (2000) Where do rodents fit? Evidence from complete mitochondrial genome of *Sciurus vulgaris*. *Mol. Biol. Evol.* 17: 979-983 [**IF 2007: 6.438**]
- 11) **Gissi C***, Reyes A*, Pesole G, Saccone C. (2000) Lineage-specific evolutionary rate in mammalian mtDNA. *Mol Biol Evol.* 17: 1022-1031 [**IF 2007: 6.438**]
- 12) Pesole G, **Gissi C**, Grillo G, Licciulli F, Liuni S, Saccone C. (2000) Analysis of oligonucleotide AUG start codon context in eukaryotic mRNAs. *Gene.* 261: 85-91 [**IF 2007: 2.871**]
- 13) Saccone C, **Gissi C**, Lanave C, Larizza A, Pesole G, Reyes A. (2000) Evolution of the mitochondrial genetic system: an overview. *Gene.* 261: 153-159 [**IF 2007: 2.871**]
- 14) Kawai J, Shinagawa A, Shibata K, Yoshino M, Itoh M, Ishii Y, Arakawa T, Hara A, Fukunishi Y, Konno H, Adachi J, Fukuda S, Aizawa K, Izawa M, Nishi K, Kiyosawa H, Kondo S, Yamanaka I, Saito T, Okazaki Y, Gojobori T, Bono H, Kasukawa T, Saito R, Kadota K, Matsuda H, Ashburner M, Batalov S, Casavant T, Fleischmann W, Gaasterland T, **Gissi C**, King B, Kochiwa H, Kuehl P, Lewis S, Matsuo Y, Nikaido I, Pesole G, Quackenbush J, Schriml LM, Staubli F, Suzuki R, Tomita M, Wagner L, Washio T, Sakai K, Okido T, Furuno M, Aono H, Baldarelli R, Barsh G, Blake J, Boffelli D, Bojunga N, Carninci P, de Bonaldo MF, Brownstein MJ, Bult C, Fletcher C, Fujita M, Gariboldi M, Gustincich S, Hill D, Hofmann M, Hume DA, Kamiya M, Lee NH, Lyons P, Marchionni L, Mashima J, Mazzairelli J, Mombaerts P, Nordone P, Ring B, Ringwald M, Rodriguez I, Sakamoto N, Sasaki H, Sato K, Schonbach C, Seya T, Shibata Y, Storch KF, Suzuki H, Toyooka K, Wang KH, Weitz C, Whittaker C, Wilming L, Wynshaw-Boris A, Yoshida K, Hasegawa Y, Kawaji H, Kohtsuki S, Hayashizaki Y. (2001) Functional annotation of a full-length mouse cDNA collection. *Nature* 409:685-690. [**IF 2001: 27.955**]
- 15) Pesole G, Mignone F, **Gissi C**, Grillo G, Licciulli F, Liuni S. (2001) Structural and functional features of eukaryotic mRNA untranslated regions. *Gene* 276: 73-81 [**IF 2001: 3.041**]
- 16) Saccone C, **Gissi C**, Reyes A, Larizza A, Sbisà E, Pesole G. (2002) Mitochondrial DNA in Metazoa: degree of freedom in a frozen event. *Gene* 286:3-12 [**IF 2002: 2.778**]
- 17) Attimonelli M, Catalano D, **Gissi C**, Grillo G, Licciulli F, Liuni S, Santamaria M, Pesole G, Saccone C. (2002) MitoNuc: a database of nuclear genes coding for mitochondrial proteins. Update 2002. *Nucleic Acids Res* 30:172-3 [**IF 2002: 7.051**]
- 18) Pesole G, Liuni S, Grillo G, Licciulli F, Mignone F, **Gissi C**, Saccone C. (2002) UTRdb and UTRsite: specialized databases and functional elements of 5' and 3' untranslated regions of eukaryotic mRNA- update 2002. *Nucleic Acids Res* 30:335-40 [**IF 2002: 7.051**]
- 19) Mignone F, **Gissi C**, Liuni S, Pesole G. (2002) Untranslated regions of mRNAs. *Genome Biol* 3: REVIEWS0004, PMID: 11897027. Epub 2002 Feb 28
- 20) Okazaki Y, Furuno M, Kasukawa T, Adachi J, Bono H, Kondo S, Nikaido I, Osato N, Saito R, Suzuki H, Yamanaka I, Kiyosawa H, Yagi K, Tomaru Y, Hasegawa Y, Nogami A, Schonbach C, Gojobori T, Baldarelli R, Hill DP, Bult C, Hume DA, Quackenbush J, Schriml LM, Kanapin A, Matsuda H, Batalov S, Beisel KW, Blake JA, Bradt D, Brusica V, Chothia C, Corbani LE, Cousins S, Dalla E, Dragani TA, Fletcher CF, Forrest A, Frazer KS, Gaasterland T, Gariboldi M, **Gissi C**, Godzik A, Gough J, Grimmond S, Gustincich S, Hirokawa N, Jackson IJ, Jarvis ED, Kanai A, Kawaji H, Kawasawa Y, Kedzierski RM, King BL, Konagaya A, Kurochkin IV, Lee Y, Lenhard B, Lyons PA, Maglott DR, Maltais L, Marchionni L, McKenzie L, Miki H, Nagashima T, Numata K, Okido T, Pavan WJ, Pertea G, Pesole G, Petrovsky N, Pillai R, Pontius JU, Qi D, Ramachandran S, Ravasi T, Reed JC, Reed DJ, Reid J, Ring BZ, Ringwald M, Sandelin A,

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- 21) Gissi C, Pesole G. (2003) Transcript mapping and genome annotation of ascidian mtDNA using EST data. *Genome Res.* 13:2203-2212. [IF 2003: 9.635]
- 22) Reyes A, Gissi C, Catzeflis F, Nevo E, Pesole G, Saccone C. (2004) Congruent Mammalian Trees from Mitochondrial and Nuclear Genes Using Bayesian Methods. *Mol Biol Evol.* 21:397-403 [IF 2004: 6.355]
- 23) Gissi C, Iannelli F, Pesole G. (2004) Complete mtDNA of *Ciona intestinalis* reveals extensive gene rearrangement and the presence of an *atp8* and extra *trnM* gene in ascidians *J Mol Evol* 58:376-389 [IF 2004: 2.751]
- 24) Pavesi G, Mauri G, Iannelli F, Gissi C, Pesole G. (2004) GeneSyn: a tool for detecting conserved gene order across genomes. *Bioinformatics* 20:1472-1474 [IF 2004: 5.742]
- 25) Gissi C§, San Mauro D, Pesole G, and Zardoya R. (2006) Mitochondrial phylogeny of Anura (Amphibia): a case study of congruent phylogenetic reconstruction using amino acid and nucleotide characters. *Gene* 366: 228-237 [IF 2006: 2.721]
- 26) Gissi C, Pesole G, Cattaneo E, Tartari M (2006) Huntingtin gene evolution in Chordata and its peculiar features in the ascidian *Ciona* genus. *BMC Genomics* 7(1): 288; doi:10.1186/1471-2164-7-288. [IF 2006: 4.029]
- 27) Ragni E, Fontaine T, Gissi C, Latgè JP, Popolo L. (2007) Gas family of proteins of *Saccharomyces cerevisiae*: characterization and evolutionary analysis. *Yeast* 24(4): 297-308 [IF 2007: 2.619]
- 28) Horner DS, Lefkimmatis K, Reyes A, Gissi C, Saccone C, Pesole G. (2007) Phylogenetic analyses of complete mitochondrial genome sequences suggest a basal divergence of the enigmatic rodent *Anomalurus*. *BMC Evolutionary Biology* 7:16; doi:10.1186/1471-2148-7-16 [IF 2007: 4.091]
- 29) Iannelli F, Pesole G, Sordino P, Gissi C§ (2007) Mitogenomics reveals two cryptic species in *Ciona intestinalis*. *Trends in Genetics* 23(9): 419-22. doi: 10.1016/j.tig.2007.07.001 - [IF 2007: 9.729]
- 30) Iannelli F, Griggio F, Pesole G, Gissi C§ (2007) The mitochondrial genome of *Phallusia mammillata* and *Phallusia fumigata* (Tunicata, Ascidiacea): high genome plasticity at intra-genus level. *BMC Evolutionary Biology* 7:155; doi:10.1186/1471-2148-7-155 [IF 2007: 4.091] ISSN 1471-2148
- 31) Tartari M, Gissi C, Lo Sardo V, Zuccato C, Picardi E, Pesole G, Cattaneo E (2008) Phylogenetic comparison of Huntingtin homologues reveals the appearance of a primitive polyQ in sea urchin. *Mol Biol Evol* 25: 330-338. [IF 2008: 7.280]
- 32) Holland LZ, Albalat R, Azumi K, Benito-Gutiérrez E, Blow MJ, Bronner-Fraser M, Brunet F, Butts T, Candiani S, Dishaw LJ, Ferrier DEK, Garcia-Fernández J, Gibson-Brown JJ, Gissi C, Godzik A, Hallböök F, Hirose D, Hosomichi K, Ikuta T, Inoko H, Kasahara M, Kasamatsu J, Kawashima T, Kimura A, Kobayashi M, Kozmik Z, Kubokawa K, Laudet V, Litman GW, McHardy AC, Meulemans D, Nonaka M, Olinski RP, Pancer Z, Pennacchio LA, Pestarino M, Rast JP, Rigoutsos I, Robinson-Rechavi M, Roch G, Saiga H, Sasakura Y, Satake M, Satou Y, Schubert M, Sherwood N, Shiina T, Takatori N, Tello J, Vopalensky P, Wada S, Xu A, Ye Y,

- Yoshida K, Yoshizaki F, Yu J-K, Zhang Q, Zmasek CM, Putnam NH, Rokhsar DS, Satoh N, and Holland PWH. (2008) The amphioxus genome illuminates vertebrate origins and cephalochordate biology. *Genome Research* 18(7): 1100-1111 online 16 June 2008. doi:10.1101/gr.073676.107 [IF 2008: 10.178]
- 33) Gissi C§, Iannelli F, Pesole G§. (2008) Evolution of the mitochondrial genome of Metazoa as exemplified by comparison of congeneric species. *Heredity* 101(4): 301-20. Online publication 9 July 2008; doi:10.1038/hdy.2008.62 [IF 2007: 3.823]
- 34) Lattuada L, Quaglia F, Iannelli F, Gissi C, Mantecca P, Bacchetta R, Polli M (2009) Mitochondrial DNA sequence variations in some Italian wild boar populations. *Journal of Animal Breeding and Genetics*. 126: 154-163 doi: 10.1111/j.1439-0388.2008.00766.x. [IF 2007: 1.077]
- 35) Gissi C§, Pesole G, Mastrototaro F, Iannelli F, Guida V, Griggio F (2010) Hyper-variability of ascidian mitochondrial gene order: exposing the myth of deuterostome organelle genome stability. *Molecular Biology and Evolution* 27(2):211-5; doi: 10.1093/molbev/msp234; Epub 2009 Oct 1. [IF 2009: 9.872] Quartile: Q1. N° citazioni 2015: 10
- 36) Lupi R, D'Onorio de Meo P, Picardi E, D'Antonio M, Paoletti D, Castrignanò T, Pesole G, Gissi C§. (2010) MitoZoa: a curated MITOchondrial genome database of metaZOAns for comparative genomics studies. *Mitochondrion* 10(2):192-9; Epub 2010 Jan 18. [IF 2009: 4.145] Quartile: Q1.
- 37) Zambelli F, Pavesi G, Gissi C, Horner DS, Pesole G. (2010) Assessment of orthologous splicing isoforms in human and mouse orthologous genes. *BMC Genomics*. Oct 1;11:534; doi:10.1186/1471-2164-11-534 [IF 2009: 3.759] Quartile: Q1.
- 38) D'Onorio de Meo P, D'Antonio M, Griggio F, Lupi R, Borsani M, Pavesi G, Castrignanò T, Pesole G, Gissi C§. (2012) MitoZoa 2.0: a database resource and search tools for comparative and evolutionary analyses of mitochondrial genomes in Metazoa. *Nucleic Acids Res*. 40(1):D1168-72. Epub 2011 Nov 28. Online ISSN 1362-4962 - Print ISSN: 0305-1048. [IF 2011: 8.026] Quartile: Q1.
- 39) Montagna M, Sassera D, Griggio F, Epis S, Bandi C, Gissi C§. (2012) Tick-Box for 3'-end formation of mitochondrial transcripts in Ixodida, basal chelicerates and *Drosophila*. *PLoS ONE* 7(10):e47538.1 -e47538.14 (doi:10.1371/journal.pone.0047538) (<http://dx.plos.org/10.1371/journal.pone.0047538>) ISSN: 1932-6203. [IF 2011: 4.092] Quartile: Q1.
- 40) Sillo F*, Gissi C*, Chignoli D, Ragni E, Popolo L, Balestrini R. (2013) Expression and phylogenetic analyses of the Gel/Gas proteins of *Tuber melanosporum* provide insights into the function and evolution of glucan remodeling enzymes in fungi. *Fungal Genetics and Biology* 53:10-21. doi: 10.1016/j.fgb.2013.01.010. *: Joint First Author. ISSN: 10960937, 10871845. [IF 2011: 3.737] Quartile: Q1.
- 41) Rubinstein N, Feldstein T, Shenkar N, Botero Castro F, Griggio F, Mastrototaro F, Delsuc F, Douzery EJP, Gissi C§, Huchon D§ (2013) "Deep sequencing of mixed total DNA without barcodes allows efficient assembly of highly plastic ascidian mitochondrial genomes" *Genome Biol Evol*. 5(6):1185-99. doi: 10.1093/gbe/evt081 §: Joint Corresponding Author. ISSN: 1759-6653. [IF 2013: 4.618] Quartile: Q1.
- 42) Voskoboynik A, Neff NF, Sahoo D, Newman AM, Pushkarev D, Koh W, Passarelli B, Fan CH, Mantalas GL, Palmeri KJ, Ishizuka KJ, Gissi C, Griggio F, Ben-Shlomo R, Corey R, Penland L, White III R A, Weissman IL, Quake SR (2013) "The genome sequence of the colonial chordate, *Botryllus schlosseri*" *Elife*. 2(2013 Jul), pp. e00569.1-e00569.24. doi: 10.7554/eLife.00569. ISSN: 2050-084X. [IF 2013: 8.519] .
- 43) Gissi C, Romano P, Ferro A, Giugno R, Pulvirenti A, Facchiano A, Helmer-Citterich M. (2013) "Bioinformatics in Italy: BITS 2012, the ninth annual meeting of the Italian Society of

- Bioinformatics” BMC Bioinformatics. 2013 Apr 22;14 Suppl 7:S1. doi: 10.1186/1471-2105-14-S7-S1. ISSN: 14712105. **[IF 2012: 3.024] Quartile: Q1.** NB: editoriale di presentazione dello Special Issue del congresso BITS 2012, curato da C Gissi come Editor in Chief (vedi anche paragrafo I. “PARTECIPAZIONE A COMITATI EDITORIALI DI RIVISTE”).
- 44) Griggio F, Voskoboynik A, Iannelli F, Justy F, Tilak M, Xavier X, Pesole G, Emmanuel J.P. Douzery EJP, Mastrototaro F, **Gissi C** (2014) “Ascidian mitogenomics: comparison of evolutionary rates in closely related taxa provides evidence of ongoing speciation events” *Genome Biol Evol* 6:591-605. Erratum in: *Genome Biol Evol*. 2014 Apr;6(4):931. Xavier, Turon [corrected to Turon, Xavier]. ISSN: 17596653. **[IF 2013: 4.618] Quartile: Q1.**
- 45) Manzari C, Fosso B, Marzano M, Annese A, Caprioli R, D’Erchia AM, **Gissi C**, Intranuovo M, Picardi E, Santamaria M, Scorrano S, Sgaramella G, Stabili L, Piraino S, Pesole G. (2015) “The influence of invasive jellyfish blooms on the aquatic microbiome in a coastal lagoon (Varano, SE Italy) detected by an Illumina-based deep sequencing strategy”. *Biological Invasions* 17: 923-940, online 19 Nov 2014, DOI:0.1007/s10530-014-0810-2. ISSN: 13873547, 15731464. **[IF 2014: 3.249] Quartile: Q1.**
- 46) D’Erchia AM, Atlante A, Gadaleta G, Pavesi G, Chiara M, De Virgilio C, Manzari C, Mastropasqua F, Prazzoli GM, Picardi E, **Gissi C**, Horner D, Reyes A, Sbisà E, Tullo A, and Pesole G (2015) “Tissue-specific mtDNA abundance from exome data and its correlation with mitochondrial transcription, mass and respiratory activity” *Mitochondrion* 20: 13-21. Available online 1 Nov 2014; 20:13-21 DOI: doi:10.1016/j.mito.2014.10.005. ISSN: 18728278, 15677249. **[IF 2014: 3.249] Quartile: Q1.**
- 47) Brunetti R, **Gissi C**, Pennati R, Caicci F, Gasparini F, Manni L. (2015) “Morphological evidence that the molecularly determined *Ciona intestinalis* type A and type B are different species: *Ciona robusta* and *Ciona intestinalis*” *Journal of Zoological Systematics and Evolutionary Research* 53:185-257. DOI: 10.1111/jzs.12101. Article first published online: 15 MAY 2015. ISSN: 09475745, 14390469. **[IF 2014: 1.677] Quartile: Q1.**
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- 49) Brozovic M, Martin C, Dantec C, Dauga D, Mendez M, Simion P, Percher M, Laporte B, Scornavacca C, Di Gregorio A, Fujiwara S, Gineste M, Lowe E K, Piette J, Racioppi C, Ristoratore F, Sasakura Y, Takatori N, Brown T C, Delsuc F, Douzery E, **Gissi C**, McDougall A, Nishida H, Sawada H, Swalla B J, Yasuo H, Lemaire P (2015). “ANISEED 2015: a digital framework for the comparative developmental biology of ascidians”. *Nucleic Acids Research*, ISSN: 0305-1048, doi: 10.1093/nar/gkv966 **[IF 2014: 9.112] Quartile: Q1.**
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- 52) Brunetti R, Manni L, Mastrototaro F, **Gissi C§**, Gasparini F. (2017) "Fixation, description and DNA barcode of a neotype for *Botryllus schlosseri* (Pallas, 1766) (Tunicata, Ascidiacea). *Zootaxa*. 4353(1): 29-50. doi: 10.11646/zootaxa.4353.1.2. [IF: 0.972]
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- 54) Jioji N, Tabudravu, Léonie Pellissier, Alan James Smith, Karolina Subko, Caroline Autréau, Klaus Feussner, David Hardy, Daniel Butler, Richard Kidd, Edward J. Milton, O Hai Deng, Rainer Ebel, Marika Salonna, **Carmela Gissi**, Federica Montesanto, Sharon M. Kelly, Bruce F. Milne, Gabriela Cimpan, O Marcel Jaspars. (2019) "LC-HRMS-Database Screening Metrics for Rapid Prioritisation of Samples to Accelerate the Discovery of Structurally New Natural Products" *Journal of Natural Products*, 82 (2): 211–220, Publication Date (Web): February 8, 2019 . DOI: 10.1021/acs.jnatprod.8b00575
- 55) Rocha MR, Salonna M, Griggio F, Ekins M, Lambert G, Mastrototaro F, Fidler A, **Gissi C. §** (2019) "The power of combined molecular and morphological analyses for the genus *Botrylloides*: identification of a potentially global invasive ascidian and description of a new species" *Systematics and Biodiversity*, <https://doi.org/10.1080/14772000.2019.1649738> Online 6 Sept 2019
- 56) Mastrototaro F, Montesanto F§, Salonna M, Grieco F, Trainito E, Chimienti G, **Gissi C§** (2019) "Hitch-hikers of the sea: concurrent morphological and molecular identification of *Symplegma brakenhielmi* (Tunicata: Ascidiacea) in the western Mediterranean Sea" *Mediterranean Marine Science* 20(1): 197-207, DOI: <http://dx.doi.org/10.12681/mms.19390>
- 57) Brunetti R, Griggio F, Mastrototaro F, Gasparini F, **Gissi C§** (2020) "Toward a resolution of the cosmopolitan *Botryllus schlosseri* species complex (Ascidiacea, Styelidae): mitogenomics and morphology of clade E (*Botryllus gaiae*)" *Zoological Journal of the Linnean Society* 190(4):1175-1192; DOI: <http://dx.doi.org/10.1093/zoolinnea/zlaa023>
- 58) Mastrototaro F, Montesanto F, Salonna M, Viard F, Chimienti G, Trainito, **Gissi C§** (2020) "An integrative taxonomic framework for the study of the genus *Ciona* (Ascidiacea) and description of a new species, *Ciona intermedia*" *Zoological Journal of the Linnean Society* 190(4): 1193–1216; DOI: <http://doi.org/10.1093/zoolinnea/zlaa042>

Book Publications

- 1) Saccone C, **Gissi C**, Pesole G, Sbisà E. (1995) Mitochondrial DNA: facts and fantasy. In: Palmieri F. et al. (Editors) Elsevier Science B.V, *Progress in Cell Research*, Vol. 5 pp. 131-135

National and International Meetings: SELECTED TALKS

- 1) **Gissi C**, De Chirico A, Pesole G, Saccone C. Velocità di sostituzione nucleotidica in regioni codificanti e regolatorie del genoma mitocondriale di mammiferi. Convegno congiunto ABCD, AGI, SIBBM, SIMGBM. Montesilvano Lido, Italy, 30 September-3 October 1997 (Talk)
- 2) **Gissi C**. Rates of mt gene evolution. TMR Network Meeting: Molecular Phylogeny of Mammalian Orders. Stazione Zoologica Anton Dohrn. Napoli-Ischia, Italy, 15-18 October 1998 (Talk)
- 3) **Gissi C**, Reyes A, Pesole G, Saccone C. Asymmetric base composition in the mitochondrial genome of mammals. IV meeting of PhD students in Evolutionary Biology. Heraklion, Creta, 1-3 April 1998 (Talk)

- 4) **Gissi C**, Reyes A, Pesole G, Saccone C. Asimmetria composizionale del genoma mitocondriale di mammiferi. Convegno congiunto ABCD, AGI, SIBBM, SIMGBM. Montesilvano Lido, Italy, 1-4 October 1998 (Talk)
- 5) Iannelli F, Griggio F, Pesole G, **Gissi C**. Reshaping the mtDNA circle: new insights from four newly sequenced ascidian genomes. Incontro Ascidiologi Italiani, Stazione Zoologica “A. Dohrn”, Napoli, Italy. 3-4 April 2006 (Talk)
- 6) **Gissi C**, Griggio F, Iannelli F, Pesole G, Mastrototaro F. “The mitochondrial gene order of Ascidiacea: extreme variability both within the class and compared to other deuterostomes.” 5th International Tunicate Meeting, June 2009. Okinawa, Japan. Selected talk
- 7) Griggio G, Voskoboynik A, Iannelli F, Pushkarev D, **Gissi C**. “Mitogenomics reveals a remarkably high intra-species substitution rate in the ascidian *Botryllus schlosseri*” 6th International Tunicate Meeting, July 3-7, 2011 McGill University, Montreal, Quebec, Canada. (Talk)
- 8) Pennati R, De Sanctis R, Pestarino M, **Gissi C**, Horner DS, De Bernardi F, Candiani S. “Comparative analysis of neural related microRNA during the development of Amphioxus and Ascidiaceans” 6th International Tunicate Meeting, July 3-7, 2011 McGill University, Montreal, Quebec, Canada. (Talk, presentato da R. Pennati)
- 9) Christelle Dantec, Jérôme Compain, Pierre Cavalet, Delphine Dauga, Kai Wang, Remo Sanges, Hitoyoshi Yasuo, Alex McDougall, Christian Sardet, **Gissi C**, Pennati R, Jean-Nicolas Volff, Elia Stupka, Herman Spaink, Hitoshi Sawada, Hiroki Nishida, and Patrick Lemaire. “Assembly and annotation of the genomes of two *Phallusia* and two *Halocynthia* species.” 7th International Tunicate Meeting, Naples, 22-26 July 2013. Selected as Oral presentation of P. Lemaire
- 10) Voskoboynik A, Neff NF, Sahoo D, Newman AM, Pushkarev D, Koh W, Passarelli B, Fan CH, Mantalas GL, Palmeri KJ, Ishizuka KJ, **Gissi C**, Griggio F, Ben-Shlomo R, Corey R, Penland L, White III RA, Weissman IL, Quake SR “The *Botryllus schlosseri* genome: a genetic toolkit for the investigation of regeneration and immune system evolution” 7th International Tunicate Meeting, Naples, 22-26 July 2013. Selected as Oral presentation of A Voskoboynik
- 11) Lambert G, **Gissi C**, Sheets E, Griggio F, Cohen CS, Brunetti R, Mastrototaro F, Rosana M. da Rocha “Morphological and molecular characterization of a worldwide distributed *Botrylloides* species.” 7th International Tunicate Meeting, Naples, 22-26 July 2013. Selected as Oral presentation
- 12) Montagna M, Sasserà D, Griggio F, Epis S, Bandi C, **Gissi C** “The mitochondrial genome of *Ixodes ricinus* reveals Tick-Box: a motif involved in 3'-end formation of mitochondrial transcripts and conserved in ticks, basal chelicerates plus *Drosophila*” Entomology Society of America Annual Meeting 2013, Austin, Texas, 9-14 Nov 2013. Selected as oral presentation by Matteo Montagna. See <http://esa.confex.com/esa/2013/webprogram/Paper73890.html>
- 13) **Manni L**, Gasparini F, Stach T, Pennati R, Gissi C. “*Ciona intestinalis* type A is *Ciona robusta* Hoshino & Tokioka, 1967, and *Ciona intestinalis* type B is *Ciona intestinalis* (Linnaeus, 1767)” 8th International Tunicate Meeting, Aomori, Japan, 13-17 July 2015
- 14) Fabio Gasparini, **Carmela Gissi**, Riccardo Brunetti, Francesco Mastrototaro, Lucia Manni “Disentangling a species complex: the case of the colonial ascidian *Botryllus schlosseri*” 9th International Tunicate Meeting, New York, USA, 17-21 July 2017. Talk by Fabio Gasparini
- 15) Dorothée Huchon, Michal Hadass Sasson, Liran Dray, Emmanuel JP Douzery, Xavier Turon, Merrick Ekins, Gustav Paulay, Carmela Gissi, Noa Shenkar “Insights from complete mitochondrial sequences on the phylogenetic relationships of Aplousobranchia” 9th International Tunicate Meeting, New York University, July 17-21, 2018 Talk by Dorothée Huchon
- 16) Marika Salonna, Fabio Gasparini, Francesco Mastrototaro, Riccardo Brunetti, **Carmela Gissi**. “Occurrence of *Botryllus schlosseri* species complex (Ascidiacea) along the Italian coasts.” 79°

Congresso dell'Unione Zoologica Italiana-UZI 2018, September 25-28, 2018 – Lecce (Italy).
SELECTED FOR ORAL PRESENTATION (Marika Salonna)

- 17) Federica Montesanto, Giovanni Chimienti, Flavia Grieco, Marika Salonna, **Carmela Gissi**, Egidio Trainito, Francesco Mastrototaro. “The hitch-hikers of the sea: first record of the non-indigenous ascidian *Symplesma brakenhielmi* (Michaelson, 1904) in the Western Mediterranean.” 79° Congresso dell'Unione Zoologica Italiana-UZI 2018, September 25-28, 2018 – Lecce (Italy).
SELECTED FOR ORAL PRESENTATION (Federica Montesanto)
- 18) Salonna M, Montesanto F, Mastrototaro F, Ekins M, Gasparini F, **Gissi C**. “The subfamily Botryllinae: species identification and phylogenetic reconstruction.” 10th International Tunicate Meeting, July 7-12, 2019 – Villefranche-sur-mer (France). *Oral presentation* (Marika Salonna)
- 19) Montesanto F, Salonna M, Chimienti G, Viard F, Trainito E, **Gissi C** and Mastrototaro F. “Further revelations on *Ciona* taxonomic complexity.” 10th International Tunicate Meeting, July 7-12, 2019 – Villefranche-sur-mer (France). *Oral presentation* (Federica Montesanto)

National and International Meetings: POSTERS

- 1) Lanave C, Pesole G, **Gissi C**, Saccone C. Glutamine synthetase gene evolution in bacteria
Congresso della International society of molecular evolution. Whorkshop on open questions in
molecular evolution. Guanacaste, Costa Rica, 18-23 April 1994
- 2) Reyes A, **Gissi C**, Pesole G, Saccone C. Molecular phylogeny of rodents: the position of the
family *Gliridae*. Euro-American Mammal Congress. Santiago de Compostela, Spain, 19-24 July
1998
- 3) Saccone C, Sbisà E, Tanzariello F, D'Erchia A.M, **Gissi C**, Larizza A, Reyes A, Pesole G. Il
genoma mitocondriale di Mammiferi: analisi della dinamica evolutiva e tassonomia molecolare.
Conferenza sulla Ricerca Scientifica delle facoltà di Medicina e Chirurgia e Scienze Matematiche
Fisiche e Naturali della Università degli Studi di Bari. Bari, Italy, 11-12 December 1998
- 4) Reyes A, **Gissi C**, Pesole G, Saccone C. Compositional features of the metazoan mitochondrial
genomes and their evolutionary implications. 44° Congresso della Società Italiana di Biochimica
e Biologia Molecolare. Alghero, Italy, 10-14 September 1999
- 5) Reyes A, **Gissi C**, Pesole G, Saccone C. Complete mitochondrial DNA sequence of the european
red squirrel *Sciurus vulgaris*, and analysis of the phylogenetic relationships among rodents. 44°
Congresso della Società Italiana di Biochimica e Biologia Molecolare. Alghero, Italy, 10-14
September 1999
- 6) **Gissi C**, Reyes A, Pesole G, Saccone C. Lineage-specific evolutionary rate in mammalian
mtDNA. Secondo Congresso FISV. Riva del Garda, Italy, 30 September-4 October 2000.
- 7) Pesole G, **Gissi C**, Reyes A, Saccone C. The complete mitochondrial genome of *Ochotona*
princeps and the phylogeny of mammals. Molecular Evolution: Evolution, Genomics,
Bioinformatics. Sorrento, Italy. 13-16 June 2002
- 8) Pesole G, **Gissi C**. Transcript mapping and genome annotation of ascidian mtDNA using EST
data. 5° Convegno FISV: Rimini, Italy. 10-13 October 2003
- 9) Pesole G, **Gissi C**. Transcript mapping and genome annotation of ascidian mtDNA using EST
data. International Urochordate Meeting 2003. Carry-le-Rouet, France. 11-15 October 2003
- 10) **Gissi C**, Iannelli F, Pesole G. Complete mtDNA of *Ciona intestinalis* reveals extensive gene
rearrangement and the presence of an *atp8* and extra *trnaM* gene in ascidians. 8th Evolutionary
Biology Meeting at Marseilles, Marseilles, France. 22-24 September 2004.
- 11) Rota Stabelli O, Horner D, **Gissi C**, Foster P, Pesole G. Compositional biases and the
mitochondrial phylogeny of arthropods. BITS Conference 2005. Milano, Italy. 17-19 Marzo 2005

- 12) **Gissi C**, Iannelli F, Griggio F, Pesole G. Delving into Ascidiacea mtDNA: preliminary data from three newly completed genomes. 3rd International Tunicate Conference, Santa Barbara, California, USA. 9-13 July 2005
- 13) Iannelli F, **Gissi C**, Griggio F, Pesole G. Delving into Ascidiacea mtDNA: preliminary data from three newly completed genomes. 9th Evolutionary Biology Meeting at Marseilles, Marseilles, France. 21-23 September 2005.
- 14) Carotti C, Ragni E, Palomares O, **Gissi C**, Latge J, Fontaine T, Popolo L. A Cys-enriched domain related to a novel plant carbohydrate-binding module is essential for the glucan-transferase activity of a PHR/GEL/GAS protein subfamily. ASM conferences, 8th Candida and Candidiasis, Denver, Colorado, USA. 13-17 March 2006
- 15) Iannelli F, Griggio F, Pesole G, **Gissi C**. Reshaping the mtDNA circle: new insights from four newly sequenced ascidian genomes. BITS Conference 2006, Bologna, Italy. 28-29 April 2006.
- 16) Iannelli F, Griggio F, Pesole G, **Gissi C**. Tunicates mitogenomics: new insights from six newly sequenced ascidian genomes. FISV 2006, 8th Annual Meeting, Riva del Garda, Italy. 28 September – 1 October 2006.
- 17) Iannelli F, Griggio F, Pesole G, **Gissi C**. Ascidian mitogenomics: a surprising case of species-specific gene order reshuffling. Marine Genomics, an International Conference, Sorrento, Italy. 28 October – 1 November 2006.
- 18) Iannelli F, Griggio G, Pesole G, **Gissi C**. Ascidian mitogenomics: a surprising case of species-specific gene order reshuffling. Marine Genomics Europe: Exploratory Workshop. Roscoff, France. 15-17 April, 2007
- 19) Griggio F, Iannelli F, Pesole G, **Gissi C**. Ascidian mitogenomics and the evolution of mitochondrial gene order in Chordata. BITS Conference 2007. Naples, Italy. 26-28 April 2007.
- 20) Iannelli F, Pesole G, Sordino P, **Gissi C**. One ring to divide them all: mitochondrial genomics unveils two cryptic species in *Ciona intestinalis*. EMBO Workshop on “Molecular Biodiversity and DNA Barcoding”. Rome, Italy. 17-19 May, 2007
- 21) Iannelli F, Pesole G, Sordino P, **Gissi C**. One ring to divide them all: mitochondrial genomics unveils two cryptic species in *Ciona intestinalis*. 4rd International Tunicate Conference. Villefranche-sur-Mer, France. 23-27 June 2007
- 22) Iannelli F, Griggio F, Pesole G, **Gissi C**. Ascidian mitogenomics: intra-genus gene order reshuffling. 4rd International Tunicate Conference. Villefranche-sur-Mer, France. 23-27 June 2007
- 23) **Gissi C**, Tartari M, Cattaneo E, Pesole G. Huntingtin gene evolution in Chordata and its peculiar features in the ascidian *Ciona* genus. 4rd International Tunicate Conference. Villefranche-sur-Mer, France. 23-27 June 2007
- 24) Griggio F, Iannelli F, Pesole G, **Gissi C**. Ascidian mitogenomics: gene order reshuffling at intra-genus level. FISV 2007, 8th Annual Meeting, Riva del Garda, Italy. 26-29 September 2007.
- 25) Iannelli F, Pesole G, Sordino P, **Gissi C**. One ring to divide them all: mitochondrial genomics unveils two cryptic species in *Ciona intestinalis*. FISV 2007, 8th Annual Meeting, Riva del Garda, Italy. 26-29 September 2007
- 26) Iannelli F, Pesole G, Sordino P, **Gissi C**. One ring to divide them all: mitochondrial genomics unveils two cryptic species in *Ciona intestinalis*. International Invasive Sea Squirt Conference-II, Brudenell, PEI, Canada. October 2-4, 2007
- 27) **Gissi C**, Iannelli F, Griggio F, and Pesole G. “High genome plasticity of ascidian mtDNA as exemplified by comparison of congeneric species.” Annual Meeting of the Society of Molecular Biology and Evolution (SMBE 2008), Barcelona, Spain. 5-8 June 2008.

- 28) Iannelli F, Pesole G, Sordino P and **Gissi C** “Mitochondrial genomics demonstrate the existence of two cryptic species in *Ciona intestinalis*.” Annual Meeting of the Society of Molecular Biology and Evolution (SMBE 2008), Barcelona, Spain. 5-8 June 2008.
- 29) **Gissi C**, Iannelli F, Griggio F, Pesole G. “Simplicity and complexity: mitochondrial genome diversity in Metazoa.” Mitochondrial Physiology and Pathology - International Symposium, Bari, Italy. 22-26 June 2008.
- 30) Iannelli F, Pesole G, Sordino P, **Gissi C**. “One ring to divide them all: mitochondrial genomics unveils two cryptic species in *Ciona intestinalis*.” II Meeting of the Italian Ascidiologists, Palermo, Italy. 31 June - 1 July 2008.
- 31) **Gissi C**, Iannelli F, Griggio F, Pesole G. “The fast evolutionary dynamics of ascidian mitochondrial genome: an exception to the general deuterostome evolutionary trend”. II Meeting of the Italian Ascidiologists, Palermo, Italy. 31 June - 1 July 2008. Pubblicato su Invertebrate Survival Journal. - ISSN 1824-307X. - 5:2(2008), p. 89.
- 32) Iannelli F, Pesole G, **Gissi C**. “The star ascidian *Botryllus schlosseri*: first report of similarity in gene order and regulatory elements between the mitochondrial genome of ascidians and other deuterostomes” 3rd SIBE Meeting, 2-5 October 2008, Alghero, Italy
- 33) **Gissi C**, Griggio F, Iannelli F, and Pesole G. “Evolutionary mitogenomics: the strange case of ascidians and vertebrates” 3rd SIBE Meeting, 2-5 October 2008, Alghero, Italy
- 34) **Gissi C**, Griggio F, Iannelli F. “Evolutionary analyses of sequence and intron-exon structure of two lectin genes in ascidians” X Incontro della SIICS, Società Italiana di Immunobiologia Comparata e dello Sviluppo, 18-20 February 2009, Urbino. Pubblicato su International Survival Journal 6: 22-31, 2009 (ISSN 1824-307X) (<http://www.isj.unimo.it/articoli/ISJ181.pdf>)
- 35) Lupi R, D’Onorio de Meo P, D’Antonio M, Paoletti D, Castrignanò T, Picardi E, Pesole G, **Gissi C**. “MitoZoa: a curated database of mitochondrial genomes of Metazoa specifically developed for genomics and phylogenetic analyses”. BITS Conference 2009. Genova, Italy. 18-20 March 2009.
- 36) Lupi R, **Gissi C**. “A combined approach for successful reannotation of animal mitochondrial tRNAs based on pattern-matching and tRNA-predictor programs.” In: VII Annual Meeting of The Bioinformatics Italian Society. Bari, April 14-16, 2010. Editor: Progredit, Bari, p. 196-198
- 37) Lupi R, D’Onorio de Meo P, Picardi E, D’Antonio M, Paoletti D, Castrignanò T, Pesole G, **Gissi C**. “Investigating the gene order variability and non-coding region sequences of metazoan mitochondrial genomes: design and construction of a mitogenomics database.” In: VII Annual Meeting of the Bioinformatics Italian Society. Bari, April 14-16, 2010. Editor: Progredit, Bari. p. 193-195
- 38) **Gissi C**. “MitoZoa: a curated database of MITOchondrial genomes of metaZOA for comparative mitogenomics” 18th annual meeting of the Society for Molecular Biology and Evolution (SMBE 2010). Lyon, France, 4-8 July 2010
- 39) Lupi R, **Gissi C**. “A survey of mitochondrial evolution in Metazoa: large variability in little genomes.” IV Congresso SIBE (Società Italiana di Biologia Evoluzionistica). Milano, Italy, 2-4 September 2010
- 40) Lupi R, D’Onorio De Meo P, D’Antonio M, Pavesi G, Griggio F, Pesole G, Castrignanò T, **Gissi C** “More is better, different is helpful: MitoZoa database improvements and the usage of mitochondrial gene order diversity as reannotation criterion.” VIII Annual Meeting of the Bioinformatics Italian Society. Pisa, June 20-22, 2011. [a cura di] F. Geraci, R. Marangoni, M. Pellegrini, M.E. Renda. - Pisa : Edizioni ETS, 2011 Jun 20. - ISBN 978-884673069-5. - pp. 117-118.

- 41) Pennati R, **Gissi C**, Caicci F, Bishop J, Sato A, De Bernardi F, Griggio F, Manni L. “Analisi morfologica e molecolare di larve di *Ciona intestinalis* (Ascidiacea, Tunicata) di tipo A e B.” 73° Congresso Nazionale UZI (Unione Zoologia Italiana) 24-27 Settembre 2012, Firenze.
- 42) Gasparini F, **Gissi C**, Pennati R, Caicci F, Bishop J, Sato A, Giumbo A, Griggio F, Manni L. “Identification of cryptic species in the invasive ascidian *Ciona intestinalis*: larval morphological analyses and molecular screening.” International Workshop on “Molecular tools for monitoring marine invasive species”. Lecce 12-14 September 2012
- 43) Griggio F, Voskoboynik A, Iannelli F, Mastrototaro F, Pushkarev Dmitry, Giumbo A, Pesole G, **Gissi C**. “The invasive ascidian *Botryllus schlosseri*: mitogenomics sequence variability as marker of intra-species variability.” International Workshop on “Molecular tools for monitoring marine invasive species”. Lecce 12-14 September 2012
- 44) Voskoboynik A, Neff NF, Sahoo D, Newman AM, Pushkarev D, Koh W, Passarelli B, Fan CH, Mantalas GL, Palmeri KJ, Ishizuka KJ, **Gissi C**, Ben-Shlomo R, Corey R, Penland L, White R A, Weissman IL, Quake SR “The *Botryllus schlosseri* genome illuminates the early events of vertebrate evolution” 2nd International Workshop on Tunicate Information System. Kyoto, Japan, November 27-28, 2012
- 45) Pennati R, **Gissi C**, Brunetti R, Caicci F, Bishop J, Sato A, Stach T, Kaul S, Ficetola F, Griggio F, Manni L. “Identificazione di specie criptiche nell’ascidia *Ciona intestinalis*: analisi morfologica della larva e screening molecolare” Convegno GEI (Gruppo Embiologico Italiano) 2013, Varese, 9-12 Giugno 2013
- 46) Lambert G, **Gissi C**, Sheets E, Griggio F, Cohen CS, Brunetti R, Mastrototaro F, Rosana M. da Rocha “Morphological and molecular characterization of a worldwide distributed *Botrylloides* species.” 7th International Tunicate Meeting, Naples, 22-26 July 2013. Selected as Oral presentation
- 47) Griggio F, Giumbo A, Franchi N, Pesole G, Mastrototaro F, **Gissi C**. “The Botryllinae subfamily: first evidence of invariant mitochondrial genome architecture in a sea of ascidian variability.” 7th International Tunicate Meeting, Naples, 22-26 July 2013
- 48) **Gissi C**, Griggio F, Mastrototaro F. “A new COI amplification strategy for species discrimination and phylogenetic reconstructions in Botryllinae” 8th International Tunicate Meeting, Aomori, Japan, 13-17 July 2015
- 49) Manni L, Pennati R, **Gissi C**, Gasparini F. “When a developmental biology model species changes name: the case of *Ciona intestinalis*” European journal of histology (ISSN: 1121-760X) Vol 60, No 1s (2016): Italian Embryological Group (GEI) Congress, Naples, 20-23 June 2016.
- 50) Santamaria M, Manzari C, Lionetti C, Marzano M, Fosso B, Balech B, De Filippis T, Sgaramella G, D’Erchia AM, **Gissi C**, and Pesole G. “NGS Revolution: high-throughput exploration of biodiversity with molecular tools” Special Session SS34: Alien species ecological impacts: from genomics to macroecology of the SIL (International Society of Limnology) 2016 Congress, 31 July - 5 August 2016, Torino, Italy
- 51) Fosso B, Santamaria M, Manzari C, Lionetti C, D’Erchia AM, **Gissi C**, Balech B, Pesole G. “Characterization of the eukaryotic microbiome by 18s rRNA metabarcoding data analysis and assessment of the relative resolution of v4 and v9 regions” 41° CIESM (The Mediterranean Science Commission) Congress, Kiel, Germany, 12-16 September 2016
- 52) Fabio Gasparini, **Carmela Gissi**, Francesco Mastrototaro, Riccardo Brunetti, Lucia Manni “A new issue of cryptic species in a model ascidian: developmental stages and DNA barcode for *Botryllus schlosseri* clade A” 63° Congresso del Gruppo Embriologico Italiano (GEI). Roma, 12-15 Giugno 2017

- 53) Montesanto F, Chimienti G, **Salonna M**, Viard F, Trainito E, Gissi C, Mastrototaro F. “Another *Ciona*-case (Tunicata, Ascidiacea).” 50° Congresso SIBM 2019, June 10-14, 2019 – Livorno (Italy). *Poster*
- 54) **Salonna M**, Montesanto F, Mastrototaro F, Gasparini F, Gissi C. “Identifying species and reconstructing the phylogeny of Botryllinae (Tunicata, Ascidiacea) using an elongated COI fragment: advantages and pitfalls.” **SMBE 2019**, July 21-25, 2019- Manchester (UK). *Poster*
- 55) Gissi C, **Salonna M**, Griggio F, Montesanto F, Mastrototaro F, Gasparini F. “Cryptic species E of the *Botryllus schlosseri* species complex is a new species.” 10th International Tunicate Meeting, July 7-12, 2019 – Villefranche-sur-mer (France). *Poster*
- 56) Federica Montesanto, Giovanni Chimienti, Marika Salonna, **Carmela Gissi**, Francesco Mastrototaro. "The prophecy came true: *Aplidium accareense* (Millar, 1953) spreads in the Mediterranean sea" 80° Congresso dell'Unione Zoologica Italiana-UZI 2019, Roma, 23-26 Settembre 2019
- 57) Francesco Mastrototaro Federica Montesanto, Marika Salonna, Giovanni Chimienti, **Carmela Gissi**. "Integrated taxonomy as useful tool for ascidian model organisms studies" 80° Congresso dell'Unione Zoologica Italiana-UZI 2019, Roma, 23-26 Settembre 2019
- 58) Mucciolo S, Salonna M, **Gissi C**, Prodocimo V, Freire CA, Di Domenico M, Mastrototaro F, Mastrodonato M, Lana PC, Calamita G "The euryhaline *Alitta succinea* (Annelida; Nereididae) expresses aquaporin water channels" 13th International Polychaete Conference, IPC13, 4-9 August 2019, Long Beach, California
- 59) Virginia Vanni, Marika Salonna, Fabio Gasparini, **Carmela Gissi** and Lucia Manni "Yamanaka factors in the budding ascidian *Botryllus schlosseri*: gene evolution and expression" SIBE 2019, Padova, 1-4 Settembre 2019

Tutor of undergraduate and graduate students

- 2002-2018: Supervisor of more than 25 theses of M.Sc. students of the following Bachelor’s (first-cycle) and Master’s (second-cycle) degrees:
 - Bachelor’s in Industrial and Environmental Biotechnologies, University of Milan;
 - Bachelor’s in Biological Sciences, University of Milan;
 - Master’s in Functional Genomics and Bioinformatics, University of Milan;
 - Master’s in Molecular Biotechnology and Bioinformatics, University of Milan;
 - Master’s in Biological Sciences, University of Milan;
 - Bachelor’s in Industrial and Environmental Biotechnologies, University of Milan;
 - Bachelor’s in Industrial and Agroindustrial Biotechnologies, University of Bari.
- Some of the students for which I was tutor: Vanessa Guida (2007), Valentina Zappatore (2010), Nigla Testa (2009), Cosimo Di Fonzo (2009), Adriana Giumbo (2012), Matteo Chiara (2008), Gianrico Sinisi (2018)

Supervisor of Ph.D. students

- 2002-2010: supervisor of 5 PhD students of the PhD School in Cellular and Molecular Biology at the University of Milan:
 - 2006: Ph.D. thesis: “Dinamica evolutiva del genoma mitocondriale di Ascidiacea” Dr. Fabio Iannelli, now Bioinformatician at IFOM, the FIRC Institute for Molecular Oncology, Milano, Italy
 - 2007: Ph.D. thesis “Evolutionary features of the mitochondrial genome of Ascidiacea (Chordata, Tunicata) at short and long phylogenetic distances” Dr. Francesca Griggio, now researcher at the “Centro Piattaforme Tecnologiche” of the University of Verona, Italy

- 2008: Ph.D. thesis “Development of machine learning methods for the discrimination between coding and non-coding conserved sequences”. Dr. Matteo Rè
- 2009: Ph.D. thesis “Bioinformatic approaches to the identification of regulatory elements in genomic sequences” Dr. Federico Zambelli, now researcher at the University of Milan
- 2010: Ph.D. thesis “MicroRNA discovery and characterization in *Vitis vinifera* using small RNA deep sequencing and support vector machine” Dr Viviana Piccolo, now Bioinformatics data scientist at the Istituto Clinico Humanitas IRCCS, Department of Immunology and Inflammation, Milan, Italy
- 2016-2019: supervisor of one PhD student (Marika Salonna) of the PhD School in Functional and Applied Genomics and Proteomics (University of Bari)

Teaching

- 2005-2009: course of Laboratory di Bioinformatics (Univ. of Milan)
- 2003-2009: module of Genomics in the class of Functional Genomics II (Univ. of Milan)
- 2009-2015: module of Comparative Genomics in the class of Bioinformatics and Comparative Genomics (Univ. of Milan)
- 2009-2015: module of Bioinformatics in the class of Molecular Biology and Bioinformatics (Univ. of Milan)
- 2013-2015: module of Evolution in the class of Biodiversity and Evolution (Univ. of Milan)
- 2015-today: course of Molecular Biology (Univ. of Bari)
- 2017-today: course of Nutrigenomics (Univ. of Bari)

Bari, 2/12/2020

Carmelo Gini