Curriculum Vitae

PERSONAL INFORMATIONS

	Gloria Rita Bertoli
Address	Via Cascina Fornace 3, 20068 Peschiera Borromeo (Mi)
Phone (home)	+39 02 55302173
Mobile	+39 3209642947
E-mail	gloriarita.bertoli@cnr.it
Nationality	Italian

WORK EXPERIENCE

Dates	01 April 2025-today
Occupation or position held Main activities and responsibilities	Acting Director (Direttore f.f.) of the Institute of Bioimaging and Complex Biological System (Provvedimento n48, protocollo n.0103117 del 01-04-2025).
Dates	November 2022-today
Occupation or position held Main activities and responsibilities	Co-Leadership of Spoke 6 activity “Biodiversity and Human Wellbeing” in the “National Biodiversity Future Center (NBFC)” (identification code CN00000033, CUP B83C22002930006), financed under the National Recovery and Resilience Plan (NRRP), Mission 4, Component 2, Investment 1.4 “Strengthening of research structures and creation of R&D ‘national champions’ on some Key Enabling Technologies” - Call for tender No. 3138 of 16 December 2021, rectified by Decree n.3175 of 18 December 2021 of Italian Ministry of University and Research funded by the European Union – NextGenerationEU. Co-Coordination of the scientific activities in the spoke 6 “Biodiversity and Human Wellbeing”
Dates	September 2011 – today
Occupation or position held Main activities and responsibilities	Full Researcher of the Istituto di Bioimmagini e Sistemi Biologici Complessi (IBSBC) prima IBFM – CNR, Segrate (Mi); header of ‘microRNA imaging and quantification (miQ)’ laboratory Identification and characterization of new epigenomic biomarkers of cancer Grant proposal and scientific papers writing Training and supervision of undergraduate students Scientific publications
Dates	February 2014
Occupation or position held	I interned at the European Synchrotron Facility (ESRF) laboratory (Grenoble) within the project ‘Studio dei meccanismi molecolari del dolore cronico’ (Chronic pain molecular mechanism). ESRF, European Synchrotron Radiation Facility, Grenoble (France)
Dates	14 September 2009 – September 2011

Occupation or position held	Full Researcher in the 'Genetics of Mammary Gland' laboratory of the Istituto di Tecnologie Biomediche (ITB)- CNR, Segrate (Mi)
Main activities and responsabilities	Characterization of cancer stem cells Grant proposal and scientific papers writing Training and supervision of undergraduate students Scientific publications
Dates	September 2005 – March 2009
Occupation or position held	Post-doc with a Telethon fellowship in the 'Genetics of Mammary Gland' laboratory of the Istituto di Tecnologie Biomediche (ITB)- CNR, Segrate (Mi)
Main activities and responsabilities	Responsible of the project 'In vivo and in vitro functional study of Tbx3, the gene mutated in the Ulnar-Mammary Syndrome (OMIM181450)' - Telethon grant (GGP04247). Grant proposal and scientific papers writing Training and supervision of undergraduate students Scientific publications
Dates	September 2005 - Dicember 2005
Occupation or position held	Fellow of the Scientific Institute San Raffaele Hospital HSR-DiBiT. laboratory of Transport and Secretion of proteins, Department of Molecular Medicine and Pathology, Scientific Institute San Raffaele Hospital HSR-DiBiT.
Main activities and responsibilities	Involved in the study of 'Protein folding in pathological diseases ' Participation at seminars concerning the management of clinical trials
Dates	September 2002 – September 2005
Occupation or position held	PhD fellowship in Cellular and Molecular Physiology – University of Milan, c/o laboratory of 'Transport and Secretion of proteins', Dep. of Molecular Medicine and Pathology, Scientific Institute San Raffaele-DiBiT.
Main activities and responsibilities	Responsible of the study of 'Characterization of the oxidative folding and functional role in mammalian cells' Scientific reports and papers writing Poster presentation held at national and international conferences
Dates	September 1999 – August 2002
Occupation or position held	Fellow for the academic training in the Lab. of 'Transport and Secretion of proteins', Dep. of Molecular Medicine and Pathology, Scientific Institute San Raffaele-DiBiT.
Main activities and responsibilities	Involved in the study of 'Characterization of the oxidative folding and functional role in mammalian cells'
Dates	January 1998 - July 1999
Occupation or position held	Undergraduated Student at the Experimental Oncology C Division of the Istituto Nazionale Tumori of Milan
Main activities and responsibilities	Involved in a molecular pharmacology/oncology project with the aim to prepare the experimental thesis to achieve my Biological Sciences degree (Laurea in Scienze Biologiche)

EDUCATION AND TRAINING

Dates	05 June 2018
Title of qualification awarded	Training course for workers of CNR institutes on specific risks from exposure to carcinogens, mutagens and biologics
Name and type of organisation providing education and training	CNR prevention and protection service
Dates	05 Febr. 2019
Title of qualification awarded	Training course for safety officers
Name and type of organisation providing education and training	CNR prevention and protection service
Dates	20 May 2019
Title of qualification awarded	Course for the protection of personal data and personal protection
Name and type of organisation providing education and training	CNR Training office
Dates	23 May 2019
Title of qualification awarded	Training course for safety officers
Name and type of organisation providing education and training	CNR prevention and protection service
Dates	2007
Title of qualification awarded	Certificate of attendance to the Workshop on Cancer Stem Cells
Name and type of organisation providing education and training	Workshop on Cancer stem cells – IFOM-IEO Campus, Milan, Italy
Dates	2005
Title of qualification awarded	PhD Degree in General Physiology- Cellular and Molecular Physiology (Score: Optimum)
Organisation	University of Milan (Italy)
Dates	2004
Title of qualification awarded	Certificate of Attendance to the EU Network Meeting
Organisation	EU Network Meeting 'Cells as Protein Factories'
Dates	2003
Title of qualification awarded	Trinity Ten Certificate (awarded with Grade 10/10 with merit)
Organisation	Trinity –The international Examination Board, Trinity College London Patron HRH The Duke of Kent KG
Dates	2002
Title of qualification awarded	First Certificate in English (awarded with Grade B) (n.026IT0100336)
Organisation	University of Cambridge
Dates	2001
Title of qualification awarded	Italian State recognized biologist (Esame di Stato)
Organization	Università degli Studi of Milan (Italy)
Dates	1999
Title of qualification awarded	MSc, Biological Sciences (Laurea in Scienze Biologiche) (Score 104/110)
Organisation	Università degli Studi of Milan (Italy)

SERVING AS REVIEWER FOR

2023 Since 2021	Reviewer of the projects of Bando di Ricerca Nazionale for Università degli Studi di Modena e Reggio Emilia
2021	Reviewer for Qatar National Research Fund (QNRF) for scientific project evaluation (http://www.qnrf.org.)
Since 2019	Reviewer for Czech Science Foundation, GACR, Department 3 (www.gacr.cz/en) for scientific project evaluation
2019	Reviewer for ELSEVIER – Epilepsy Research
2019	Reviewer for Oncotarget
2018	Reviewer for PhD School in Molecular and Translational Medicine of the University of Milan, Italy
2018	Registered as auditor to 'Reprise', group of expert evaluators of MIUR
2017 -19	Reviewer for Cell Communication and Signaling
2016-17	Reviewer for Genes, Cancers, International Journal of Molecular Sciences - MDPI
2017	Current Cancer Drug Targets, Current Pharmaceutical Design, Bentham Science Publishers Cellular Physiology and Biochemistry Reviewer for grant application of Netherlands Organisation for Scientific Research (NWO)
2016	Reviewer for ELSEVIER – Biomedicine and Pharmacotherapy Reviewer for Ministry of University and Research, revision of PRIN projects
2007	Reviewer for Biomedicine and Pharmacotherapy
1999	Reviewer and supervisor for INGENIO-Finlombarda Spa Course for radioprotection, San Raffaele Hospital

SERVING AS EDITOR FOR

2016	Editor for the Special Issue "Frontiers in biomarkers for theranostics", published in Frontiers in Bioscience (FBS) journal
2022	Editor for Methods and Protocols, MDPI journal, with the special isuue 'Methods and Protocols for breast cancer diagnosis

SKILLS AND COMPETENCES

- Good experience in project coordination
- Long standing practice with writing and reviewing of documents (submissions to ethical committees, grant proposals, reports, papers, abstracts, book chapters)
- Basic data management experience, able to keep secure and accurate documentation
- Quick learner and capable of working independently
- Strong attention to details and ability to follow procedures, processes and instructions, due to long standing wet-lab research experience
- Proficient in supervising technical and research staff, providing guidance and relevant information
- Expertise with data presentation and public speaking
- Strong interpersonal skills, enthusiastic and able to collaborate and provide input to colleagues
- Problem solver, self-motivated and proactive in order to meet deadlines
- Broad knowledge of multiple softwares such as Excel, PowerPoint, Word, Endnote, Fiji, and other programs dedicated to bioinformatic evaluations
- Large theoretical and practical knowledge of "standard" and "specific" techniques used in cellular biology, in biochemistry, and in molecular biology
- Experience in manipulation of tissues from animal experimental models and from oncological patients (tissue and serum/plasma) for the execution of "in vitro" experimental procedures, storage and analysis of specific molecules
- Language skills: Italian (native), English (professional proficiency)

GENERAL PROFILE

- PhD-level Biomedical Scientist with long experience in cellular and molecular biology, with a main role in research projects in the field of Molecular Oncology, with a specific focus on microRNA Discovery and Functional Analysis
- Strong organizational abilities developed while managing multiple research projects, demonstrating multi-tasking and problem-solving attitude
- Good verbal and written communication skills, as demonstrated by the publication of 40 scientific papers in high-tier, peer-reviwed journals, and awards conferred by Telethon, MIUR, Regione Lombardia
- Strong experience as supervisors for Degree Thesis or projects for graduate student (i.e. Ingenio, University of Pavia, Università Politecnica delle Marche, University of Milan)

- Good teamwork and interpersonal skills, as evidenced by national and international collaborations

PUBBLICATIONS
n=59, Scopus h index:25

- Giammona, A., Galuzzi, B. G., Imperia, E., Gervasoni, C., Remedia, S., Restaneo, L., Nespoli, M., De Gara, L., Tani, F., Cicala, M., Guarino, M. P. L., Porro, D., Cerasa, A., Lo Dico, A., Altomare, A.,* & Bertoli, G.* (2025). Chronic Gastrointestinal Disorders and miRNA-Associated Disease: An Up-to-Date. International journal of molecular sciences, 26(1), 413. https://doi.org/10.3390/ijms26010413
- Giammona, A., Commisso, M., Bonanomi, M., Remedia, S., Avesani, L., Porro, D., Gaglio, D., Bertoli, G.,* & Lo Dico, A.* (2024). A Novel Strategy for Glioblastoma Treatment by Natural Bioactive Molecules Showed a Highly Effective Anti-Cancer Potential. *Nutrients*, *16*(15), 2389. https://doi.org/10.3390/nu16152389
- D'Antona, S., Porro, D., Gallivanone, F., & Bertoli, G. * (2024). Characterization of cell cycle, inflammation, and oxidative stress signaling role in non-communicable diseases: Insights into genetic variants, microRNAs and pathways. *Computers in biology and medicine*, *174*, 108346. https://doi.org/10.1016/j.compbiomed.2024.108346
- Cena H., Labra M., NBFC collaborator group (23 authors) Biodiversity and Planetary Health: A Call for Integrated Action: The National Biodiversity Future Center. The Lancet , February 15, 2024
- 'The Biological interplay between air pollutants and miRNAs regulation in cancer' A.Giammona, S.Remedia, D.Porro, A. Lo Dico, G.Bertoli*#, Frontiers in Cell and Developmental Biology, section Cancer Cell Biology, February 2024.
- Rainone P, Valtorta S, Villa C, Todde S, Cadamuro M, Bertoli G, Conconi D, Lavitrano M, Moresco RM. Evaluating [^{18}F]FDG and [^{18}F]FLT Radiotracers as Biomarkers of Response for Combined Therapy Outcome in Triple-Negative and Estrogen-Receptor-Positive Breast Cancer Models. Int J Mol Sci. 2023 Sep 15;24(18):14124. doi: 10.3390/ijms241814124.
- Gallivanone F, Bertoli G, Porro D. Radiogenomics, Breast Cancer Diagnosis and Characterization: Current Status and Future Directions. Methods Protoc. 2022 Oct 3;5(5):78. doi: 10.3390/mps5050078.
- Bertoli G, Panio A, Cava C, Gallivanone F, Alini M, Strano G, Molfino F, Brioschi L, Viani P, Porro D. Secreted miR-153 Controls Proliferation and Invasion of Higher Gleason Score Prostate Cancer. Int J Mol Sci. 2022 Jun 6;23(11):6339. doi: 10.3390/ijms23116339.
- Foglieni C, Lombardi M, Lazzeroni D, Zerboni R, Lazzarini E, Bertoli G, Pisano A, Girolami F, Andolfo A, Magagnotti C, Peretto G, Sartorio CL, Olivotto I, La Canna G, Alfieri O, Rimoldi OE, Barile L, d'Amati G, Camici PG. Myosins and MyomiR Network in Patients with Obstructive Hypertrophic Cardiomyopathy. Biomedicines. 2022 Sep 3;10(9):2180. doi: 10.3390/biomedicines10092180.
- Panio A, Cava C, D'Antona S, Bertoli G, Porro D. Diagnostic Circulating miRNAs in Sporadic Amyotrophic Lateral Sclerosis. Front Med (Lausanne). 2022 May 6;9:861960. doi: 10.3389/fmed.2022.861960
- Santo GD, Frasca M, Bertoli G, Castiglioni I, Cava C. Identification of key miRNAs in prostate cancer progression based on miRNA-mRNA network construction. Comput Struct Biotechnol J. 2022 Feb 7;20:864-873. doi: 10.1016/j.csbj.2022.02.002. PMID: 35222845; PMCID: PMC8844601.
- Manna I, Fortunato F, De Benedittis S, Sammarra I, Bertoli G, Labate A, Gambardella A. Non-Coding RNAs: New Biomarkers and Therapeutic Targets for Temporal Lobe Epilepsy. Int J Mol Sci. 2022 Mar 11;23(6):3063. doi: 10.3390/ijms23063063. PMID: 35328484; PMCID: PMC8954985.
- Salvatore, D., S. Valtorta, G. Bertoli, S. Todde, M. Iannone, A. Coliva, E. Toninelli et al. "Evaluation of Radiotherapy associated with Temozolomide plus Metformin in a GBM immunocompetent microenvironment.". *EUROPEAN JOURNAL OF NUCLEAR MEDICINE AND MOLECULAR IMAGING*, 2021, vol. 48(1), pp. S517-S517..
- D'Antona S, Bertoli G, Castiglioni I, Cava C. Minor Allele Frequencies and Molecular Pathways Differences for SNPs Associated with Amyotrophic Lateral Sclerosis in Subjects Participating in the UKBB and 1000 Genomes Project. J Clin Med. 2021 Jul 30;10(15):3394. doi: 10.3390/jcm10153394. PMID: 34362180; PMCID: PMC8348602.
- Cava C, Bertoli G, Castiglioni I. Potential drugs against COVID-19 revealed by gene expression profile, molecular docking and molecular dynamic simulation. Future Virol. 2021 Jul:10.2217/fvl-2020-0392. doi: 10.2217/fvl-2020-0392. Epub 2021 Jul 20. PMID: 34306168; PMCID: PMC8293696.
- Lombardi M, Lazzeroni D, Benedetti G, Bertoli G, Lazarevic D, Riba M, De Cobelli F, Rimoldi O, d'Amati G, Olivotto I, Foglieni C, Camici P. Plasmatic and myocardial microRNA profiles in patients with Hypertrophic Cardiomyopathy. Clin Transl Med. 2021 Jul;11(7):e435. doi: 10.1002/ctm2.435. PMID: 34323407; PMCID: PMC8287979.
- Bertoli G, Cava C, Corsi F, Piccotti F, Martelli C, Ottobrini L, Vaira V, Castiglioni I. Triple negative aggressive phenotype controlled by miR-135b and miR-365: new theranostics candidates. Sci Rep. 2021 Mar 22;11(1):6553. doi: 10.1038/s41598-021-85746-w. PMID: 33753785; PMCID: PMC7985188
- De Benedittis S, Fortunato F, Cava C, Gallivanone F, Iaccino E, Caligiuri ME, Castiglioni I, Bertoli G#, Manna I, Labate A, Gambardella A. Circulating microRNA: The Potential Novel Diagnostic Biomarkers

to Predict Drug Resistance in Temporal Lobe Epilepsy, a Pilot Study. Int J Mol Sci. 2021 Jan 12;22(2):702. doi: 10.3390/ijms22020702. PMID: 33445780; PMCID: PMC7828221.

- Salimimoghadam S, Taefehshokr S, Loveless R, Teng Y, Bertoli G, Taefehshokr N, Musaviaroo F, Hajiasgharzadeh K, Baradaran B. The role of tumor suppressor short non-coding RNAs on breast cancer. Crit Rev Oncol Hematol. 2021 Feb;158:103210. doi: 10.1016/j.critrevonc.2020.103210. Epub 2020 Dec 29. PMID: 33385514.
- Valtorta S, Salvatore D, Rainone P, Belloli S, Bertoli G#, Moresco RM. Molecular and Cellular Complexity of Glioma. Focus on Tumour Microenvironment and the Use of Molecular and Imaging Biomarkers to Overcome Treatment Resistance. Int J Mol Sci. 2020;21(16):E5631. Published 2020 Aug 6. doi:10.3390/ijms21165631
- Claudia Cava, Gloria Bertoli, Isabella Castiglioni. In Silico Discovery of Candidate Drugs against Covid-19. Viruses. 2020 Apr 6;12(4):404. doi: 10.3390/v12040404
- Claudia Cava, Gloria Bertoli, Isabella Castiglioni. A protein interaction map identifies existing drugs targeting SARS-CoV-2 Research Square (2020)
- Cava C., Bertoli G., Castiglioni I. A protein interaction map identifies existing drugs targeting SARS-CoV-2Cava C, Bertoli G, Castiglioni I. In Silico Discovery of Candidate Drugs against Covid-19. Viruses. 2020 Apr 6;12(4). pii: E404. doi: 10.3390/v12040404.
- Cava C, Novello C, Martelli C, Lodico A, Ottobrini L, Piccotti F, Truffi M, Corsi F, Bertoli G#, Castiglioni I. (2020). Theranostic application of miR-429 in HER2+ breast cancer. THERANOSTICS, ISSN: 1838-7640
- Colaprico A, Olsen C, Bailey MH, Odom GJ, Terkelsen T, Silva TC, Olsen AV, Cantini L, Zinovyev A, Barillot E, Noushmehr H, Bertoli G, Castiglioni I, Cava C, Bontempi G, Chen XS, Papaleo E. (2020). Interpreting pathways to discover cancer driver genes with Moonlight. NATURE COMMUNICATIONS, ISSN: 2041-1723
- Cantini L*, Bertoli G*, Cava C, Dubois T, Zinovyev A, Caselle M, Castiglioni I, Barillot E, Martignetti L. (2019). Identification of microRNA clusters cooperatively acting on epithelial to mesenchymal transition in triple negative breast cancer. NUCLEIC ACIDS RESEARCH, ISSN: 0305-1048, doi: 10.1093/nar/gkz016.
- Cava C, Bertoli G#, Castiglioni I (2019). Portrait of Tissue-Specific Coexpression Networks of Noncoding RNAs (miRNA and lncRNA) and mRNAs in Normal Tissues. COMPUTATIONAL AND MATHEMATICAL METHODS IN MEDICINE, ISSN: 1748-670X
- Gallivanone F, Cava C, Corsi F, Bertoli G#, Castiglioni I. (2019). In Silico Approach for the Definition of radiomiRNomic Signatures for Breast Cancer Differential Diagnosis. INTERNATIONAL JOURNAL OF MOLECULAR SCIENCES, ISSN: 1422-0067
- Cava C*, Bertoli G*, Castiglioni I. (2018). In silico identification of drug target pathways in breast cancer subtypes using pathway cross-talk inhibition. JOURNAL OF TRANSLATIONAL MEDICINE, vol. 16, ISSN: 1479-5876
- Cava C*, Bertoli G*, Colaprico A, Bontempi G, Mauri G, Castiglioni I. (2018). In-Silico Integration Approach to Identify a Key miRNA Regulating a Gene Network in Aggressive Prostate Cancer. INTERNATIONAL JOURNAL OF MOLECULAR SCIENCES, vol. 19, ISSN: 1422-0067
- Cava C, Bertoli G, Colaprico A, Olsen C, Bontempi G, Castiglioni I. (2018). Integration of multiple networks and pathways identifies cancer driver genes in pan-cancer analysis. BMC GENOMICS, vol. 19, ISSN: 1471-2164, doi: 10.1186/s12864-017-4423-x.
- Cava C, Manna I, Gambardella A, Bertoli G#, Castiglioni I. (2018). Potential Role of miRNAs as Theranostic Biomarkers of Epilepsy. MOLECULAR THERAPY NUCLEIC ACIDS, vol. 13, p. 275-290, ISSN: 2162-2531, doi: 10.1016/j.omtn.2018.09.008. E
- Bertoli G, Cava C., Diceglie C., Martelli C., Rizzo G., Piccotti F., Ottobrini L., Castiglioni I. (2017). MicroRNA-567 dysregulation contributes to carcinogenesis of breast cancer, targeting tumor cell proliferation, and migration. BREAST CANCER RESEARCH AND TREATMENT, ISSN: 0167-6806
- Cava C, Colaprico A, Bertoli G, Graudenzi A, Silva TC, Olsen C, Noushmehr H, Bontempi G, Mauri G, Castiglioni I. (2017). SpidermiR: An R/Bioconductor Package for Integrative Analysis with miRNA Data. INTERNATIONAL JOURNAL OF MOLECULAR SCIENCES, vol. 18, ISSN: 1422-0067, doi: 10.3390/ijms18020274
- Graudenzi A, Cava C, Bertoli G, Fromm B, Flatmark K, Mauri G, Castiglioni I. (2017). Pathway-based classification of breast cancer subtypes. FRONTIERS IN BIOSCIENCE, ISSN: 1093-9946
- Lafortuna CL, Tovar AR, Rastelli F, Tabozzi SA, Caramenti M, Orozco-Ruiz X, Aguilar-Lopez M, Guevara-Cruz M, Avila-Nava A, Torres N, Bertoli G (2017). Clinical, functional, behavioural and epigenomic biomarkers of obesity. FRONTIERS IN BIOSCIENCE, ISSN: 1093-9946
- Sartorio CL, Lazzeroni D, Bertoli G, Camici PG (2017). Theranostic biomarkers in hypertrophic cardiomyopathy: insights in a long road ahead. FRONTIERS IN BIOSCIENCE, ISSN: 1093-9946

- Bertoli G, Cava C, Castiglioni I. (2016). The potential of miRNAs for diagnosis, treatment and monitoring of breast cancer. SCANDINAVIAN JOURNAL OF CLINICAL & LABORATORY INVESTIGATION. SUPPLEMENT, vol. 245, p. S34-39, ISSN: 0085-591X, doi: 10.1080/00365513.2016.1208444.
- Bertoli G, Cava, C., Castiglioni, I. (2016). MicroRNAs as Biomarkers for Diagnosis, Prognosis and Theranostics in Prostate Cancer. INTERNATIONAL JOURNAL OF MOLECULAR SCIENCES, vol. 17, ISSN: 1422-0067
- Cava C, Colaprico A, Bertoli G, Bontempi G, Mauri G, Castiglioni I. (2016). How interacting pathways are regulated by miRNAs in breast cancer subtypes. BMC BIOINFORMATICS, vol. 17, ISSN: 1471-2105, doi: 10.1186/s12859-016-1196-1.
- Sartorio, CL, Bertoli G, Lazzeroni, D., Rimoldi, O., Esposito, A., Peretto, G., ... & Camici, P. G (2016). The expression of beta myosin isoform MYH7B correlates with severity of left ventricular systolic dysfunction in patients with hypertrophic cardiomyopathy. CARDIOVASCULAR RESEARCH, ISSN: 1755-3245
- Bertoli G, Cava C, Castiglioni I. (2015). MicroRNAs: New Biomarkers for Diagnosis, Prognosis, Therapy Prediction and Therapeutic Tools for Breast Cancer. THERANOSTICS, ISSN: 1838-7640, doi: 10.7150/thno.11543
- Cava C*, Bertoli G*#, Castiglioni I. (2015). Integrating genetics and epigenetics in breast cancer: biological insights, experimental, computational methods and therapeutic potential. BMC SYSTEMS BIOLOGY, ISSN: 1752-0509, doi: 10.1186/s12918-015-0211-x
- Colaprico A., Cava C., Bertoli G, Bontempi G., Castiglioni I. (2015). Integrative Analysis with Monte Carlo Cross-Validation Reveals miRNAs Regulating Pathways Cross-Talk in Aggressive Breast Cancer. BIOMED RESEARCH INTERNATIONAL, ISSN: 2314-6141, doi: 10.1155/2015/831314.
- Cava C., Bertoli G, Ripamonti M., Mauri G., Zoppis I., Della Rosa PA., Gilardi MC., Castiglioni I. (2014). Integration of mRNA expression profile, copy number alterations, and microRNA expression levels in breast cancer to improve grade definition. PLOS ONE, ISSN: 1932-6203, doi: doi: 10.1371/journal.pone.0097681
- Valtorta S, Nicolini G, Tripodi F, Meregalli C, Cavaletti G, Avezza F, Crippa L, Bertoli G, Sanvito F, Fusi P, Pagliarin R, Orsini F, Moresco RM, Coccetti P. (2014). A novel AMPK activator reduces glucose uptake and inhibits tumor progression in a mouse xenograft model of colorectal cancer. INVESTIGATIONAL NEW DRUGS, ISSN: 0167-6997, doi: 10.1007/s10637-014-0148-8
- MOSCA E, BERTOLI G, PISCITELLI E, VILARDO L, REINBOLD RA, ZUCCHI I, MILANESI L (2009). Identification of functionally related genes using data mining and data integration: a breast cancer case study. BMC BIOINFORMATICS, ISSN: 1471-2105
- C. Cocola, S. Sanzone, S. Astigiano, P. Pelucchi, E. Piscitelli, L. Vilardo, O. Barbieri, G. Bertoli, R.A. Reinbold, I. Zucchi (2008). A rat mammary gland cancer cell with stem cell properties of self-renewal and multi-lineage differentiation. CYTOTECHNOLOGY, vol. 58, p. 25-32, ISSN: 0920-9069, doi: 10.1007/s10616-008-9173-9
- I. Zucchi, S. Astigiano, G. Bertalot, S. Sanzone, C. Cocola, P. Pelucchi, G. Bertoli, M. Stehling, O. Barbieri, A. Albertini, H.R. Schöler, B.G. Neelf, R.A. Reinbold, R. Dulbecco (2008). Distinct populations of tumor initiating cells derived from a tumor generated by rat mammary cancer stem cells. PROCEEDINGS OF THE NATIONAL ACADEMY OF SCIENCES OF THE UNITED STATES OF AMERICA, vol. 105, p. 16940-16945, ISSN: 0027-8424, doi: 10.1073/pnas.0808978105
- PLATONOVA N, SCOTTI M, BABICH P, BERTOLI G, MENTO E, MENEGHINI, V, EGEO A, ZUCCHI I, MERLO GR (2007).. CELL AND TISSUE RESEARCH, ISSN: 0302-766X
- ZUCCHI I, SANZONE S, ASTIGIANO S, PELUCCHI P, SCOTTI M, VALSECCHI V, BERTOLI G, ALBERTINI A, REINBOLD RA, DULBECCO R (2007). The properties of a mammary gland cancer stem cell. PROCEEDINGS OF THE NATIONAL ACADEMY OF SCIENCES OF THE UNITED STATES OF AMERICA, ISSN: 1091-6490
- M. OTSU, G. BERTOLI, C. FAGIOLI, E. GUERINI-ROCCO, S. NERINI MOLTENI, E. RUFFATO AND R. SITIA (2006). Dynamic retention of Ero1a and Ero1b in the Endoplasmic Reticulum by interaction with PDI and ERp44'. ANTIOXIDANTS & REDOX SIGNALING, ISSN: 1523-0864
- G. BERTOLI, T. SIMMEN, T. ANELLI, S. NERINI MOLTENI, R. FESCE, R. SITIA (2004). Two conserved cysteine triads in human Ero1α cooperate for efficient disulfide bond formation in the ER. THE JOURNAL OF BIOLOGICAL CHEMISTRY, ISSN: 0021-9258
- P. CUNNEA, A.M. VIZUETE, G. BERTOLI, T. SIMMEN, A.E. DAMDIMOPOULOS, S. HERMANN, S. LEINONEN, M.P. HUIKKO, JA. GUSTAFSSON, R. SITIA, G. SPYROU (2003). ERdj5, an Endoplasmic Reticulum (ER)-resident protein containing DnaJ and Thioredoxin domains, is expressed in secretory cells or following ER stress. THE JOURNAL OF BIOLOGICAL CHEMISTRY, ISSN: 0021-9258

- T. ANELLI, M. ALESSIO, A. BACHI, L. BERGAMELLI, G. BERTOLI, S. CAMERINI, A. MEZGHRANI, E. RUFFATO, T. SIMMEN, R. SITIA (2003). Thiol-mediated protein retention in the endoplasmic reticulum: the role of ERp44. EMBO JOURNAL, ISSN: 0261-4189
- L. ORLANDI, G. BERTOLI, G. ABOLAFIO, M.G. DAIDONE, AND N. ZAFFARONI (2001). Effects of Liposome-Entrapped Annamycin in Human Breast Cancer Cells: Interference With Cell Cycle Progression and Induction of Apoptosis. THE JOURNAL OF BIOLOGICAL CHEMISTRY, vol. 81, p. 9-22, ISSN:0021-9258
- M.PAGANI, S. PILATI, G. BERTOLI, B. VALSASINA, AND R. SITIA (2001). The C-terminal domain of yeast Ero1p mediates membrane localization and is essential for function. FEBS LETTERS, ISSN: 0014-57

CONGRESS PARTECIPATION

- 31esimo congresso Nazionale Malattie Digestive "GUT MICROBIOTA, MICRORNA AND ENVIRONMENTAL FACTORS: NEW PERSPECTIVES FOR AN IN-DEPTH ANALYSIS ON THE ETIOPATHOGENESIS OF IBD AND IBS" 13-15 aprile 2025
- 7th International Electronic Conference on Atmospheric Sciences "Integrating Planetary Health and Nature-Based Solutions: Assessing fresh Traffic-Related Air Pollution Impacts on Human and Plant Health in Urban Forests" Sirignano, C., Fusaro, L., De Vargas Brondani, D, Di Iulio, G., Listrani, S., Scartazza, A., Anselmi, C., Calfapietra, C., Bertoli, G., Giammona A., Gervasoni C., Altomare, A., Di Giosa, A., Mortarini, L, Landi, T., Decesari, S, Facchini, C., Costabile, F.
- Invited speaker in the 36th International Symposium on Pediatric Surgical Research, 6-8 October 2023 with a presentation entitled INCREASED ADIPOSE TISSUE EXPRESSION OF INFLAMMATORY CYTOKINES IN PEDIATRIC OBESITY: PERSPECTIVE SURGICAL RISK BIOMARKERS by *Gloria Bertoli, Francesca Gallivanone, Carlotta Ardenghi, Giulia Lanfranchi, Gloria Pelizzo, Gianvincenzo Zuccotti, Valeria Calcaterra*
- S. Valtorta, S. Granata, P. Rainone, G. Bertoli, S. Todde, M. Iannone, A. Coliva, A. Spinelli, S. de Pretis, S. Diprima, F Zerbetto, S. Villa, N. Di Muzio and RM Moresco "Effect of radiotherapy combined with drugs on glioma microenvironment evaluated using PET imaging and single-cell RNA sequencing" presented at EMIM (European Molecular Imaging Meting) 2023
- S. Granata, S.Valtorta, F. Zerbetto, S. Todde, M. Iannone, A. Coliva, A. Spinell, G. Bertoli, S. de Pretis[7], S. Diprima, S. Villa, N. Di Muzio and RM. Moresco " PET imaging and single-cell RNA sequencing glioma microenvironment assessment after RT combined therapy" presented at NeuroMi (November 2022)
- S. Valtorta, G. Bertoli, P. Rainone, S. Todde, M.Iannone, S. Belloli, A. Coliva, A. Spinelli, F. Zerbetto, S. Villa, N. Di Muzio[5] and RM. Moresco "Assessment of radiotherapy efficacy in a GBM-immunocompetent animal model" presented at the Conference of Department of Biomedical Sciences-CNR (Feb 2022)
- D. Salvatore S. Valtorta, G. Bertoli, S. Todde, M. Iannone, A. Coliva, E. Toninelli, A. Spinelli, F. Zerbetto, S. Villa, N. Di Muzio and RM. Moresco "Radiotherapy evaluation in a GBM-immunocompetent animal model" Neuromi 2021
- G. Bertoli, I. Manna, C. Cava, F. Gallivanone, E. Iaccino, M.E. Caligiuri, S. De Benedittis, F. Fortunato, A. Labate, A Gambardella "Circulating microRNA: The Potential Novel Diagnostic Biomarkers to Predict Drug Resistance in Temporal Lobe Epilepsy, a Pilot Study" presented at the Conference of Department of Biomedical Sciences- CNR (Feb 2021)
- D. Salvatore, S. Valtorta, G. Bertoli, S. Todde, M. Iannone, A. Coliva, E. Toninelli, A. Spinelli, F. Zerbetto, S. Villa, N. Di Muzio and RM. Moresco "Evaluation of Radiotherapy associated with Temozolomide plus Metformin in a GBM immunocompetent microenvironment" presented at EMIM congress (May 2021)
- D. Salvatore, S. Valtorta, G. Bertoli, S. Todde, M. Iannone, A. Coliva, E. Toninelli, A. Spinelli, F. Zerbetto, S. Villa, N. Di Muzio and RM. Moresco "Evaluation of Radiotherapy associated with Temozolomide plus Metformin in a GBM immunocompetent microenvironment" presented at EANM congress (April 2021)
- Bertoli G., Cava C., Diceglie C., Martelli C., Rizzo G., Piccotti F., Ottobrini L., and Castiglioni I. (2018). MICRORNA-567 DYSREGULATION CONTRIBUTES TO CARCINOGENESIS OF BREAST CANCER, TARGETING TUMOR CELL PROLIFERATION, AND MIGRATION. In: Atti del Convegno SIC. Milano, 19-22 settembre 2018
- Sartorio CL, Bertoli G, Lazzeroni D, Rimoldi O, Esposito A, Peretto G, Damascelli A, De Cobelli F, Alfieri O, Camici PG (2016). The expression of beta myosin isoform MYH7B correlates with severity of left ventricular systolic dysfunction in patients with hypertrophic cardiomyopathy. In: CARDIOVASCULAR RESEARCH. CARDIOVASCULAR RESEARCH, vol. 111, p. s119, OXFORD UNIV PRESS, GREAT CLARENDON ST, OXFORD OX2 6DP, ENGLAND, ISSN: 0008-6363, Florence, JUL 08-10, 2016

- Carmem Luiza Sartorio, Bertoli G, Davide Lazzeroni, Ornella Rimoldi, Alessandra Esposito, Giovanni Peretto, Anna Damascelli, Francesco De Cobelli, Ottavio Alfieri, Paolo Guido Camici (2016). The expression of beta myosin isoform MYH7B correlates with severity of left ventricular systolic dysfunction in patients with hypertrophic cardiomyopathy. In: CARDIOVASCULAR RESEARCH CONGRESS. p. S119, OXFORD:Oxford University Press
- Cava, C., Bertoli G, Zoppis, I., Mauri, G., Gilardi, M.C., Castiglioni, I. (2013). Candidate biomarkers for response to tamoxifen in breast cancer metastatic patients. In: Bioinformatics and Bioengineering (BIBE), 2013 IEEE 13th International Conference; pp 1-4. Chana, Grecia, 10/11/2013 - 13/11/2013
- Cocola C., Sanzone S., Astigiano S., Pelucchi P., Valsecchi V., Scotti M., Cellamare N., Piscitelli E., Vilardo L., Sala E., Bertoli G., Barbieri O., Reinbold R., and Zucchi I. 'A rat mammary gland cell with stem cell properties of self-renewal, multi-lineage differentiation and tumor sustainability' In : EuroSTELLS Workshop 'Challenges in Stem Cell Differentiation and Transplantation' (30 Sept - 3 Oct 2007)
- BERTOLI G, SCOTTI M, SANZONE S, VALSECCHI V, PELUCCHI P, PLATONOVA N, MERLO G.R, AND ZUCCHI I (2007). Studio funzionale in vivo e in vitro di TBX3, il gene mutato nella sindrome ulnare mammaria. In: Convention Telethon 2007.
- BERTOLI G, SCOTTI M, SANZONE S, VALSECCHI V, PELUCCHI P, PLATONOVA N, MERLO G.R, AND ZUCCHI I (2006). Role of Tbx3, the gene mutated in the Ulnar-Mammary Syndrome, in mammary gland development. In: FISV 06-Federazione Italiana Scienze della Vita 2006.
- BERTOLI G, SCOTTI M. PLATONOVA N, VALSECCHI V, MENTO E, PELUCCHI P. MERLO G.R, AND ZUCCHI I (2005). Role of Tbx3, the gene mutated in the Ulnar-Mammary Syndrome, in mammary gland development. In: ELSO 2005.
- Bertoli G., Simmen T., Nerini-Molteni S., Sitia R. 'Intra and Inter-molecular cooperativity between two conserved cysteine triads in human Ero1 alpha allows efficient disulfide bond formation in the ER' In: ELSO Meeting 2003
- BERTOLI G. (2002) 'From Triplet Repeat Expansion to Protein Toxicity' In: Molecular Mechanism of Neurodegeneration, Milan-Italy
- BERTOLI G., ANELLI T., SITIA R. (2002) Traffico di Membrana e Biogenesi degli Organelli In: Associazione di Bioogia Cellulare e del Differenziamento (ABCD), Certosa di Pontignano (Fi), Italy

AWARDS AND HONORS

- 2007 winner of the study award from Telethon (for the project GGP04247)
- 2006 winner of the Telethon Fellowship (project GGP04247)
- 2005 winner of the Telethon Fellowship (project GGP04247)
- 2005 winner of the one-year fellowship from Vita Salute San Raffaele
- 2004 winner of the award for the Best Poster during FISV 04-Federazione It. Scienze della Vita 2004.
- 2004 winner of the one-year fellowship from Vita Salute San Raffaele
- 2002 winner of the fellowship from Fondazione Centro San Raffaele del Monte Tabor
- Until 2019 responsible for IBFM for the processing of personal data and bioethical aspects (Protocol n. 61 Prot. AMMCNT-CNR n. 0038349, del 29/05/2019)

INVITED SPEAKER

- Invited speaker in the 36th International Symposium on Pediatric Surgical Research, 6-8 October 2023 with a presentation entitled INCREASED ADIPOSE TISSUE EXPRESSION OF INFLAMMATORY CYTOKINES IN PEDIATRIC OBESITY: PERSPECTIVE SURGICAL RISK BIOMARKERS
- Grand Round of Medical Specialization, Lesson on "Identificazione della regolazione da parte dei miRNAs della fisiologia e fisiopatologia nel sistema cardiovascolare", 15 January 2014;
- Bergmeyer Conference, presentation on "Breast Cancer - The potential of miRNA for diagnosis, treatment and monitoring.", 7-9 March 2016
- Department of Molecular Biology and Functional Genomics, Ist. Scientifico Universitario San Raffaele, Progress Report 'Oxidative Protein Folding in the Crowded Environment of the Endoplasmic Reticulum', 15 April 2003
- Scientific dissemination for primary and secondary school (2018, 2019, 2020)

SCIENTIFIC RESPONSIBILITIES

- Spoke 6 co-leader in the National Biodiversity Future Center of the Spoke 6 'Biodiversity and Human Wellbeing'' (PNRR 2022)- financed by European Community, Next Gen EU (letter by D.Porro, 11/01/2023)
- IBFM-CNR referent in the National Biodiversity Future Center of the Spoke 6 'Biodiversity; Exposome and Urban Lifestyle', Action 1 'Exposome', Task 1 'One Health e biodiversità umana: risposta all'esposoma' (PNRR 2022)

- Unit Coordinator for IBFM-CNR in the PRIN 2020 Project (financed by Italian MIUR): Plants Bioprospecting of Serine Proteases Inhibitors to develop an innovative colon cancer prevention strategy – PRESERVE (Prot. 2020Y78C7J) finanziamento: 535.390 euro
- 2019 Collaborator in the project 'INnovazione, nuovi modelli TEcnologici e Reti per curare la SLA (INTERSLA)', REGIONE LOMBARDIA, CALL HUB RICERCA E INNOVAZIONE -CALL PER PROGETTI STRATEGICI DI RICERCA, SVILUPPO E INNOVAZIONE VOLTI AL POTENZIAMENTO DEGLI ECOSISTEMI LOMBARDI DELLA RICERCA E DELL'INNOVAZIONE QUALI HUB A VALENZA INTERNAZIONALE, Italia, finanziamento: 626,085 euro
- 2017 Principal Investigator in the second call of InterOmics Flagship Project-MIUR, Italia (Interomics 2017) finanziamento:100.000 euro
- Since 2017 Reprise evaluators for MIUR, Italian Ministery for University and Research
- Responsible of scientific dissemination in:

-European Biotech Week (2017-2019) with the laboratories "Il DNA, la molecola della vita" (2017), "Porte aperte all'IBFM: I colori del cambiamento" (2018), and the seminars "Dai meccanismi di regolazione epigenomica all'imaging in vivo" (2019)
-Festival della Scienza (2017-2019) with the laboratories "Perché un bambino non assomiglia ad una rana" (2017), "I colori del cambiamento " (2018), "Elementary DNA-I legami della vita" (2019).
-Alternanza scuola-lavoro (2016-2020) hosting students from I.P.S.I.A. Institute- Melzo (2015 and 2017), A.Volta Institute (2018), G.Bruno Institute-Melzo (2019), ITSOS-Melzo (2023).
-Lessons for students of primary and secondary De Andrè Institute-Peschiera Borromeo entitled "I modelli animali perché sono importanti e li usiamo in laboratorio" (28-01-2020), "Covid-19" (16-04-2020).

REFERENCES

- Dr. Danilo Porro, full professor at University Milano Bicocca and IBFM-CNR Director, danilo.porro@ibfm.cnr.it
- Dr.ssa Mariacarla Gilardi, Full professor of ELECTRONIC AND INFORMATION BIOENGINEERING (ING-INF/06), DIPARTIMENTO DI MEDICINA E CHIRURGIA (SCHOOL OF MEDICINE AND SURGERY), University of Milan-Bicocca, maria.gilardi@unimib.it
- Dr.ssa Isabella Castiglioni, Full professor of APPLIED PHYSICS (CULTURAL HERITAGE, ENVIRONMENT, BIOLOGY AND MEDICINE) (FIS/07), DIPARTIMENTO DI FISICA "GIUSEPPE OCCHIALINI", University of Milan-Bicocca, isabella.castiglioni@unimib.it
- Dr. Roberto Sitia, Scientific Director of Division of Genetics and Cellular Biology of DiBiT, Dep. of BioTechnology-HSR and Full professor of Università Vita-Salute San Raffaele, sitia.roberto@hsr.it
- Dr.ssa Maria Grazia Daidone, Head of the Department of Experimental Oncology and Molecular Medicine , Department of Experimental Oncology and Molecular Medicine, AmadeoLab c/o IRCCS Fondazione Istituto Nazionale Tumori of Milan, mariagrazia.daidone@istitutotumori.mi.it
- Dr.ssa Nadia Zaffaroni, Head of the Molecular Pharnacology Lab.(Operative Unit 14), Department of Experimental Oncology and Molecular Medicine, AmadeoLab c/o IRCCS Fondazione Istituto Nazionale Tumori of Milan, nadia.zaffaroni@istitutotumori.mi.it

I HEREBY GRANT PERMISSION TO USE MY PERSONAL DATA IN ACCORDANCE WITH THE ITALIAN LAW 'EX D.LGS. 196/03. AUT. MIN. N. 13/I/0007145/03.04 DEL 1 APRILE 2008'

Date

25-02-2025

Signature

GLORIA RITA BERTOLI
03.04.2025
16:37:50
GMT+02:00