

PERSONAL INFORMATION

Bartolini Desirée

 0755857445 (Lab) desiree.bartolini@unipg.it; desirex85@hotmail.it Skype me at "desirex85"**ORCID profile:** <https://orcid.org/0000-0003-3849-757X>Sex Female | **Date of birth** 31/08/1985 | **Nationality** Italian

RESEARCH WORK

ERC FIELDS:

LS1_2 General biochemistry and metabolism

LS1_8 Biochemistry of signal transduction

LS2_4 Metabolomics

LS3_1 Morphology and functional imaging of cells

LS3_4 Apoptosis

LS3_7 Cell signaling and cellular interactions

LS4_4 Ageing

LS4_5 Metabolism, biological basis of metabolism related disorders

LS5_11 Neurological disorders (e.g. Alzheimer's disease, Huntington's disease, Parkinson's disease)

LS7_3 Pharmacology, pharmacogenomics, drug discovery and design, drug therapy

PUBLICATION RECORD

Scopus ID: 55704993300<https://www.scopus.com/authid/detail.uri?authorId=55704993300>

From Scopus (2012-2026):

Cumulative record of original publications, review papers and book chapters = 90 products.**Total citations = 3,128****H index=31**

PROFESSIONAL APPOINTMENT

February 2022 – present, head of research unit (laboratory of human anatomy), Dept of Pharmaceutical Sciences, University of Perugia, Italy.

WORK EXPERIENCE

*February 2025-present***Associate Professor in Human Anatomy (SSD BIOS-12/A)**

University of Perugia, Dept. of Pharmaceutical Sciences

*February 2022-February 2025***Assistant Professor and Research fellow (RTD-B), SSD BIOS-12/A**

University of Perugia, Dept. of Pharmaceutical Sciences

*May 2021-February 2022***Annual research Fellowship**University of Perugia, Dept. of Chemistry, Biology and Biotechnology (CBB), University of Perugia
Via Elce di sotto, 06126 Perugia (Italy).

Head of Laboratory: Prof. Cruciani Gabriele

Project title: "**Biomolecular investigation and development of new therapeutic agents for SARS-CoV-2 infection.**"

Business or sector cell morphology, applied biology & biochemistry

May 2020-April 2021

Annual research Fellowship

University of Perugia, Dept. of Pharmaceutical Sciences, Section of Applied Biochemistry and Nutrition Sciences.

Istituti biologici di via del Giochetto, 06126 Perugia (Italy).

Head of Laboratory: Prof. Galli Francesco

Project title: "**Fragilità nel soggetto obeso affetto da insulino-resistenza: il ruolo della senescenza staminale a livello del tessuto adiposo**" (Bando Fondazione Cassa di Risparmio Perugia "Invecchiamento. Cura e prevenzione della fragilità: aspetti biologici, fisiopatologici e problematiche cliniche").

Business or sector cell and applied biology & biochemistry

November 2019-June 2020

Contract of Collaboration (Pharmacy POT project)

University of Perugia, Dept. of Pharmaceutical Sciences

Head of project: Prof. Cecchetti Violetta

Business or sector Tutor activities in animal biology

April 2019-April 2020

Annual research Fellowship (V.I.S.T.A. project – PSR 2014-2020)

University of Perugia, Dept. of Pharmaceutical Sciences, Section of Applied Biochemistry and Nutrition Sciences.

Istituti biologici di via del Giochetto, 06126 Perugia (Italy).

Head of Laboratory: Prof. Galli Francesco

Project title: "**V.I.S.T.A. - Vetrina Informatica per Sistemi di Trasparenza nell'Agroalimentare (Informatics for food-print data monitoring and accessibility)**"

Business or sector Nutrition and biochemistry

April 2017-March 2019

Two-years FIRC-AIRC Fellowship

University of Perugia, Dept. of Pharmaceutical Sciences, Section of Applied Biochemistry and Nutrition Sciences.

Istituti biologici di via del Giochetto, 06126 Perugia (Italy).

▪ Head of Laboratory: Prof. Galli Francesco

▪ Project title: "**Therapeutic targeting of the Glutathione S-transferase interactome in human hepatocarcinoma**"

Business or sector Cancer and Biochemistry

November 2016-March 2017

Research Fellowship

University of Perugia, Dept. of Pharmaceutical Sciences, Section of Applied Biochemistry and Nutrition Sciences.

Istituti biologici di via del Giochetto, 06126 Perugia (Italy).

▪ Head of Laboratory: Prof. Galli Francesco

▪ Project title: "**Promotion of consumer's health:nutritional valorization of Italian agrofood traditional products**".

Business or sector Nutrition

November 2015–October 2016

Annual Research Fellowship

University of Perugia, Dept. of Pharmaceutical Sciences, Section of Applied Biochemistry and Nutrition Sciences.

Istituti biologici di via del Giochetto, 06126 Perugia (Italy).

▪ Head of Laboratory: Prof. Galli Francesco

▪ Project title: **“Promotion of consumer’s health: nutritional valorization of Italian agrofood traditional products”**

Business or sector Nutrition

January 2013–October 2015

PhD Student fellowship

University of Perugia, Dept. of Pharmaceutical Sciences, Section of Applied Biochemistry and Nutrition Sciences

Istituti biologici di via del Giochetto, 06126 Perugia (Italy).

▪ *Head of Laboratory: Dr. Francesco Galli*

Business or sector Cell Biology, Nutrition and Clinical Biochemistry

October 1 2012–
December 31 2012

Annual Fellowship (prot. 26185).

IRCCS “Tecnologie Avanzate e Modelli Assistenziali in Oncologia” Arcispedale S. Maria Nuova (Laboratory of Molecular Biology), V.le Risorgimento, 80 – 42123, Reggio Emilia

▪ *Head of Laboratory: Dr.ssa Albini Adriana*

▪ Project title: “Anti-angiogenesis in the resistance era: delivery, microenvironment modulation of stem cells and angioprevention.”

Business or sector Translational Research in Oncology

August 1 2011–
September 30 2012

Annual Contract of Collaboration

Fondazione MultiMedica Onlus, Science and Technology Pole MultiMedica, Laboratory of Oncology Research, Milan, Italy

▪ *Head of Laboratory: Dr.ssa Albini Adriana*

▪ *Project title: “Anti-angiogenesis in the resistance era: delivery, microenvironment modulation of stem cells and angioprevention”.*

Business or sector Oncology research

EDUCATION AND TRAINING

- December 2022-today **National Habilitation (validity span 2023-2034):**
- Full professor in Human Anatomy (sector 05/H1; BIO/16).
- October 2022-today **National Habilitation (validity span 2022-2032):**
- Associate professor in Human Anatomy (sector 05/H1; BIO/16).
- June 2021-today **National Habilitation (validity span 2021-2030):**
- Associate professor in General Biochemistry (sector 05/E1; BIO/10).
- January 2020-today **Training activity at the Human Anatomy, Clinical and Forensic Laboratory of the Department of Surgical and Biomedical Sciences coordinated by Prof. Mario Rende**

PRINCIPAL SUBJECTS/OCCUPATIONAL SKILLS COVERED: IMMUNOFLUORESCENCE, IMMUNOHISTOCHEMISTRY (IHC), CELL MORPHOLOGY ANALYSIS, ELISA AND STUDY OF NEUROTROPHIC FACTORS.
- February 2020 **Theoretical and practical school of proteomics, Italian Proteomic Association (ItPA), Ceinge, Naples (Italy)**
- March 2018-Sept 2018 **“Percorso FIT (24 CFU)”, University of Perugia Italy.**
- January 2016 **PhD Graduation**
University of Perugia, Italy
 - **Thesis title: “Glutathione S-transferase P at the crossroad between redox signaling and the Nrf-2 mediated stress response”.**
 - **Tutor: Prof. Francesco Galli;**
 - **Principal subjects/occupational skills covered:** Enzymatic assays (GST assay), Ellman Assay and enzyme inhibition assays. MTT assay, Colony forming assay, affinity chromatography, neutral red assay, ORO assay, DCFH-DA assay, Real Time-PCR, PCR, RNA and DNA extraction, protein extraction, electrophoresis, western blotting, co-immunoprecipitation, immunofluorescence.
- April 2015-May 2015 APE-learning training course on “Health and work safety” for laboratory animal facility.
- January 2013-October 2015 **PhD Student**
University of Perugia, Dept. of Internal Medicine, Section of Applied Biochemistry and Nutrition Sciences.
Istituti biologici di via del Giochetto, 06126 Perugia (Italy).

- Skills acquired:
- **Molecular Biology techniques:** Extraction of DNA and RNA from tissue, and cell pellets from paraffin-embedded samples, purification and quantification. Separation of nucleic acids on gel agarose, PCR (Polymerase Chain Reaction), RT-PCR (Reverse Transcriptase-Polymerase Chain Reaction), Real-time RT-PCR. Extraction of proteins from tissue and cell pellets purification and quantification, SDS-PAGE, Western blotting, preparation of solutions.
- **Techniques of cell biology:** Basic techniques, including the preparation of culture media, seeding and expansion of cell lines, freezing and thawing.
- **Techniques of clinical biochemistry:** basic techniques of clinical biochemistry.
- **Equipment:** Use of centrifuges, autoclaves, spectrophotometer, fluorometer, thermal cyclers, HT7900 Fast Real-Time PCR System, conventional electrophoresis equipment, for Western Blotting, hoods and equipment for cell biology.

September 2012-January 2013

Student in Clinical Biochemistry School

University of Milan, Italy

- Skills acquired: Clinical Biochemistry, Cell Biology and Biochemistry of Nutrition

July 2011

State Examination for Professional Qualification in Biology

University of Perugia (Italy).

- Skills acquired: Biochemistry, Cell Biology, Biochemistry of Nutrition, Physiology etc.

February 2011

Master Degree in Pharmaceutical Biotechnology

Final mark

110/110

summa cum

laude

University of Perugia, Italy

- **Experimental thesis title:** "PhSeZnCl: effects on redox signaling and MAPK/ERK- dependent cell survival response in Mouse Embryonic Fibroblasts KO for GSTpi"
- **Supervisor:** Prof. Francesco Galli and Prof. Santi Claudio;
- **Principal subjects/occupational skills covered:** Organic synthesis, use of HPLC and GAS-mass (GC/MS), enzymatic assays (GST assay), Ellman Assay and enzyme inhibition assays. MTT assay, DCFH-DA assay, Real Time-PCR, PCR, RNA and DNA extraction, protein extraction, western blotting.

January 2010- February 2011

Internship for thesis project

Department of Internal Medicine– section applied biochemistry and nutritional sciences, University of Perugia, Italy

- **Supervisor:** Prof. Francesco Galli;
- **Principal subjects/occupational skills covered:** Organic synthesis, use of HPLC and GAS-mass (GC/MS), enzymatic assays (GST assay), Ellman Assay and enzyme inhibition assays. MTT assay, DCFH-DA assay, Real Time-PCR, PCR, RNA and DNA extraction, protein extraction, western blotting.

February 2008

Bachelor Degree in Biotechnology

Final mark 104/110

University of Perugia, Italy

- **Thesis activity:** "Inhibition of TGF-beta signaling as a new antineoplastic strategy "
- **Supervisor:** Dr.ssa Belladonna Maria Laura

May 2007- July 2007

Internship for thesis project

Department of Experimental Medicine and Biochemical Sciences-section Pharmacology, University of Perugia, Italy

- **Supervisor:** Prof. Belladonna Maria Laura;
- **Principal subjects/occupational skills covered:** PCR, RNA and DNA extraction, protein extraction, western blotting

June 2004

High School Diploma

Final mark 93/100

Scientific High School "R. Donatelli", Terni, Italy

- *PNI section (experimental section informatics and physics)*

PERSONAL SKILLS

Mother tongue(s) Italian

Other language(s)	UNDERSTANDING		SPEAKING		WRITING
	Listening	Reading	Spoken interaction	Spoken production	
English	Good	Good	Discrete	Discrete	Good
Spanish	Sufficient	Sufficient	Sufficient	Sufficient	Sufficient

Communication skills ▪ , High level motivation, perseverance, sense of initiative and disposed in solving problems, good interpersonal skills and ability to work in a team.

Organisational / managerial skills ▪ Good ability of management and organization of experiments for scientific research projects.

Job-related skills **Laboratory techniques:**
 Primary and immortalized cell cultures (in suspension and in adhesion), cell adhesion assay, cell proliferation assay (MTT, Tunel assay; ATP assays, etc.), study of apoptosis, autophagy, cell cycle by flow cytometry, measurement of intracellular and extracellular ROS (DCFH-DA test, Amplex Red assays), chemotaxis and chemo-invasion assays, *in vitro* angiogenesis assays, zimography, protein extraction, western blot, dot-blot, DNA/RNA extraction, PCR, RT-PCR, enzymatic assays (spettrofluorimetric assays), thiol analysis with HPLC or flow cytometry, IHC assay, immunofluorescence (IF), organic synthesis. Basic skills in virology techniques such as plaque assay, CPE assay, detection of viral nucleic acid (probes or amplification), virus neutralization (VN) • Enzyme linked immunosorbent assay (ELISA) • Indirect fluorescent antibody (IFA) • Agar-gel immunodiffusion (AGID).
 Basic skills in the use of HPLC and GAS-mass (GC/MS).

Computer skills **Informatics' knowledge:** Windows platforms; Windows Office suite (Word, Excel, Power Point), Internet Explorer and Outlook Express, GraphPad Prism, Adobe Photoshop, ChemDraw, Origin Lab, ImageJ, Gel-Pro Analyzer, EndNote, BioRender.
Bioinformatics Knowledge: use of common databases (NCBI, EBI, SciFinder, Scholar, Huger Navigator)

Other skills **Teaching activity:**
 Didactics activity as Assistant Professor in Human Anatomy courses for Pharmacy, C.T.F. and Biology Sciences at Dept of Pharmaceutical Sciences, University of Perugia.
 Didactics support for Human Anatomy courses for Medicine and Pharmacy (University of Perugia).
 ▪ Didactics support for Biochemical Methodologies Applied and Fundamentals of dietology courses for Human Nutrition Science and Pharmacy (University of Perugia).
 Didactics support for Animal Biology courses for Pharmacy and C.T.F. (University of Perugia).

Driving licence ▪ **B**

Scientific Societies member 2011-2013- Italian Cancer Society (SIC).
 2013- present- Society for Free Radical Research –Europe (SFRR-E).
 2014-2018 Multidisciplinary international group “Se-S redox&catalysis” .
 2019- 2022- Italian Proteomics Association (ItPA).
 2021- present- " Societa' Italiana Anatomia e Istologia" (SIAI).

Editorial Board member

- Amino Acids (Springer) from 2018 to 2019
- Review Editor in Frontiers in Nutrition - Nutrition and Metabolism from 2022 to today
- Guest Editor Special Issue of International Journal of Molecular Sciences (ISSN 1422-0067) "Obesity and Insulin Resistance: The Dark Sides of Adipose Organ Dysfunction in the Cardiometabolic Continuum"
(https://www.mdpi.com/journal/ijms/special_issues/insulin_resistance#editors)
- BioFactors, from 2022 to today (<https://iubmb.onlinelibrary.wiley.com/hub/journal/18728081/editorial-board.html>)

Reviewer activity: several journals in the area of cell biology, anatomy, biochemistry, laboratory medicine, nephrology, endocrinology and metabolism, nutrition and food science.

Awards:

- 1) Two-Years FIRC-AIRC 2016. Project title: "Therapeutic targeting of the Glutathione S-transferase interactome in human hepatocarcinoma".
- 2) "Travel Award SFRR-E 2018 for 19th SFRR Biennial Meeting 4-7 June 2018, Lisbon, Portugal.
- 3) "Travel Award SFRR-E 2020" for SFRR-E 2021 Congress, 15-18 June 2021.
- 4) Young Investigator Award 2022 sponsored by SFRR Europe in recognition of extraordinary Scientific Achievements in the field of "Free radical Research", given the 26th day of August 2022, in Ghent, Belgium.
- 5) "Premio Giovani Ricercatori 2023", XXXIX Congresso della SII, Isola di Vulcano, June 14.17, 2023, Italy.

Research Activity

Areas of pertinence: Biochemistry of lipids, cell biology and signal transduction, pharmacology/toxicology, human metabolism, aging and cell morphology.

Research topics:

- Vitamins and micronutrients (status, metabolism, biological roles and therapeutic applications),
- metabolomics (targeted and untargeted methods and techniques, vitamin metabolism, lipidomics)
- oxidant/redox stress and inflammation (biomarkers and pathogenic role in chronic diseases),
- glutathione S-transferase, glutathione and sulphur-containing amino acids (interactions, metabolism, redox sensing/signaling and detoxification function)
- hepatology (fatty liver and NASH, nutritional approach, biomarkers, in vitro and in vivo models, transplantation);
- **aging (neurodegenerative disease such Alzheimer's disease and Mild Cognitive Impairment (MCI))**
- kidney disease (pathobiology and comorbidity, dialysis therapy biomaterials and techniques, transplantation)
- selenium (biochemistry, cell biology, nutrition and pharmacological applications, such as chemotherapy and chemoprevention of drug-resistant cancers; positive hormesis)
- stem cells (adipose and cancer)
- melatonin (cytoprotection and immuno-inflammatory effects)
- post-translational modification of proteins (proteomics, relevance to biology, medicine and food chemistry).

Publications

- 1) Solinas M, Massi P, Cantelmo AR, Cattaneo MG, Cammarota R, **Bartolini D**, Cinquina V, Valenti M, Vicentini LM, Noonan DM, Albini A, Parolaro D. Cannabidiol inhibits angiogenesis by multiple mechanisms. *Br J Pharmacol*. 2012 Nov;167(6):1218-31. doi: 10.1111/j.1476-5381.2012.02050.x. PubMed PMID: 22624859; PubMed Central PMCID: PMC3504989. IF=4.409
- 2) Ruggiero L., Sogno I., Focaccetti C., **Bartolini D.**, Magnani E., Principi E., Noonan D.M., Albini A. Diet derived compounds in chemoprevention: Inflammatory angiogenesis and the tumor microenvironment as targets. Accepted for publication on. *Current Angiogenesis* (2012 April 30; 1(3): 206-214) (New in 2012)
- 3) Puccio G, Brambilla P, Conti M, **Bartolini D**, Noonan D, Albini A. Surface-activated chemical ionization-electrospray mass spectrometry in the analysis of urinary thiodiglycolic acid. *Rapid Commun Mass Spectrom*. 2013 Feb 15;27(3):476-80. doi: 10.1002/rcm.6471. PubMed PMID: 23280980. IF=2.846
- 4) Piroddi M, **Bartolini D**, Ciffolilli S, Galli F. Nondialyzable uremic toxins. *Blood Purif*. 2013;35 Suppl 2:30-41. doi: 10.1159/000350846. Epub 2013 May 3. PubMed PMID: 23676834. IF=2.104
- 5) Murdolo G, **Bartolini D**, Tortoioli C, Piroddi M, Iuliano L, Galli F. Lipokines and oxysterols: Novel adipose-derived lipid hormones linking adipose dysfunction and insulin resistance. *Free Radic Biol Med*. 2013 Aug 16;65C:811-820.
- 6) Galli F, Piroddi M, **Bartolini D**, Ciffolilli S, Buoncristiani E, Ricci G, Buoncristiani U. Blood thiol status and erythrocyte glutathione-S-transferase in chronic kidney disease patients on treatment with frequent (daily) hemodialysis. *Free Radic Res*. 2013 Nov 5. [Epub ahead of print] PubMed PMID: 24192047.
- 7) Luchetti F, Canonico B, **Bartolini D**, Arcangeletti M, Ciffolilli S, Murdolo G, Piroddi M, Papa S, Reiter RJ, Galli F. Melatonin regulates mesenchymal stem cell differentiation: a review. *J Pineal Res*. 2014 Mar 20. IF=7.304
- 8) **Bartolini D**, Piroddi M, Tidei C, Giovagnoli S, Pietrella D, Manevich Y, Tew KD, Giustarini D, Rossi R, Townsend DM, Santi C, Galli F. Reaction kinetics and targeting to cellular glutathione S-transferase of the glutathione peroxidase mimetic PhSeZnCl and its d,l-poly lactide microparticle formulation. *Free Radic Biol Med*. 2014 Oct 18;78C:56-65. doi: 10.1016/j.freeradbiomed.2014.10.008.
- 9) Focaccetti C, Bruno A, Magnani E, **Bartolini D**, Principi E, Dallaglio K, Bucci EO, Finzi G, Sessa F, Noonan DM, Albini A. Effects of 5-Fluorouracil on Morphology, Cell Cycle, Proliferation, Apoptosis, Autophagy and ROS Production in Endothelial Cells and Cardiomyocytes. *PLoS One*. 2015 Feb 11;10(2):e0115686. doi:10.1371/journal.pone.0115686. eCollection 2015.
- 10) **Bartolini D**, Comodi J, Piroddi M, Incipini L, Sancineto L, Santi C, Galli F. Glutathione S-transferase pi expression regulates the Nrf2-dependent response to horsetick diselenides. *Free Radic Biol Med*. 2015 Jul 4. pii: S0891-5849(15)00307-X. doi: 10.1016/j.freeradbiomed.2015.06.039.
- 11) Ciffolilli S, Wallert M, **Bartolini D**, Krauth V, Werz O, Piroddi M, Sebastiani B, Torquato P, Lorkowski S, Birringer M, Galli F. Human serum determination and in vitro anti-inflammatory activity of the vitamin E metabolite α -(13'-hydroxy)-6-hydroxychroman. *Free Radic Biol Med*. 2015 Oct 8.
- 12) **Bartolini D**, Galli F. The functional interactome of GSTP: A regulatory biomolecular network at the interface with the Nrf2 adaption response to oxidative stress. *J Chromatogr B Analyt Technol Biomed Life Sci*. 2016 Apr 15;1019:29-44. doi: 10.1016/j.jchromb.2016.02.002. Epub 2016 Feb 4. Review.
- 13) Torquato P, Ripa O, Giusepponi D, Galarini R, **Bartolini D**, Wallert M, Pellegrino R, Cruciani G, Lorkowski S, Birringer M, Mazzini F, Galli F. Analytical strategies to assess the functional metabolome of vitamin E. *J Pharm Biomed Anal*. 2016 May 30;124:399-412. doi: 10.1016/j.jpba.2016.01.056. Epub 2016 Feb 3. Review.
- 14) Bassani B, **Bartolini D**, Pagani A, Principi E, Zollo M, Albini A, Noonan DM, Bruno A. Fenretinide (4-HPR) targets caspase-9, ERK 1/2 and the Wnt3a/b-catenin pathway in medulloblastoma cells and medulloblastoma cell spheroids. *PLoS One*. 2016 Jul 1;11(7):e0154111.
- 15) Murdolo G, Piroddi M, Tortoioli C, **Bartolini D**, Schmelz M, Luchetti F, Canonico B, Papa S, Zerbini C, Iuliano L, Galli F. Free radical-derived oxysterols: novel adipokines modulating adipogenic differentiation of adipose precursor cells. *J Clin Endocrinol Metab*. 2016 Oct 6;jc20162918.

- 16) Russo A, **Bartolini D**, Torquato P, Giusepponi D, Barola C, Galarini R, Birringer M, Lorkowski S, Galli F. CYP4F2 repression and a modified alpha-tocopherol (vitamin E) metabolism are two independent consequences of ethanol toxicity in human hepatocytes. *Toxicol In Vitro*. 2017 Apr;40: 124-133. doi: 10.1016/j.tiv.2016.12.014. Epub 2017 Jan 3. IF: 3.338
- 17) Giusepponi D., Torquato P., **Bartolini D.**, Piroddi M., Birringer M., Lorkowski S., Libetta C., Cruciani G., Moretti S., Saluti G., Galli F., Galarini R. Determination of tocopherols and their metabolites by liquid-chromatography coupled with tandem mass spectrometry in human plasma and serum. *Talanta*. 2017 Aug 1;170:552-561. doi: 10.1016/j.talanta.2017.04.030. Epub 2017 Apr 12. IF: 4.035
- 18) **Bartolini D.** Torquato P, Barola C, Russo A, Rychlicki C, Giusepponi D, Bellezza G, Sidoni A, Galarini R, Svegliati-Baroni G, Galli F. Nonalcoholic fatty liver disease impairs the cytochrome P-450-dependent metabolism of α -tocopherol (vitamin E). *J Nutr Biochem*. 2017 Jun 7; 47:120-131. doi: 10.1016/j.jnutbio.2017.06.003. IF: 4.518.
- 19) Murdolo G, **Bartolini D**, Tortoioli C, Piroddi M, Torquato P, Galli F. Selenium and Cancer Stem Cells. *Adv Cancer Res*. 2017; 136:235-257. Epub 2017 Oct 12. PubMed PMID: 29054420.
- 20) **Bartolini D**, Sancineto L, Fabro de Bem A, Tew KD, Santi C, Radi R, Toquato P, Galli F. Selenocompounds in Cancer Therapy: An Overview. *Adv Cancer Res*. 2017; 136:259-302. PubMed PMID:29054421.
- 21) Lepri S, Valeri A, Buratta S, Ceccarelli M, **Bartolini D**, Ruzziconi R, Goracci L. Synthesis and phospholipidosis effect of a series of cationic amphiphilic compounds: a case study to evaluate in silico and in vitro assays. *Med Chem Res*. 2017 Oct. 25. DOI 10.1007/s00044-017-2093-5. IF:1.277
- 22) **Bartolini D.**, Dallaglio K., Torquato P., Piroddi M., Galli F. Nrf2/p62 autophagy pathway and its response to oxidative stress in hepatocellular carcinoma. *Translational Research*. In Press, Accepted Manuscript. Available online 29 November 2017. <https://doi.org/10.1016/j.trsl.2017.11.007>. IF:4.652
- 23) Ambrogini P, Albertini MC, Betti M, Galati C, Lattanzi D, Savelli D, Di Palma M, Saccomanno S, **Bartolini D**, Torquato P, Ruffolo G, Olivieri F, Galli F, Palma E, Minelli A, Cuppini R. Neurobiological Correlates of Alpha-Tocopherol Antiepileptogenic Effects and MicroRNA Expression Modulation in a Rat Model of Kainate-Induced Seizures. *Mol Neurobiol*. 2018 Feb 22. doi:10.1007/s12035-018-0946-7. IF:6.190
- 24) Russo A*, **Bartolini D***, Mensà E, Torquato P, Albertini MC, Olivieri F, Testa R, Rossi S, Piroddi M, Cruciani G, De Feo P, Galli F. Physical Activity Modulates the Overexpression of the Inflammatory miR-146a-5p in Obese Patients. *IUBMB Life*. 2018 Sep 13. doi: 10.1002/iub.1926. *equally contribution
- 25) **Bartolini D.**, Torquato P., Piroddi M. and Galli F. Targeting Glutathione S-transferase P and its Interactome with Selenium Compounds in Cancer Therapy. *Biochim Biophys Acta Gen Subj*. 2018 Oct 2. pii: S0304-4165(18)30311-8. doi:10.1016/j.bbagen.2018.09.023.
- 26) Torquato P, **Bartolini D**, Giusepponi D, Piroddi M, Sebastiani B, Saluti G, Galarini R, Galli F. Increased plasma levels of the lipoperoxyl radical-derived vitamin E metabolite α -tocopheryl quinone are an early indicator of lipotoxicity in fatty liver subjects. *Free Radic Biol Med*. 2018 Nov 30. pii: S0891-5849(18)31747-7.
- 27) Scirè A, Cianfruglia L, Minelli C, **Bartolini D**, Torquato P, Principato G, Galli F, Armeni T. Glutathione compartmentalization and its role in glutathionylation and other regulatory processes of cellular pathways. *Biofactors*. 2018 Dec 18. doi: 10.1002/biof.1476.
- 28) Ambrogini P, Torquato P, **Bartolini D**, Albertini MC, Lattanzi D, Palma MD, Marinelli R, Betti M, Minelli A, Cuppini R, Galli F. Excitotoxicity, neuroinflammation and oxidant stress as molecular bases of epileptogenesis and epilepsy-derived neurodegeneration: The role of vitamin E. *Biochim Biophys Acta Mol Basis Dis*. 2019 Jan 28. pii: S0925-4439(19)30032-8. doi: 10.1016/j.bbadis.2019.01.026.
- 29) Torquato P, Giusepponi D, Alisi A, Galarini R, **Bartolini D**, Piroddi M, Goracci L, Di Veroli A, Cruciani G, Crudele A, Nobili V, Galli F. Nutritional and lipidomics biomarkers of docosahexaenoic acid-based multivitamin therapy in pediatric NASH. *Sci Rep*. 2019 Feb 14;9(1):2045.

- 30) **Bartolini D.**, Bühmann M., Barreca M.L., Manfroni G.; Cecchetti V.; I Rauh D. and Galli F. Co-crystal structure determination and cellular evaluation of 1,4-dihydropyrazolo[4,3-c] [1,2] benzothiazine 5,5-dioxide p38 α MAPK inhibitors. *BBRC. Biochem Biophys Res Commun.* 2019 Feb 26.
- 31) **Bartolini D.**, Wang Y, Zhang J, Giustarini D, Rossi R, Wang GY, Torquato P, Townsend DM, Tew KD, Galli F. A seleno-hormetine protects bone marrow hematopoietic cells against ionizing radiation-induced toxicities. *PLoS One.* 2019 Apr 29;14(4): e0205626. doi: 10.1371/journal.pone.0205626.
- 32) Giusepponi D, Galarini R, Barola C, Torquato P, **Bartolini D.**, Moretti S, Saluti G, Gioiello A, Libetta C, Galli F. LC-MS/MS assay for the simultaneous determination of tocopherols, polyunsaturated fatty acids and their metabolites in human plasma and serum. *Free Radic Biol Med.* 2019 Apr 19. pii: S0891-5849(18)32425-0. doi: 10.1016/j.freeradbiomed.2019.04.017.
- 33) Svegliati-Baroni G, Pierantonelli I, Torquato P, Marinelli R, Ferreri C, Chatgijaloglu C, **Bartolini D.**, Galli F. Lipidomic biomarkers and mechanisms of lipotoxicity in non-alcoholic fatty liver disease. *Free Radic Biol Med.* 2019 May 29. pii: S0891-5849(19)30326-0.
- 34) Knani L*, **Bartolini D.***, Kechiche S, Tortoioli C, Murdolo G, Moretti M, Messaoudi I, Reiter RJ, Galli F. Melatonin prevents cadmium-induced bone damage: first evidence on an improved osteogenic/adipogenic differentiation balance of mesenchymal stem cells as underlying mechanism. *J Pineal Res.* 2019 Jul 24: e12597. doi: 10.1111/jpi.12597. * equally contribution.
- 35) **Bartolini D.**, Tew KD, Marinelli R, Galli F, Wang GY. Nrf2-modulation by seleno-hormetic agents and its potential for radiation protection. *Biofactors.* 2019 Oct 16.
- 36) **Bartolini D.**, Giustarini D, Pietrella D, Rossi R, Galli F. Glutathione S-transferase P influences the Nrf2-dependent response of cellular thiols to seleno-compounds. *Cell Biol Toxicol.* 2020 Feb 18. doi: 10.1007/s10565-020-09517-5.
- 37) **Bartolini D.***, De Franco F*, Torquato P, Marinelli R, Cerra B, Ronchetti R, Schön A, Fallarino F, De Luca A, Bellezza G, Ferri I, Sidoni A, Walton WG, Pellock SJ, Redinbo MR, Mani S, Pellicciari R, Gioiello A, Galli F. Garcinoic Acid Is a Natural and Selective Agonist of Pregnane X Receptor. *J Med Chem.* 2020 Mar 11. doi: 10.1021/acs.jmedchem.0c00012. * equally contribution.
- 38) Galli F, Reglero G, **Bartolini D.**, Visioli F. Better prepare for the next one. Lifestyle lessons from the COVID-19 pandemic. *PharmaNutrition.* 2020 May 6:100193. doi: 10.1016/j.phanu.2020.100193.
- 39) Marinelli R, Torquato P, **Bartolini D.**, Mas-Bargues C, Bellezza G, Gioiello A, Borrás C, De Luca A, Fallarino F, Sebastiani B, Mani S, Sidoni A, Vina J, Leri M, Bucciantini M, Nardiello P, Casamenti F, Galli F. Garcinoic acid prevents β -amyloid (A β) deposition in the mouse brain. *J Biol Chem.* 2020 July 2:jbc.RA120.013303.
- 40) Acito M*, **Bartolini D.***, Ceccarini MR, Russo C, Vannini S, Dominici L, Codini M, Villarini M, Galli F, Beccari M, Moretti M. Imbalance in the antioxidant defence system and pro-genotoxic status induced by high glucose concentrations: in vitro testing in human liver cells, *Toxicology in Vitro*, 2020, Sep 14:105001, ISSN 0887-2333, <https://doi.org/10.1016/j.tiv.2020.105001>. * equally contribution.
- 41) Giustarini D., Galvagni F., Dalle-Donne I., Milzani A., Lucattelli M., De Cunto G., **Bartolini D.**, Galli F., Santucci A., and Rossi R.. Anethole Dithiolethione Increases Glutathione in Kidney by Inhibiting γ -Glutamyltranspeptidase: Biochemical Interpretation and Pharmacological Consequences. *Oxidative Medicine and Cellular Longevity*, Volume Sept 28 2020, Article ID 3562972,
- 42) **Bartolini D.**, Marinelli R, Giusepponi D, Galarini R, Barola C, Stabile AM, Sebastiani B, Paoletti F, Betti M, Rende M, Galli F. Alpha-Tocopherol Metabolites (the Vitamin E Metabolome) and Their Interindividual Variability during Supplementation. *Antioxidants (Basel).* 2021 Jan 25;10(2):173. doi: 10.3390/antiox10020173.
- 43) Giustarini D, Santucci A, **Bartolini D.**, Galli F, Rossi R. The age-dependent decline of the extracellular thiol-disulfide balance and its role in SARS-CoV-2 infection. *Redox Biol.* 2021 Feb 17; 41:101902. doi: 10.1016/j.redox.2021.101902.
- 44) Gidari A., Sabbatini S., Bastianelli S., Pierucci S., Busti C., **Bartolini D.**, Stabile A.M., Monari C., Galli F., Rende M., Cruciani C. and Francisci D. SARS-CoV-2 Survival on Surfaces and the Effect of

UV-C Light. *Viruses* 2021, 13, 408. <https://doi.org/10.3390/v13030408>

45) **Bartolini D.**, Stabile AM, Bastianelli S, Giustarini D, Pierucci S, Busti C, Vacca C, Gidari A, Francisci D, Castronari R, Mencacci A, Di Cristina M, Focaia R, Sabbatini S, Rende M, Gioiello A, Cruciani G, Rossi R, Galli F. SARS-CoV2 infection impairs the metabolism and redox function of cellular glutathione. *Redox Biol.* 2021 Jun 10; 45:102041. doi: 10.1016/j.redox.2021.102041.

46) **Bartolini D.**, Stabile AM, Vacca C, Pistilli A, Rende M, Gioiello A, Cruciani G, Galli F. Endoplasmic reticulum stress and NF- κ B activation in SARS-CoV-2 infected cells and their response to antiviral therapy. *IUBMB Life.* 2021 Aug 13. doi: 10.1002/iub.2537.

47) Torquato P*, Giusepponi D*, **Bartolini D**[§], Barola C, Marinelli R, Sebastiani B, Galarini R, Galli F. Pre-analytical monitoring and protection of oxidizable lipids in human plasma (vitamin E and ω -3 and ω -6 fatty acids): An update for redox-lipidomics methods. *Free Radic Biol Med.* 2021 Sep 22:S0891-5849(21)00724-3. doi: 10.1016/j.freeradbiomed.2021.09.012. *equally contribution. [§]corresponding author.

48) Volpi C.[†], **Bartolini D.**[†], Brighenti V., Galli F., Tiecco M., Pellati F., Clementi C. and Sardella R. Antioxidant Power on Dermal Cells by Textiles Dyed with an Onion (*Allium cepa* L.) Skin Extract. *Antioxidants (Basel).* 2021 Oct 21;10(11):1655. doi: 10.3390/antiox10111655. [†]equally contribution.

49) Russo C., **Bartolini D.**, Corbucci C., Stabile A.M., Rende M., Gioiello A., Cruciani G., Mencacci A., Galli F.[†] and Pietrella D.[†], Effect of a UV-C Automatic Last-Generation Mobile Robotic System on Multi-Drug Resistant Pathogens. *Int. J. Environ. Res. Public Health* 2021, 18, 13019. <https://doi.org/10.3390/ijerph182413019>. [†]equally contribution.

50) Mancuso F, Arato I, di Michele A, Antognelli C, Angelini L, Bellucci C, Lilli C, Boncompagni S, Fusella A, **Bartolini D.**, Russo C, Moretti M, Nocchetti M, Gambelunghe A, Muzi G, Baroni T, Giovagnoli S and Luca G (2021) Effects of Titanium Dioxide Nanoparticles on Porcine Prepubertal Sertoli Cells: An "In Vitro" Study. *Front. Endocrinol.* 12:751915. doi: 10.3389/fendo.2021.751915

51) Castellini C, Mattioli S, Cotozzolo E, Pistilli A, Rende M, **Bartolini D.**, Di Sante G, Menchetti L, Dal Bosco A, Stabile AM. The Effect of Interaction NGF/p75^{NTR} in Sperm Cells: A Rabbit Model. *Cells.* 2022 Mar 18;11(6):1035. doi: 10.3390/cells11061035.

52) Mattioli S, Dimauro C, Cesarani A, Dal Bosco A, **Bartolini D.**, Galli F, Migni A, Sebastiani B, Signorini C, Oger C, Collodel G, Castellini C. A Dynamic Model for Estimating the Interaction of ROS-PUFA-Antioxidants in Rabbit. *Antioxidants (Basel).* 2022 Mar 10;11(3):531. doi: 10.3390/antiox11030531. PMID: 35326181

53) **Bartolini D***, Arato I*, Mancuso F*, Giustarini D, Bellucci C, Vacca C, Aglietti MC, Stabile AM, Rossi R, Cruciani G, Rende M, Calafiore R, Luca G, Galli F. Melatonin modulates Nrf2 activity to protect porcine pre-pubertal Sertoli cells from the abnormal H₂O₂ generation and reductive stress effects of cadmium. *J Pineal Res.* 2022 May 6. doi: 10.1111/jpi.12806. Epub ahead of print. PMID: 35524288. *equally contribution.

54) De Fano M*, **Bartolini D***, Tortoioli C, Vermigli C, Malara M, Galli F, Murdolo G. Adipose Tissue Plasticity in Response to Pathophysiological Cues: A Connecting Link between Obesity and Its Associated Comorbidities. *Int. J. Mol. Sci.* 2022, 23, 5511. <https://doi.org/10.3390/ijms23105511>. *equally contribution.

55) Marcantonini, G.; **Bartolini, D.**; Zatini, L.; Costa, S.; Passerini, M.; Rende, M.; Luca, G.; Basta, G.; Murdolo, G.; Calafiore, R.; et al. Natural Cryoprotective and Cytoprotective Agents in Cryopreservation: A Focus on Melatonin. *Molecules* **2022**, 27, 3254. <https://doi.org/10.3390/molecules27103254>.

- 56) Galli, F.; Bonomini, M.; **Bartolini, D.**; Zatini, L.; Reboldi, G.; Marcantonini, G.; Gentile, G.; Sirolli, V.; Di Pietro, N. Vitamin E (Alpha-Tocopherol) Metabolism and Nutrition in Chronic Kidney Disease. *Antioxidants* **2022**, *11*, 989. <https://doi.org/10.3390/antiox11050989>.
- 57) Stabile AM, Illiano E, Pistilli A, Rende M, Trama F, **Bartolini D**, Zucchi A and Costantini E (2022) The Role of NGF and Its Receptor TrKA in Patients With Erectile Dysfunction. *Front. Urol.* 2:860612. doi: 10.3389/fruro.2022.860612.
- 58) Galli, F.; Marcantonini, G.; Giustarini, D.; Albertini, M.C.; Migni, A.; Zatini, L.; Gioiello, A.; Rossi, R.; **Bartolini, D.** How Aging and Oxidative Stress Influence the Cytopathic and Inflammatory Effects of SARS-CoV-2 Infection: The Role of Cellular Glutathione and Cysteine Metabolism. *Antioxidants* **2022**, *11*, 1366. <https://doi.org/10.3390/antiox11071366>.
- 59) Stabile AM, Pistilli A, **Bartolini D**, Angelucci E, Dell'Omo M, Di Sante G, Rende M. Short-Term Effects of Side-Stream Smoke on Nerve Growth Factor and Its Receptors TrKA and p75 NTR in a Group of Non-Smokers. *Int J Environ Res Public Health.* 2022 Aug 19;19(16):10317. doi: 10.3390/ijerph191610317.
- 60) **Bartolini D**, Marinelli R, Stabile AM, Frammartino T, Guerrini A, Garetto S, Lucci J, Migni A, Zatini L, Marcantonini G, Rende M, Galli F. Wheat germ oil vitamin E cytoprotective effect and its nutrigenomics signature in human hepatocyte lipotoxicity. *Heliyon.* 2022 Sep 23;8(9):e10748. doi: 10.1016/j.heliyon.2022.e10748.
- 61) **Bartolini D**, Zatini L, Migni A, Frammartino T, Guerrini A, Garetto S, Lucci J, Moscardini IF, Marcantonini G, Stabile AM, Rende M, Galli F. Transcriptomics of natural and synthetic vitamin D in human hepatocyte lipotoxicity. *J Nutr Biochem.* 2023 Mar 22:109319. doi: 10.1016/j.jnutbio.2023.109319. Epub ahead of print. PMID: 36963728.
- 62) Arato I, Giovagnoli S, Di Michele A, Bellucci C, Lilli C, Aglietti MC, **Bartolini D**, Gambelunghe A, Muzi G, Calvitti M, Eugeni E, Gaggia F, Baroni T, Mancuso F, Luca G. Nickel oxide nanoparticles exposure as a risk factor for male infertility: "In vitro" effects on porcine pre-pubertal Sertoli cells. *Front Endocrinol (Lausanne).* 2023 Mar 30; 14:1063916. doi: 10.3389/fendo.2023.1063916.
- 63) Maovaz M, Di Sante G, **Bartolini D**, Pistilli A, Stabile AM, Rende M. The unknown and misunderstood life of Ruggero Oddi, the pioneer of biliary system physiology. *J Med Biogr.* 2023 Jul 18:9677720231188721. doi:10.1177/09677720231188721. Epub ahead of print. PMID: 37464768.
- 64) Moliterni C, Tredicine M, Pistilli A, Falcicchia R, **Bartolini D**, Stabile AM, Rende M, Ria F, Di Sante G. In Vitro and Ex Vivo Methodologies for T-Cell Trafficking Through Blood-Brain Barrier After TLR Activation. *Methods Mol Biol.* 2023; 2700:199-219. doi: 10.1007/978-1-0716-3366-3_12. PMID: 37603183.
- 65) Tognoloni A, **Bartolini D**, Pepe M, Di Meo A, Porcellato I, Guidoni K, Galli F, Chiaradia E. Platelets Rich Plasma Increases Antioxidant Defenses of Tenocytes via Nrf2 Signal Pathway. *Int J Mol Sci.* 2023 Aug 27;24(17):13299. doi:10.3390/ijms241713299.
- 66) **Bartolini D**, Grignano MA, Piroddi M, Chiaradia E, Galeazzi G, Rende M, Ronco C, Rampino T, Libetta C, Galli F. Induction of Vesicular Trafficking and JNK-Mediated Apoptotic Signaling in Mononuclear Leukocytes Marks the Immuno-Proteostasis Response to Uremic Proteins. *Blood Purif.* 2023 Sep 13:1-14. doi:10.1159/000533309.
- 67) Stabile AM, Pistilli A, Mariangela R, Rende M, **Bartolini D***, Di Sante G*. New Challenges for Anatomists in the Era of Omics. *Diagnostics (Basel).* 2023 Sep 15;13(18):2963. doi: 10.3390/diagnostics13182963. * co-corresponding.
- 68) Murdolo, G*.; **Bartolini, D.***; Tortoioli, C.; Vermigli, C.; Piroddi, M.; Galli, F. Accumulation of 4-Hydroxynonenal Characterizes Diabetic Fat and Modulates Adipogenic Differentiation of Adipose

Precursor Cells. *Int. J. Mol. Sci.* 2023, 24, 16645. <https://doi.org/10.3390/ijms242316645>. *equally contribution.

69) Pedrinolla A, Isanejad M, Antognelli C, **Bartolini D**, Borrás C, Cavedon V, Di Sante G, Migni A, Mas-Bargues C, Milanese C, Baschirotto C, Modena R, Pistilli A, Rende M, Schena F, Stabile AM, Telesa NV, Tortorella S, Hemmings K, Vina J, Wang E, McArdle A, Jackson MJ, Venturelli M, Galli F. Randomised controlled trial combining vitamin E-functionalised chocolate with physical exercise to reduce the risk of protein-energy malnutrition in predementia aged people: study protocol for Choko-Age. *BMJ Open.* 2023 Dec 22;13(12):e072291. doi:10.1136/bmjopen-2023-072291.

70) Migni, A.; Mancuso, F.; Baroni, T.; Di Sante, G.; Rende, M.; Galli, F.; **Bartolini, D.** Melatonin as a Repairing Agent in Cadmium- and Free Fatty Acid-Induced Lipotoxicity. *Biomolecules* 2023, 13, 1758. <https://doi.org/10.3390/biom13121758>.

71) Stabile, A.M.; Pistilli, A.; Moretti, E.; **Bartolini, D.**; Ruggirello, M.; Rende, M.; Castellini, C.; Mattioli, S.; Ponchia, R.; Tripodi, S.A.; et al. A Possible Role for Nerve Growth Factor and Its Receptors in Human Sperm Pathology. *Biomedicines* 2023, 11, 3345. <https://doi.org/10.3390/biomedicines11123345>.

72) Giuriato G, Romanelli MG, **Bartolini D**, Vernillo G, Pedrinolla A, Moro T, Franchi M, Locatelli E, Andani ME, Laginestra FG, Barbi C, Aloisi GF, Cavedon V, Milanese C, Orlandi E, De Simone T, Fochi S, Patuzzo C, Malerba G, Fabene P, Donadelli M, Stabile AM, Pistilli A, Rende M, Galli F, Schena F, Venturelli M. Sex differences in neuromuscular and biological determinants of isometric maximal force. *Acta Physiol (Oxf).* 2024 Feb 22:e14118. doi: 10.1111/apha.14118. Epub ahead of print. PMID: 38385696.

73) **Bartolini D.**, Migni A., Russo R., Galli F. Impaired systemic proteostasis and peripheral immune cell dysfunction in kidney diseases. *J Transl Crit Care Med.* 2024;6:e00016. doi: 10.1097/JTCCM-D-23-00016.

74) Acito M, Varfaj I, Brighenti V, Cengiz EC, Rondini T, Fatigoni C, Russo C, Pietrella D, Pellati F, **Bartolini D**, Sardella R, Moretti M, Villarini M. A novel black poplar propolis extract with promising health-promoting properties: focus on its chemical composition, antioxidant, anti-inflammatory, and anti-genotoxic activities. *Food Funct.* 2024 Apr 12. doi: 10.1039/d3fo05059a.

75) Galli F, **Bartolini D**, Ronco C. Oxidative stress, defective proteostasis and immunometabolic complications in critically ill patients. *Eur J Clin Invest.* 2024 Apr 27:e14229. doi: 10.1111/eci.14229. Epub ahead of print. PMID: 38676423.

76) **Bartolini D***, Stabile AM, Migni A, Gurrado F, Lioci G, De Franco F, Mandarano M, Svegliati-Baroni G, Di Cristina M, Bellezza G, Rende M, Galli F.* Subcellular distribution and Nrf2/Keap1-interacting properties of Glutathione S-transferase P in hepatocellular carcinoma. *Arch Biochem Biophys.* 2024 Jul;757:110043. doi: 10.1016/j.abb.2024.110043. Epub 2024 May 22. *corresponding authors.

77) Sabbatini, S*.; Zatini, L., Narducci, E.; Rosati, L.; Ardizzoni, A.; Mencacci, A.; Rende, M.; Pericolini, E.; Galli, F.; **Bartolini, D***; Monari C. Modulation of *C. albicans*-Induced Immune Response in Vaginal Epithelial Cells by Garcinolic Acid. *Microorganisms* 2024, 12, 2455. <https://doi.org/10.3390/microorganisms12122455>. * corresponding authors.

78) Varfaj I, Mancinelli AC, Migni A, Mercolini L, Castellini C, Galli F, **Bartolini D***, Sardella R.* A Cost-Effective Nonaqueous Reversed-Phase High-Performance Liquid Chromatography Method to Measure Vitamin D3 in Hen's Egg Yolk. *J Sep Sci.* 2025 Jan;48(1):e70087. doi: 10.1002/jssc.70087. * corresponding authors.

79) Migni A, **Bartolini D**, Marcantonini G, Sardella R, Rende M, Tognoloni A, Ceccarini MR, Galli F. Melatonin Repairs the Lipidome of Human Hepatocytes Exposed to Cd and Free Fatty Acid-Induced Lipotoxicity. *J Pineal Res.* 2025 Apr;77(3):e70047. doi: 10.1111/jpi.70047.

80) Migni A, **Bartolini D**, Varfaj I, Moscardini IF, Sardella R, Garetto S, Lucci J, Galli F. Lipidomics reveals different therapeutic potential for natural and synthetic vitamin D formulations in hepatocyte lipotoxicity. *Biomed Pharmacother.* 2025 Apr 28;187:118068. doi: 10.1016/j.biopha.2025.118068. Epub ahead of print. PMID: 40300390.

- 81) Trabalzini, A.; Fornaciari, M.; **Bartolini, D.**; Varfaj, I.; Sardella, R.; Paiella, M.; Sorci, G.; Orlandi, F. Influence of Agronomic Practices on the Antioxidant Activity of Three Mediterranean Officinal Wild Plants: *Silybum marianum*, *Achillea millefolium*, and *Trifolium pratense*. *Appl. Sci.* 2025, 15, 5153. <https://doi.org/10.3390/app15095153>.
- 82) Blasi F, Ceccarini MR, Bistarelli S, Galli F, Cossignani L, **Bartolini D***, Ianni F.* Impact of Extra-Virgin Olive Oil Storage Conditions on Phenolic Content and Wound-Healing Properties. *Foods.* 2025 Jun 15;14(12):2104. doi: 10.3390/foods14122104. PMID: 40565713; PMCID: PMC12191701. *corresponding authors.
- 83) Migni A, **Bartolini D**, Marcantonini G, Sardella R, Rende M, Tognoloni A, Ceccarini MR, Galli F. Multivariate Data Analysis Methods and Their Application in Lipidomics: A Gentle Comment on Appropriateness and Reliability Criteria. *J Pineal Res.* 2025 Jul;77(4):e70068. doi: 10.1111/jpi.70068. PMID: 40692122.
- 84) Bosa, L.; Mattioli, S.; Stabile, A.M.; **Bartolini, D.**; Tognoloni, A.; Pistilli, A.; Ruggirello, M.; Rende, M.; Gimeno-Martos, S.; Jordán-Rodríguez, D.; et al. Effect of Recombinant NGF Encapsulated in Chitosan on Rabbit Sperm Traits and Main Metabolic Pathways. *Biology* 2025, 14, 974. <https://doi.org/10.3390/biology14080974>.
- 85) Mancini L., Ercolanetti L., Di Sante G., Galli F., Ricci M., **Bartolini D.**, Schoubben A. Development of an inhalable atorvastatin powder and its anti-inflammatory effects in human lung cells. *Journal of Drug Delivery Science and Technology*, Volume 115, Part 2, 2026, 107754, ISSN 1773-2247, doi:10.1016/j.jddst.2025.107754.

Patents

Application Number MI2013A000536 for Patent entitled: "Synthetic Analogues of Xanthohumol"-
Year 2013

Book Chapters

- 1) Francesco Galli^{1a}, Massimo Conese², Luigi Maiuri^{2,3}, Roberto Gambari⁴, **Desirée Bartolini**¹, Marta Piroddi¹, Silvia Cifollilli¹, Giulio Cabrini^{5,a,b} Book: *Oxidative Stress in Applied Basic Research and Clinical Practice; Studies on Respiratory Disorders* (Humana Press; Springer), Chapter 1: Introduction to Oxidative Stress and Antioxidant Therapy in Respiratory Disorder, Pages 1-26 (2013).
- 2) **Bartolini Desirée**, Cifollilli Silvia, Piroddi Marta, Murdolo Giuseppe, Tortoioli Cristina, Galli Francesco. Chapter: Biochemistry and nutrition of selenium: from inorganic forms to endogenous proteins; Page: 268-327 (60). Book: *Organoselenium Chemistry: Between Synthesis and Biochemistry*, Bentham eBook.
- 3) Pierangelo Torquato, Danilo Giusepponi, Roberta Galarini, **Desirée Bartolini**, Marta Piroddi, and Francesco Galli. Chapter 15: Analysis of Vitamin E Metabolites. Book: *Vitamin E: Chemistry and Nutritional Benefits*. Published by the Royal Society of Chemistry (RSC). Editor: Etsuo Niki. Print ISBN:978-1-78801-240-9; ePub eISBN:978-1-78801-733-6;
- 4) Pierangelo Torquato, Rita Marinelli, **Desirée Bartolini**, Francesco Galli. Chapter 23, Vitamin E: Nutritional aspects. Book title: *Molecular Nutrition: Vitamins*. Elsevier, 1 January 2019, Pages 447-485. Editor(s): Vinood B. Patel. DOI: 10.1016/B978-0-12-811907-5.00019-1.
- 5) Pierangelo Torquato, Rita Marinelli, **Desirée Bartolini**, Danilo Giusepponi, Gabriele Cruciani, Lydia Siragusa, Roberta Galarini, Bartolomeo Sebastiani, Antimo Gioiello, Francesco Galli Chapter 24 - **Vitamin E: metabolism and molecular aspects**. Book title: *Molecular Nutrition: Vitamins*, Academic Press, 2020, Pages 487-518, Editor(s): Vinood B. Patel.
- 6) Marinelli R., **Bartolini D.**, Betti M., Migni A., Zatini L., Marcantonini G., Rende M. and Galli F. **Vitamin E and neuroprotection in epilepsy**. Book: *Vitamins and Minerals in Neurological Disorders*, pages 229-243, Academic Press 2023

Abstracts

- 1) Sogno I¹, Cantelmo A.R., **Bartolini D.**¹, Noonan D. M. and Albini¹A. Functional Genomics Of Endothelial Cells Treated With Chemopreventive Anti-Angiogenic Drugs. The FASEB Journal. April 2012;26:48.6 (Meeting Abstract Supplement).
- 2) **Bartolini D.**, Magnani E., Pagani A., Focaccetti C, Cantelmo A.R. Albini A. Fenretinide: new perspectives in treatment of medulloblastoma. 2nd International Conference "Traslational Research in Oncology: a New Approach to Personalized Medicine", May 8, 2012, IRCCS IRST, Meldola – May 9-10-11, 2012, Hotel Globus City, Forlì (POSTER P01, pag.8 abstract book).
- 3) Focaccetti C., Noonan D.M., **Bartolini D.**, Anzà C., Albini A. Mechanisms of Fluoropyrimidines-induced cardiac toxicity: an example of cardio-oncology. 43th National Congress ANMCO, Florence, Italy, 30 May - 02 June 2012 (POSTER).
- 4) **Bartolini D.**¹; Magnani, E. ¹; Pagani, A. ¹; Focaccetti, C. ¹; Cantelmo, AR. ²; Albini, A. ³. Fenretinide as potential treatment for medulloblastoma. 54th Annual Meeting of the Italian Cancer Society, 1-4 October 2012, Istituto Ortopedico Rizzoli, Bologna (POSTER N13 pag.83 abstract book).
- 5) Cantelmo A. R.; Solinas M.; Massi P.; Cattaneo M. G.; Cammarota, R.; **Bartolini D.**; Cinquina V.; Valenti M.; Vicentini L.; Noonan D.; Albini A.; Parolaro D. CANNABIDIOL AS A POTENT ANTI-ANGIOGENIC DRUG. 54th Annual Meeting of the Italian Cancer Society, 1-4 October 2012, Istituto Ortopedico Rizzoli, Bologna. (POSTER Z14 pag.129 abstract book)
- 6) Albini A.^{1,2}, Cantelmo A.R.¹, Focaccetti C.², **Bartolini D.**¹, Bruno A.¹, Dallaglio K.², Noonan D.M.³. THE TUMOR MICROENVIRONMENT AS TARGET FOR CANCER THERAPY AND CHEMOPREVENTION: MATRIX METALLO-PROTEASES AND BEYOND. XXXII Riunione Società Italiana per lo Studio del Connettivo, University of Bologna, October 20-21, 2012. (Oral Presentation October 21, 2012).
- 7) Cantelmo* A.R., Solinas* M., Massi* P., Cattaneo* M. G., Cammarota* R., **Bartolini D.**, Cinquina V., Valenti M., Vicentini L., Noonan D., Albini A., Parolaro D. CANNABIDIOL AS A POTENT ANTI-ANGIOGENIC DRUG, FEBS Workshop on Molecular and Cellular mechanisms in Angiogenesis Capri 14-17 October 2012 (POSTER)
- 8) Albini A.¹, Cantelmo AR. ², Pagani A.², **Bartolini D.**², Noonan D.³. Cancer prevention by targeting angiogenesis and the tumor microenvironment. CSH Asia / ICMS (The International Cancer Microenvironment Society) Joint Conference on Tumor Microenvironment, Suzhou Dushu Lake Conference Center, November 13 - 17, 2012.
- 9) Ciffolilli S., Dragoni S., Wallert M., Piroddi M., Goracci L., **Bartolini D.**, Birringer M., Lorkowsky S., Cruciani G., Galli F., Metabolomics of vitamin E. 3rd European Lipodomics Meeting, July 2-4, 2013, Pardubice, Czech Republic (accepted, 11/06/2013).
- 10) Rongoni E., Incipini L., Tidei C., **Bartolini D.**, Sabatino S., Pietrella D., Galli F. and Santi C. Antimicrobial and GPx-like activity of benzoate based diselenides. ICCST-12, July 22-26, 2013, Cardiff, Wales, United Kingdom (POSTER).
- 11) Murdolo G.^{1,2}, **Bartolini D.**¹, Piroddi M. ¹, Luchetti F. ³, Tortoioli C.¹, Canonico B.³, Iuliano L.⁴ and Galli F.². Lipid peroxidation impairs Wnt-dependent differentiation of human adipose precursor cells. 57th National Meeting of the Italian Society of Biochemistry and Molecular Biology, Ferrara, 18th-19th-20th September 2013 (POSTER).
- 12) **Bartolini D.**¹, Piroddi M.¹, Tidei C.², Giovagnoli S.², Manevich Y.³, Tew K.D.³, Santi C.² and Galli F.¹ Reaction kinetics and cell effects of a new glutathione peroxidase mimetic drug: PhSeZnCl. 57th National Meeting of the Italian Society of Biochemistry and Molecular Biology, Ferrara, 18th-19th-20th September 2013 (POSTER).
- 13) A. Pagani, **D. Bartolini**, A. Bruno, D.M. Noonan, A. Albini. Fenretinide (4-HPR) targets parental and cancer initiating medulloblastoma cells. 55th Annual Meeting of the Italian Cancer Society, Università degli Studi "Magna Graecia" di Catanzaro, 23 - 26 September 2013 (POSTER N16 and Oral Presentation).
- 14) **Bartolini D.**, Piroddi M., Tidei C., Ciffolilli S., Giustarini D., Rossi R., Santi C., Galli F. PhSeZnCl: a new GPx mimetic drug with anticanceractivity in GSTP1 overexpressing K562 erythroleukemia cells. 55th SIC ANNUAL MEETING of the Italian Cancer Society, Catanzaro, 23-26 september 2013.
- 15) Galli F., **Bartolini D.**, Ciffolilli S., Piroddi M., Clerici C. Novel soy germ pasta improves endothelial function, blood pressure, and oxidative stress in patients with type 2 diabetes. III International Conference on CELLULAR ENVIRONMENTAL STRESSORS IN BIOLOGY AND MEDICINE: FOCUS ON REDOX REACTION *Oxygen Club of California*, Ferrara 25th -27th June 2014 (Pag.55 abstract book).
- 16) **D. Bartolini**¹, M. Piroddi¹, J. Comodi¹, C. Tidei¹, S. Giovagnoli¹, D. Pietrella¹, Y. Manevich², K.D. Tew², D. Giustarini³, R. Rossi³, D.M. Townsend⁴, C. Santi¹ and F. Galli¹. Reaction kinetics and targeting to cellular GST of the glutathione peroxidase mimetic PhSeZnCl and its D,L-poly lactide microparticle formulation. 3th Workshop of the multidisciplinary group SeS Redox & cataysis – (wSeS-3), Perugia 15th-17th September 2014 (Pag. 20 abstract book; oral presentation).

Abstracts

- 17) **Bartolini D.**, Comodi J., Piroddi M., Incipini L., Sancineto L., Santi C. And Galli F., Hormetic diselenides reveal the existence of a glutathione S-transferase P-dependent control of Nrf2 activation response. 4th WORKSHOP OF THE MULTIDISCIPLINARY GROUP SES REDOX & CATAYSIS – (WSES-4), 20th-21th April 2015. (Oral presentation)
- 18) **Bartolini D.**, Comodi J., Piroddi M., Pieri V., Incipini L., Sancineto L., Santi C. And Galli F., First evidence of a glutathione S-transferase P-dependent feedback mechanism of the Nrf2 activation response (abstract id:10357), Oxygen Club of California World Congress 2015. Valencia, Spain.
- 19) (Key note lecture) F. Galli, S. Lorkowski, M. Wallert, G. Cruciani, M. Birringer, G. Svegliati Baroni, **D. Bartolini**, M. Piroddi. Metabolic fate of vitamin E at the crossroad with fatty acid metabolism: a nutraceutical perspective. RDPFA 2015, Recent Developments in Pharmaceutical Analysis. 28 June – 1 July 2015, Perugia, Italy.
- 20) Murdolo G., Piroddi M., Tortoioli C., **Bartolini D.**, Schmelz M., Iuliano L., Galli F. 7-keto-cholesterol: a free radical-derived oxysterol of human adipose tissue with anti-adipogenic activity. SFRR-E/SNFS Conference, 2-4 Sept., 2015. Stuttgart, Germany. (published in: Free Radical Biology and Medicine, Volume 86, Supplement 1, September 2015, Pages S41).
- 21) **Bartolini D.**, Faccani V., Russo A., Pieri V., Torquato P., Agostinelli L., Rychlicki C., Svegliati-Baroni G., Galli F. Cytochrome P450 metabolism of vitamin E in models of non-alcoholic fatty liver disease and steatohepatitis. SFRR-E/SNFS Conference, 2-4 Sept., 2015. Stuttgart, Germany. (published in: Free Radical Biology and Medicine Volume 86, Supplement 1, September 2015, Pages S42).
- 22) **Bartolini D.**, do Nascimento V., Galli F., L. Braga A., Pietrella D., Santi C. and Sancineto L.. Se-based compounds as drug candidates: in the search for Se Therapeutics. HALCHEM7, Cestokowa (Poland), 3-6 Sept. 2015.
- 23) **D. Bartolini**, M. Piroddi, L. Incipini, L. Sancineto, V. Pieri, C. Santi, F. Galli. Selenium-derived compounds as pharmacological tools to target the redox signaling and detoxification function of GSTP. 3rd Congress of the Serbian Society for Mitochondrial and Free Radical Physiology (SSMFRP), Belgrade (Serbia), September 25-26, 2015.
- 24) P. Torquato, V. Faccani, S. Lorkowski, M. Wallert, G. Cruciani, M. Birringer, R. Galarini, **D. Bartolini**, M. Piroddi, F. Galli. Wheat germ omics and the functional "endometabolome" of vitamin E. 4th Edition of the International Conference on FoodOmics: Food to Life, 8-9 October 2015, Cesena, Italy.
- 25) **Bartolini D**¹, Barola C¹, Torquato P¹, Ripa O¹, Pierantonelli I², Rychlicki C², Svegliati-Baroni G,² Galarini R³ and Galli F¹ **ANALYTICAL AND MOLECULAR INSIGHTS IN THE CYTOCHROME P450 METABOLISM OF VITAMIN E AND LIPOTOXICITY MECHANISMS OF NON-ALCOHOLIC FATTY LIVER.** SFRR-E/SNFS Conference, 8-12 June, 2016. Budapest, Hungary.
- 26) Piroddi M,² Chiaradia E,¹ **Bartolini D.**¹ Moretti M,¹ Russo A and ¹Galli F. **REDOX PROTEOMICS OF PLASMA PROTEINS IN CHRONIC KIDNEY DISEASE: ASSOCIATION WITH LEUCOCYTES DNA-DAMAGE AND PRO-APOPTOTIC ACTIVITY.** SFRR-E/SNFS Conference, 8-12 June, 2016. Budapest, Hungary.
- 27) Russo A^{1,2}, Barola C¹, Torquato P¹, Galli F¹ and **Bartolini D**¹. **THE TOXIC EFFECT OF ETHANOL ON CYTOCHROME P450 F2 (CYP4F2) EXPRESSION IN HUMAN HEPATOCARCINOMA CELLS IS MITIGATED BY α -TOCOPHEROL.** SFRR-E/SNFS Conference, 8-12 June, 2016. Budapest, Hungary.
- 28) Torquato P¹, **Bartolini D**¹, Giusepponi D², Saluti G², Russo A¹, Barola C¹, Birringer M.³, Galarini R² and Galli F.¹ **α -13'-OH IS THE MAIN PRODUCT OF α -TOCOPHEROL METABOLISM AND INFLUENCES CYP4F2 AND PPAR γ GENE EXPRESSION IN HEPG2 HUMAN HEPATOCARCINOMA CELLS.** SFRR-E/SNFS Conference, 8-12 June, 2016. Budapest, Hungary.
- 29) **Bartolini D.**, Torquato P., Russo A., Kasialiova A., Piroddi M., Chiaradia E., Galli F. **Interaction proteomics of glutathione S-transferase P1: a regulatory protein at the interface between inflammatory pathways and the stress adaption response.** XI ItPA National Congress, Perugia, May 16th-19th, 2016 (O-IV-01, pag. 46).
- 30) Piroddi M., Chiaradia E., **Bartolini D.**, Moretti M., Russo A., Torquato P., Galli F. **Redox-proteomics of uremic plasma: protein carbonylation and lymphocytes cytotoxicity.** XI ItPA National Congress, Perugia, May 16th-19th, 2016 (P-IV-04, pag. 71).
- 31) Fiorito S., Epifano F., Taddeo V.A., Genovese S., Santi C., **Bartolini D.**, Galli F. **Selenium-prenyl containing compounds as Drug Candidates.** Young Chemists Symposium, MYCS2016, Rimini, October 25-27th, 2016
- 32) Torquato P., **Bartolini D.**, Piroddi M., Russo A., Giusepponi D., Cruciani G., Galarini R. and Galli F. **Vitamin E metabolism and function.** 16th Fat Soluble Vitamins Congress. March 21-23, 2017, Paris, France (Abstract n° E2, oral presentation, abstract book page 19).
- 33) **Bartolini D.**, Buhmann M., Barreca, M.L., Manfroni G., Cecchetti V., Rauh D. and Galli F. **Functional and structural characterization of a novel class of MAP-kinase inhibitors.** OCC World Congress 2017 and Annual SFRR-E Conference METABOLIC STRESS AND REDOX REGULATION, Radisson Blue Hotel, Berlin, June 21-23, 2017. Free Radical Biology and Medicine 108 (2017), P-139, S-65.
- 34) **Bartolini D.**, Giustarini D., Torquato P., Piroddi M., Claudio S., Rossi R., Tew K. and Galli F. **GSTP expression influences the metabolism and redox of cellular glutathione.** OCC World Congress 2017 and Annual SFRR-E Conference METABOLIC STRESS AND REDOX REGULATION, Radisson Blue Hotel, Berlin, June 21-23, 2017. Free Radical Biology and Medicine 108 (2017), P-140, S-65.

Abstracts

- 35) Torquato P., **Bartolini D.**, Giusepponi D., Saluti G., Galarini R., Russo A., Birringer M., Lorkowski S., Borrás C., Vina J. and Galli F. **Alpha-(13^h-hydroxy)-6-hydroxychroman is the main product of alpha-tocopherol metabolism and regulates CYP4F2 and PPAR- γ expression in HepG2 and HepaRG cells.** OCC World Congress 2017 and Annual SFRR-E Conference METABOLIC STRESS AND REDOX REGULATION, Radisson Blue Hotel, Berlin, June 21-23, 2017. Free Radical Biology and Medicine 108 (2017).
- 36) Giusepponi D., Torquato P., **Bartolini D.**, Piroddi M., Moretti S., Saluti G., Birringer M., Lorkowski S., Galli F., Galarini R. **A quantitative LC-MS/MS method for the measurement of tocopherols, polyunsaturated fatty acids and their metabolites in human plasma and serum.** OCC World Congress 2017 and Annual SFRR-E Conference METABOLIC STRESS AND REDOX REGULATION, Radisson Blue Hotel, Berlin, June 21-23, 2017. Free Radical Biology and Medicine 108 (2017), P-250, S105.
- 37) P Torquato, **D Bartolini**, D Giusepponi, M Piroddi, R Galarini, F Galli. **Increased levels of alpha-tocopherylquinone (α -TQ) demonstrate a higher vitamin E oxidation rate in non-alcoholic fatty liver disease (NAFLD) patients.** 19th SFRR Biennial Meeting 4-7 June 2018, Lisbon, Portugal. Free Radical Biology and Medicine (2018), 120, S122.
- 38) P Torquato, D Giusepponi, AAlisi, R Galarini, **D Bartolini**, M Piroddi et al., **Arachidonic acid to docosahexaenoic acid ratio (AA/DHA): a strong clinical outcome predictor in DHA-based nutritional therapy of pediatric NASH.** 19th SFRR Biennial Meeting 4-7 June 2018, Lisbon, Portugal. Free Radical Biology and Medicine (2018) 120, S122.
- 39) **Bartolini D.**, Giustarini D, Pietrella D, Marinelli R, Torquato P, Rossi R, Galli F. **Glutathione S-transferase P influences the Nrf2-dependent control of cellular glutathione metabolism.** 19th SFRR Biennial Meeting 4-7 June 2018, Lisbon, Portugal. (Oral presentation).
- 40) **Bartolini D.**, Giustarini D., Pietrella D., Rossi R., Galli F. **THE NRF2/GSTP INTERACTOME AND ITS ROLE IN STRESS-MEDIATED REGULATION OF CELLULAR THIOL METABOLISM AND SIGNALING.** 4th International Congress of the Serbian Society for Mitochondrial and Free Radical Physiology, Challenges in Redox Biology. 28-30 Sept. 2018, University of Belgrade Rectorate Palace (Studentski trg 1), Belgrade.
- 41) Marinelli R., **Bartolini D.**, Ambrogini P., Betti M., Minelli A., Cuppini R. and Galli F. **Vitamin E molecules to treat excitotoxicity and neuroinflammation in chronic neurodegenerative diseases.** 1st International Conference on Neuroprotection by drugs, nutraceuticals and physical activity, 6- 7 June 2019, Rimini, Italy.
- 42) Marinelli R., Torquato P., **Bartolini D.**, Mas-Bargues C., Belezza G., Gioiello A., Borrás C., De Luca A., Fallarino F., Mani S., Sidoni A., Vina J., Leri M., Bucciantini M., Casamenti F., Galli F. **Garcinoic acid is a brain PPAR-gamma and PXR agonist that stimulates the ApoE-dependent metabolism of A β in mouse embryonic astrocytes.** Winter School on Biotechnology, 6th Edition, 20-23 January 2020, Teaching Center of Biotechnology, Via del Giochetto, Perugia. (poster P11, flash presentation)
- 43) **Bartolini D.**, Grignano M.A., Focaia R., Stabile A.M., Torquato P., Di Cristina M., Piro F., Rende M., Libetta C., Galli F. **High molecular weight uremic retention solutes stimulate GSTP protein expression and oxidative damage of peripheral blood leukocytes.** SFRR-E 2021, 15-18 June 2021, Belgrade (SERBIA). Poster presented virtually.
- 44) **Bartolini D.**, Stabile A.M., Gurrato F., Lioci G., Pistilli A., Migni A., Svegliati-Baroni G., Galli F. and Rende M. **First molecular and physical characterization of Glutathione S-transferase P interaction with Nrf2 transcription factor in the drug-resistance model of mouse hepatocarcinoma.** 16th EACA Congress and XII ISCAA Congress, 14-16 September 2021 (poster presentation).
- 45) **Bartolini D.**, Stabile A.M., Gurrato F., Lioci G., Pistilli A., Migni A., Svegliati-Baroni G., Galli F. and Rende M. **Glutathione S-transferase P interacts with Nrf2 transcription factor in the drug-resistance model of mouse hepatocarcinoma: a first molecular and physical characterization.** 74th SIAI National Congress, 25-25 September 2021 (Oral Presentation).
- 46) Tali Shandiz S., **Bartolini D.**, De Franco F., Passeri D., Marinelli R., Cruciani G., Pellicciari R., Galli F. and Gioiello A. **Design, Synthesis and Biological Activity of Garcinoic Acid Bioisosters as Pregnane X Receptor Modulators.** SCI National Congress, 14-23 September 2021. Poster presented virtually.
- 47) Fonte C., Pedrinolla A, Stabile A., **Bartolini D.**, Wang E., Vina J., Jackson M., Masoud I., Schena F., Galli, F Venturini M. **Combining vitamin E-functionalized CHOColate with physical exercise to reduce the risk Of protein-energy malnutrition in pre-dementia AGEd people – The Choko-AGE study.** 22nd Convegno Nazionale AIP "Dopo la pandemia: la sfida per una medicina a misura della terza età" 23-25 May 2022 (Poster presentation).
- 48) **Bartolini D***, Zatini L., Marcantonini G., Stabile AM., Frammartino T., Guerrini A., Garetto S., Lucci J., Rende M., Galli F. **Cytoprotection effect of natural vitamin D in human liver cell lipotoxicity: a transcriptomics approach.** Special Issue: Redox Biology Congress 2022, Ghent, Belgium. Free Radical Biology and Medicine, Volume 189S1, 20 August 2022. Page 30 (Poster).

- 49) **Bartolini D.**,* Arato I., Mancuso F., Giustarini D., Bellucci C., Vacca C., Aglietti, MC., Stabile, AM, Rossi R., Cruciani G., Rende M., Calafiore R., Luca G., Galli F.; **Melatonin modulates Nrf2/NfκB activity to prevent Cadmium-induced H₂O₂ production and reductive stress in porcine pre-pubertal Sertoli cells.** Special Issue: Redox Biology Congress 2022, Ghent, Belgium. Free Radical Biology and Medicine, Volume 189S1, 20 August 2022. Page 30 (Poster).
- 50) **Bartolini D.**,* Galeazzi G., Stabile AM., Gurrato F., Lioci G., Pistilli A., Di Sante G., Migni A., Rende M., Svegliati-Baroni G., Galli F. **Interaction between Glutathione S-Transferase P and Nrf2 transcription factor in mouse hepatocarcinoma: a molecular and physical characterization.** Special Issue: Redox Biology Congress 2022, Ghent, Belgium. Free Radical Biology and Medicine, Volume 189S1, 20 August 2022. Page 30 (Poster).
- 51) **Bartolini D.**, Giustarini D., Marcantonini G, Rossi R., Stabile AM., Rende M., Gioiello A., Zatini L., Mencacci A., Cruciani G., Galli F. **Abnormalities of the cellular redox associated with the cytopathic and proinflammatory effects of SARS-COV2 infection.** SFRR-E Oral Presentation Session 3 – Redox biology of neurodegenerative and infectious diseases. Special Issue: Redox Biology Congress 2022, Ghent, Belgium. Free Radical Biology and Medicine, Volume 189S1, 20 August 2022. Page 20.
- 52) **Bartolini D.***, Migni A., Marcantonini G., Zatini L., Gioiello A., Stabile A.M., Rende M., Galli F. **Anticancer effect of the vitamin E metabolite garcinoic acid in mouse models of HER2/neu positive breast cancer.** VESS3 Oral Presentations Sessions. Redox Biology Congress 2022, Ghent, Belgium. Free Radical Biology and Medicine, Volume 189S1, 20 August 2022. Page 26.
- 53) Hemmings K.* Prokopidis K., Migni A., Antognelli C., **Bartolini D.**, Borrás C., Cruciani G., Di Sante G., Marcantonini G., Mas Bagues C., Modena R., Pedrinolla A., Piroddi M., Pistilli A., Rende M., Shena F., Sebastiani., Stabile AM, Talesa VN., Tortorella S., Venturelli M., Vina J., Wang E., Zatini L., Galli F., Isanejad M., Jackson M, McArdle A. **The role of hypercortisolism, inflammation and modified redox on the functional loss of muscle with age: protective effects of vitamin E and cocoa polyphenols.** VESS3 Oral Presentations Sessions. Redox Biology Congress 2022, Ghent, Belgium. Free Radical Biology and Medicine, Volume 189S1, 20 August 2022. Pages 26-27.
- 54) Marcantonini G.*, **Bartolini D.**, Zatini L., Marinelli R., Stabile A.M., Frammartino T., Guerrini A., Garetto S., Jacopo Lucci J., Rende M., Galli F. **Nutrigenomics of wheat germ oil-vitamin e in human liver cells exposed to oleic acid-induced lipotoxicity.** VESS3 Oral Presentations Sessions. Redox Biology Congress 2022, Ghent, Belgium. Free Radical Biology and Medicine, Volume 189S1, 20 August 2022. Page 27.
- 55) Migni A.*, Galli F., Antognelli C., **Bartolini D.**, Borrás C., Cruciani G., Di Sante G., Hemmings K., Jackson M., McArdle A., Marcantonini G., Mas-Bargues C., Isanejad M., Pedrinolla A., Modena R., Piroddi M., Pistilli A., Rende M., Shena F., Sebastiani., Stabile A.M., Talesa VN., Tortorella S., Venturelli M., Vina J., Wang E., Zatini L. **The Choko-age project: development and analytical characterization of a new chocolate product functionalized with vitamin E to combine with physical exercise in preventing malnutrition in pre-dementia elderly subjects.** VESS3 Oral Presentations Sessions. Redox Biology Congress 2022, Ghent, Belgium. Free Radical Biology and Medicine, Volume 189S1, 20 August 2022. Page 27.
- 56) **Bartolini D.**, Zatini L., Marcantonini G., Migni A., Stabile AM, Frammartino T, Guerrini A, Garetto S., Lucci J, Pistilli A., Di Sante G., Galli F. and Rende M. **Vitamin D cytoprotection in human liver cell lipotoxicity and its transcriptomic fingerprint: a comparison of natural and synthetic formulations.** 75th SIAI National Congress, Padova, September 2022. (IJAЕ, Vol .126, n .1 (Supplement): 61, 2022 <http://www.fupress.com/ijae> ITALIAN JOURNAL OF ANATOMY AND EMBRYOLOGY; Oral presentation).
- 57) Di Sante G., Camponeschi C, De Carluccio M, Amadio S, Clementi ME, Sampaolese B, Volonté C, Stabile AM, **Bartolini D.**, Pistilli A, Tredicine M, Ria F., Rende M, Michetti F. **The S100B protein as a therapeutic target for multiple sclerosis processes.** 75th SIAI National Congress, Padova, September 2022. (IJAЕ, Vol .126, n 1 (Supplement): 160, 2022 <http://www.fupress.com/ijae> ITALIAN JOURNAL OF ANATOMY AND EMBRYOLOGY; Oral presentation).
- 58) Stabile AM, Pistilli A, Ria F, Tredicine M, Lucchini M, Moliterni C, Bianco A, Mirabella M, **Bartolini D.**, Rende M, Di Sante G. **CD44 isoforms distribute differentially in CNS areas during EAE and is regulated by TLR2 in CD4+ cells during acute episodes of Multiple Sclerosis.** 75th SIAI National Congress, Padova, September 2022. (IJAЕ, Vol .126, n 1 (Supplement): 180, 2022 <http://www.fupress.com/ijae> ITALIAN JOURNAL OF ANATOMY AND EMBRYOLOGY; Oral presentation).
- 59) Pistilli A., Ria F., Tredicine M., Poerio N., Lucchini M, Camponeschi C, o Mirabella M, Stabile AM, **Bartolini D.**, Fraziano M., Rende M, Di Sante G. **Liposome-based nanoparticles modulate Macrophage and regulatory T cell and effector phenotypes in Multiple Sclerosis patients.** 75th SIAI National Congress, Padova, September 2022. (IJAЕ, Vol .126, n 1 (Supplement): 234, 2022 <http://www.fupress.com/ijae> ITALIAN JOURNAL OF ANATOMY AND EMBRYOLOGY; Poster presentation).
- 60) Pedrinolla A, Venturelli M, Schena F., Pistilli A., Galli F., **Bartolini D.**, Rende M, Di Sante G. and Stabile AM. **The Choko-AGE study: Combining vitamin E-functionalized CHOCocolate with physical exercise to reduce the risk of protein energy malnutrition in predementia AGEd people.** 75th SIAI National Congress, Padova, September 2022. (IJAЕ, Vol .126, n 1 (Supplement): 282, 2022 <http://www.fupress.com/ijae> ITALIAN JOURNAL OF ANATOMY AND EMBRYOLOGY; Poster presentation).
- 61) Pedrinolla A.,Stabile AM, Schena F.,Pistilli A., **Bartolini D.**, Modena R., Baschirotto C., Rende M, Di Sante G., Galli F., Venturelli M. (the Choko-AgE consortium). **Vitamin E-functionalized chocolate combined with physical exercise to prevent malnutrition in pre-dementia elderly subjects: The Choko-AgE Project.** IIM 2022, Assisi 20-23 Ottobre 2022 (Poster presentation).

- 62) McArdle A., Pringle S., Kumiscia J., Hemmings K., **Bartolini D.**, Migni A., Venturelli M., Vina J., Galli F., Jackson M. **Role of altered cortisol production in the development of sarcopenia.** American Physiology Summit 2023 Meeting Abstracts, Volume 38 Issue S1, May 2023
<https://doi.org/10.1152/physiol.2023.38.S1.5735268>
- 63) **Bartolini D.**, Mancini L., Schoubben A., Migni A., Rende M., Ricci M. and Galli F. **Antioxidant and anti-inflammatory properties of a new NAC inhalable dry powder on lung epithelial cells.** Annual meeting of the Society for Free Radical Research – Europe (SFRR-E), June 6–9, 2023, Hotel Savoyen, Vienna, Austria. (Poster presentation). Free Radical Biology and Medicine, 2023. Volume 201, Page 51.
- 64) Migni A., Galeazzi G., Marcantonini G., Zatini L., Rende M., Galli F. and **Bartolini D.** **Cadmium and palmitic acid synergize their pro-oxidant and cytotoxic effects in liver and gut epithelial cells: the cytoprotective role of alpha-tocopherol (Vitamin E) and melatonin.** Annual meeting of the Society for Free Radical Research – Europe (SFRR-E), June 6–9, 2023, Hotel Savoyen, Vienna, Austria. (Poster presentation). FREE RADICAL BIOLOGY AND MEDICINE, volume 201, Pages 45-45. Publisher: ELSEVIER SCIENCE INC2023.
- 65) **Bartolini D.**, Stabile A.M., Gurrado F., Lioci G., Migni A., Svegliati-Baroni G., Sidoni A., Rende M., Galli F. **Glutathione S-transferase P nuclear distribution and Nrf2/Keap1 interacting properties mark the GSH-dependent drug resistance phenotype of hepatocellular carcinoma.** Annual meeting of the Society for Free Radical Research – Europe (SFRR-E), June 6–9, 2023, Hotel Savoyen, Vienna, Austria. (Oral presentation). Free Radical Biology and Medicine, 2023. Volume 201, Page 8.
- 66) **Bartolini D.**, Stabile AM, Gurrato F., Lioci G., Pistilli A., Migni A., Di Sante G., Svegliati-Baroni G., Sidoni A., Rende M., Galli F. **Nuclear localization of Glutathione S-Transferase P and interacting properties of Nrf2/Keap1 as biomarkers of drug resistant hepatocellular carcinoma.** XXXIX Congresso della SII, Isola di Vulcano, June 14.17, 2023, Italy (Poster presentation).
- 67) **Bartolini D.**, Grignano M.A., Anna Maria Stabile, Di Sante G., Piroddi M., Chiaradia E., Galeazzi G., Ronco C., Rampino T., Pistilli A., Libetta C., Gall F., Rende M. „Induction of vesicular trafficking and apoptotic signalling in mononuclear leukocytes signs the “immuno-proteostasis” response to uremic proteins”. 76° Congresso Nazionale SIAI, Modena, September 11-13, 2023 (Oral Presentation).
- 68) Alessandra Pistilli et al. “NGF and its receptors in human Sperm Cells: novel tools for reproductive fitness” 76° Congresso Nazionale SIAI, Modena, September 11-13, 2023 (Poster Presentation).
- 69) Gabriele Di Sante et al. “Multiomic deconstruction of (teno)synovial tissue: application of innovative technologies for the prevention of rheumatoid arthritis”. 76° Congresso Nazionale SIAI, Modena, September 11-13, 2023 (Poster Presentation).
- 70) Anna Maria Stabile et al. “Detection of neurodegenerative, oxidative and neuroinflammatory biosignatures characterizing frailty condition”. 76° Congresso Nazionale SIAI, Modena, September 11-13, 2023 (Poster Presentation).
- 71) Varfaj I., **Bartolini D.**, Pallottelli L., Migni A., Sgarretta D., Macchiarulo A., Romani A., Sardella R., Clementi C., Galli F. Advancing sustainable biofunctional textiles: Exploring the anti-inflammatory, antioxidant, and UV-protection properties in onion (*Allium cepa* L.) skin extract. Free Radical Biology and Medicine, 2024. (Poster presentation).
- 72) **D Bartolini**, MA Grignano, A Migni, I Varfaj, AM Stabile et al., Glutathione S-transferase P1-1 induction influences the cellular proteostasis and apoptotic response to uremic proteins in peripheral blood leukocytes.- Free Radical Biology and Medicine, 2024.
- 73) Migni A., **Bartolini D.**, Varfaj I., Sardella R., Galli F. Advanced lipidomics strategies to explore hepatic lipotoxicity and its treatment. Free Radical Biology and Medicine, Vol. 218, Pag. 55, 2024. (Poster presentation).
- 74) Arato I, **Bartolini D.** Mancuso F, Giustarini D, Bellucci C, Vacca C, Aglietti MC, Stabile AM, Rossi R, Cruciani G, Rende M, Calafiore R, Galli F and Luca G. Cytoprotective effect of melatonin in prepubertal Sertoli cells: role in cadmium-induced idiopathic male infertility. Human Reproduction, Vol. 39, Supplement_1, Pag. deae108. 478, 2024.
- 75) Di Sante G., Sali M., Stabile A.M., Pistilli A., **Bartolini D.**, Ruggirello M., Ria F., Rende M., Buonsenso D. Altered miRNome impacts on immune responses, inflammatory processes and tissue repair in children affected by Long Covid (Oral Presentation). Italian Journal of Anatomy and Embryology 128(1) Supplement: 13, 2024 Supplement Firenze University Press, ISSN 1122-6714 (print) | ISSN 2038-5129 (online). 77° Congresso Nazionale SIAI, Genova, 2024.
- 76) Ruggirello M., Clementi M.E., Stabile A.M., Pistilli A., **Bartolini D.**, Di Liddo R., Valeriani F., Ria F., Rende M., Spica V.R., Di Sante G., Michetti F. The impact of S100B silencing on Multiple Sclerosis model: the role of glial cells. (Poster presentation). Italian Journal of Anatomy and Embryology 128(1) Supplement: 88, 2024 Supplement Firenze University Press, ISSN 1122-6714 (print) | ISSN 2038-5129 (online). 77° Congresso Nazionale SIAI, Genova, 2024
- 77) **Bartolini D.**, Grignano M.A., Migni A., Varfaj I., Stabile A.M., Tognoloni A., Libetta C., Di Sante G., Galli F., Rende M. Glutathione S-transferase P influences cellular proteostasis and the apoptotic response to uremic solutes in peripheral blood leukocytes. (Poster presentation). Italian Journal of Anatomy and Embryology 128(1) Supplement:

160, 2024 Supplement Firenze University Press www.fupress.com/ijae, ISSN 1122-6714 (print) | ISSN 2038-5129 (online). 77° Congresso Nazionale SIAI, Genova, 2024.

78) Varfaj I., Migni A., Stabile A.M., Pedrinolla A., Pistilli A., Tognoloni A., Di Sante G., Venturelli M., Galli F., Rende M., **Bartolini D.** Choko-age project: in vitro bioactivity evaluation of a new Vi-tamin E-funzionalized chocolate product. (Oral Presentation). Italian Journal of Anatomy and Embryology 128(1) Supplement: 165, 2024 Supplement Firenze University Press www.fupress.com/ijae, ISSN 1122-6714 (print) | ISSN 2038-5129 (online). 77° Congresso Nazionale SIAI, Genova, 2024

79) Migni A., Varfaj I., Russo R, **Bartolini D.** and Galli F.. Exploring lipidomic alterations and oxidative stress in Cushing's syndrome: Implications for disease pathogenesis and therapy. Free Radical Biology and Medicine, volume 233, S101, 2025.

80) Migni A., **Bartolini D.**, Russo R. and Galli F. .Melatonin counteracts cadmium and free fatty acid-induced lipotoxicity in human hepatocytes: Lipidomics characterization and molecular insights. Free Radical Biology and Medicine, volume 233, S88, 2025.

81) Russo R. and **Bartolini D.** Precision nutrition: Lipid profile and seasonal variations of mackerel oil as a source of omega-3. Free Radical Biology and Medicine, volume 233 S87-S88, 2025.

82) Ina Varfaj, **Desirée Bartolini**, Anna Migni, Isabelle Franco Moscardini, Alessia Tognoloni, Maria Rachele Ceccarini, Roberta Russo, Stefano Garetto, Jacopo Lucci, Francesco Galli. Natural Vitamin D formulations prevent oxidative stress in human hepatocytes exposed to free fatty acid-induced lipotoxicity. Free Radical Biology and Medicine, volume 233 S89, 2025.

Conference

"Bioforum 2011", February 2011, Venice

"Life-Med 2011", October 2011, Milan

"Procedura per le biobanche di ricerca", October 2011, Humanitas Cancer Center (Rozzano, Milan).

"SIP YOUNG SCIENTISTS", 24th-25th October 2011, Alma Mater Studiorum University of Bologna, Bologna.

"Corso Biotecnologie e Medicina" 16th November 2011, IRCCS MultiMedica, Sesto San Giovanni, Milan.

Corso "Rischio Biologico", Novembre 2011, IRCCS MultiMedica Scientific and Technological Pole, Milan.

Seminars: "The tumor microenvironment as target for cancer therapy and prevention". April 20, 2012, IFOM-IEO Campus, Conference Room (Building 9), Via Adamello, 16 - Milan

2nd International Conference "Translational Research in Oncology: a New Approach to Personalized Medicine", May 8, 2012, IRCCS IRST, Meldola – May 9-10-11, 2012, Hotel Globus City, Forlì.

WorkShop Diagnosi precoce del carcinoma prostatico: "phi, oltre il PSA", May 31, 2012, Auditorium, IRCCS MultiMedica, Sesto San Giovanni, Milan.

54th Annual Meeting of the Italian Cancer Society; MISSION [IM]POSSIBLE understanding cancer-host dialogues for personalized cancer medicine, October 1-4, 2012, Istituto Ortopedico Rizzoli, Bologna.

Seminario Ricerca-RE, October 24, 2012, Aula Cubica di Rocca Saporiti, ASMN di Reggio Emilia.

V edizione, Conferenza Internazionale Women&Technologies®: e-Nutrition e Premio "Le Tecnovisionarie®" 2012. November 6, 2012, Camera di Commercio di Milano, sala conferenze, Via Meravigli 9/B, Milan.

Convegno "Fitoterapia, Ayurveda, Medicina Antroposofica e Oncologia: indicazioni, controindicazioni, esperienze di integrazione", November 23, 2012, Istituto Nazionale dei Tumori (INT), Milan.

Corso "Biotecnologie e Medicina", December 11, 2012, Aula Cubica – Palazzo Rocca Saporiti, Reggio Emilia.

57th National Meeting of the Italian Society of Biochemistry and Molecular Biology, 18th-19th-20th September 2013, Ferrara (Italy).

Workshop on OMEGA-3, Fatty acids in health and disease, Rome (Italy), March 13th-14th, 2014.

III International Conference on CELLULAR ENVIRONMENTAL STRESSORS IN BIOLOGY AND MEDICINE: FOCUS ON REDOX REACTION, Ferrara, Italy, June 25-27, 2014.

3th Workshop of the multidisciplinary group SeS Redox & cataysis – (wSeS-3), Perugia, Italy, September 15-17, 2014

Winter School on Biotechnology, School of Medicine's Learning Centre, Perugia, Italy, January 19-13, 2015.

4th Workshop of the multidisciplinary group SeS Redox & cataysis – (wSeS-4), Perugia, Italy, April 20-21, 2015

Oxygen Club of California World Congress, „Oxydants and antioxidants in biology“, Valencia, 24th-26th June 2015, Congress Palace of Valencia.

The SFRR-E Meeting 2015, September 2-4, 2015, Stuttgart, Germany.

XI Annual Conference ItPA, May 16th-19th, Perugia, Italy.

SFRR-E Meeting Budapest, 8-11 June 2016 Danubius Hotel Helia Budapest 1133 Budapest, Kárpát Street 62-64. (Hungary)

OCC World Congress 2017 and Annual SFRR-E Conference METABOLIC STRESS AND REDOX REGULATION, Radisson Blue Hotel, Berlin, June 21-23, 2017.

19th SFRR Biennial Meeting 4-7 June 2018, Lisbon, Portugal.

Conference “Il Microbioma”, 31 May 2019, Aula Magna “G. Bossi”, Ancona, Italy.

Winter School on Biotechnology, 6th Edition, 20-23 January 2020, Teaching Center of Biotechnology, Via del Giochetto, Perugia.

Winter School on Biotechnology, 7th Edition – Virtual Edition. “Biotechnologies in the time of COVID-19”, 18-21 January 2021.

SFRR 2021 - 20th Biennial Meeting of SFRR International, Online Congress, 15-18 March 2021.

SFRR-E 2021 Online Congress, 15-18 June 2021.

16th Congress of the European Association of Clinical Anatomy (EACA) held ONLINE jointly with the XII Meeting of the International Symposium of Clinical and Applied Anatomy (ISCAA), from 14th to 16th of September 2021.

74th SIAI National Congress, Bologna, 25-25 September 2021.

SFRR-E and POG Redox Biology Congress 2022, 23-26 August 2022, Ghent, Belgium.

75th SIAI National Congress, Padova, September 2022.

Annual meeting of the Society for Free Radical Research – Europe (SFRR-E), June 6–9, 2023, Hotel Savoyen, Vienna, Austria.

XXXIX Congresso della SII, June 14.17, 2023, Isola di Vulcano, Italy.

76° Congresso Nazionale SIAI, September 11-13, 2023, Modena, Italy.

Annual meeting 2024 of the Society for Free Radical Research – Europe „From molecules to tissues: redox biology in action“, ISTANBUL, TÜRKIYE, from June 5 - 7, 2024

77° Congresso Nazionale SIAI, September 10-12, 2024, Genova, Italy.

HNE Club meeting, October 10-12, 2024, Genova, Italy.

Monotematic meeting The impact of micro- and macro-environments on immunity and inflammation: paving the way for novel immunotherapies, SIF, Perugia (Italy), June 16-17, 2025.

78° Congresso Nazionale SIAI, September 17-20, 2025, Ravenna, Italy.

I authorize the use of my personal information for yours need according to the L. 196/03.

Perugia, January 19, 2026

